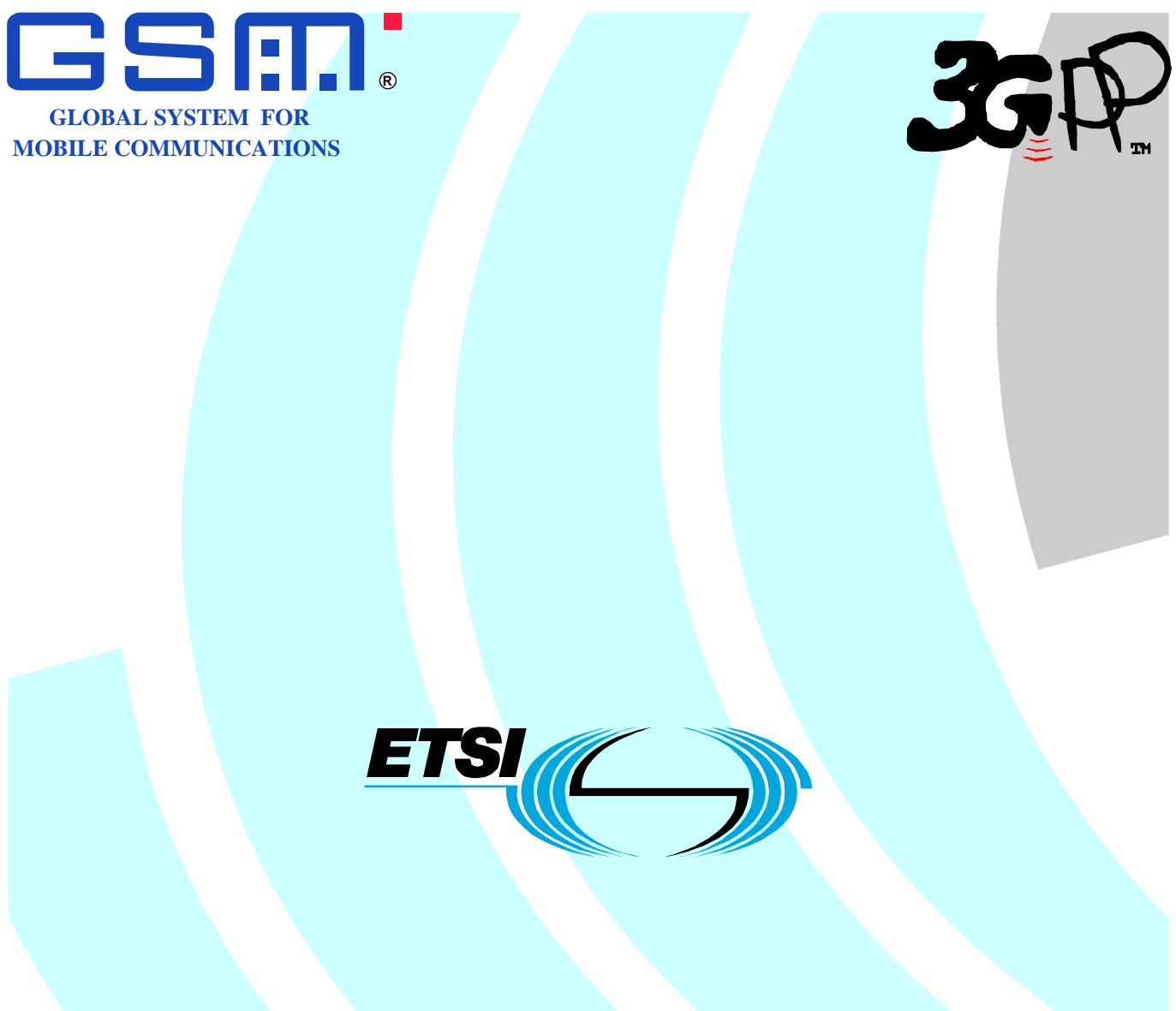


ETSI TS 100 607-4 V8.1.0 (2002-12)

Technical Specification

**Digital cellular telecommunications system (Phase 2+);
Mobile Station (MS) Conformance Specification;
Part 4: SIM Application Toolkit conformance specification
(3GPP TS 11.10-4 version 8.1.0 Release 1999)**



Reference

RTS/TSGG-051110-4v810

Keywords

GSM

ETSI

650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C
Association à but non lucratif enregistrée à la
Sous-Préfecture de Grasse (06) N° 7803/88

Important notice

Individual copies of the present document can be downloaded from:
<http://www.etsi.org>

The present document may be made available in more than one electronic version or in print. In any case of existing or perceived difference in contents between such versions, the reference version is the Portable Document Format (PDF). In case of dispute, the reference shall be the printing on ETSI printers of the PDF version kept on a specific network drive within ETSI Secretariat.

Users of the present document should be aware that the document may be subject to revision or change of status.
Information on the current status of this and other ETSI documents is available at
<http://portal.etsi.org/tb/status/status.asp>

If you find errors in the present document, send your comment to:
editor@etsi.org

Copyright Notification

No part may be reproduced except as authorized by written permission.
The copyright and the foregoing restriction extend to reproduction in all media.

© European Telecommunications Standards Institute 2002.
All rights reserved.

DECT™, PLUGTESTS™ and UMTS™ are Trade Marks of ETSI registered for the benefit of its Members.
TIPHON™ and the **TIPHON logo** are Trade Marks currently being registered by ETSI for the benefit of its Members.
3GPP™ is a Trade Mark of ETSI registered for the benefit of its Members and of the 3GPP Organizational Partners.

Intellectual Property Rights

IPRs essential or potentially essential to the present document may have been declared to ETSI. The information pertaining to these essential IPRs, if any, is publicly available for **ETSI members and non-members**, and can be found in ETSI SR 000 314: "*Intellectual Property Rights (IPRs); Essential, or potentially Essential, IPRs notified to ETSI in respect of ETSI standards*", which is available from the ETSI Secretariat. Latest updates are available on the ETSI Web server (<http://webapp.etsi.org/IPR/home.asp>).

All published ETSI deliverables shall include information which directs the reader to the above source of information.

Foreword

This Technical Specification (TS) has been produced by ETSI 3rd Generation Partnership Project (3GPP).

The present document may refer to technical specifications or reports using their 3GPP identities, UMTS identities or GSM identities. These should be interpreted as being references to the corresponding ETSI deliverables.

The cross reference between GSM, UMTS, 3GPP and ETSI identities can be found under www.etsi.org/key.

Contents

| | |
|--|----|
| Intellectual Property Rights | 2 |
| Foreword..... | 2 |
| Foreword..... | 17 |
| 1 Scope | 18 |
| 2 References | 18 |
| 3 Definitions, symbols and abbreviations | 20 |
| 3.1 Mobile station definition and configurations..... | 20 |
| 3.2 Applicability..... | 20 |
| 3.2.1 Applicability of this specification..... | 20 |
| 3.2.2 Applicability of the individual tests..... | 20 |
| 3.2.3 Applicability to terminal equipment | 20 |
| 3.2.4 Definitions | 20 |
| 3.2.4.1 Format of the Table of Optional Features | 20 |
| 3.2.4.2 Format of the Applicability Table..... | 21 |
| 3.2.4.3 Status and Notations..... | 21 |
| 3.3 Table of Optional Features | 22 |
| 3.4 Applicability table | 22 |
| 3.5 Conventions for mathematical notations | 37 |
| 3.6 Conventions on electrical terms | 38 |
| 3.7 Terms on test conditions..... | 38 |
| 4 Test Equipment | 38 |
| 5 Testing methodology in general | 38 |
| 5.1 Testing of optional functions and procedures..... | 38 |
| 5.2 Test interfaces and facilities | 38 |
| 5.3 Different protocol layers | 38 |
| 5.4 Information to be provided by the apparatus supplier | 38 |
| 5.5 Definitions of transmit and receive times..... | 38 |
| 6 Reference test methods..... | 38 |
| 7 Implicit testing..... | 39 |
| 8 Measurement uncertainty | 39 |
| 9 Format of tests | 39 |
| 10 Generic call set up procedures..... | 42 |
| 11 - 26 Not used | 42 |
| 27 Testing of the SIM/ME interface..... | 43 |
| 27.1 - 27.21 Not used | 43 |
| 27.22 SIM Application Toolkit | 43 |
| 27.22.1 Initialisation of SIM Application Toolkit Enabled SIM by SIM Application Toolkit Enabled ME (Profile Download) | 46 |
| 27.22.1.1 Definition and applicability..... | 46 |
| 27.22.1.2 Conformance requirement..... | 46 |
| 27.22.1.3 Test Purpose..... | 46 |
| 27.22.1.4 Method of test | 46 |
| 27.22.1.5 Test Requirement | 49 |
| 27.22.2 Contents of the TERMINAL PROFILE command..... | 49 |
| 27.22.2.1 Definition and applicability..... | 49 |
| 27.22.2.2 Conformance requirement..... | 49 |
| 27.22.2.3 Test Purpose..... | 49 |
| 27.22.2.4 Method of Test | 50 |

| | | |
|-----------------|--|----|
| 27.22.2.5 | Test Requirement | 50 |
| 27.22.3 | Servicing of Proactive SIM Commands..... | 50 |
| 27.22.3.1 | Definition and applicability..... | 50 |
| 27.22.3.2 | Conformance requirement..... | 50 |
| 27.22.3.3 | Test Purpose..... | 50 |
| 27.22.3.4 | Method of test | 50 |
| 27.22.3.5 | Test Requirement | 51 |
| 27.22.4 | Proactive SIM Commands | 51 |
| 27.22.4.1 | DISPLAY TEXT..... | 51 |
| 27.22.4.1.1 | DISPLAY TEXT (Normal) | 51 |
| 27.22.4.1.1.1 | Definition and applicability | 51 |
| 27.22.4.1.1.2 | Conformance requirements | 51 |
| 27.22.4.1.1.3 | Test Purpose..... | 51 |
| 27.22.4.1.1.4 | Method of test | 51 |
| 27.22.4.1.1.4.1 | Initial Conditions..... | 51 |
| 27.22.4.1.1.4.2 | Procedure..... | 51 |
| 27.22.4.1.1.5 | Test Requirement | 60 |
| 27.22.4.1.2 | DISPLAY TEXT (Support of “No response from user”)..... | 60 |
| 27.22.4.1.2.1 | Definition and applicability | 60 |
| 27.22.4.1.2.2 | Conformance requirement | 61 |
| 27.22.4.1.2.3 | Test Purpose..... | 61 |
| 27.22.4.1.2.4 | Method of test | 61 |
| 27.22.4.1.2.4.1 | Initial Conditions..... | 61 |
| 27.22.4.1.2.4.1 | Procedure..... | 61 |
| 27.22.4.1.2.5 | Test Requirement | 62 |
| 27.22.4.1.3 | DISPLAY TEXT (Display of extension text)..... | 62 |
| 27.22.4.1.3.1 | Definition and applicability | 62 |
| 27.22.4.1.3.2 | Conformance requirement | 62 |
| 27.22.4.1.3.3 | Test Purpose..... | 62 |
| 27.22.4.1.3.4 | Method of test | 63 |
| 27.22.4.1.3.4.1 | Initial Conditions..... | 63 |
| 27.22.4.1.3.4.2 | Procedure..... | 63 |
| 27.22.4.1.3.5 | Test Requirement | 64 |
| 27.22.4.1.4 | DISPLAY TEXT (Sustained text)..... | 64 |
| 27.22.4.1.4.1 | Definition and applicability | 64 |
| 27.22.4.1.4.2 | Conformance requirement | 65 |
| 27.22.4.1.4.3 | Test Purpose..... | 65 |
| 27.22.4.1.4.4 | Method of test | 65 |
| 27.22.4.1.4.4.1 | Initial Conditions..... | 65 |
| 27.22.4.1.4.4.2 | Procedure..... | 65 |
| 27.22.4.1.4.5 | Test Requirement | 69 |
| 27.22.4.1.5 | DISPLAY TEXT (Display of icons) | 69 |
| 27.22.4.1.5.1 | Definition and applicability | 69 |
| 27.22.4.1.5.2 | Conformance requirement | 69 |
| 27.22.4.1.5.3 | Test Purpose..... | 70 |
| 27.22.4.1.5.4 | Method of test | 70 |
| 27.22.4.1.5.4.1 | Initial Conditions..... | 70 |
| 27.22.4.1.5.4.2 | Procedure..... | 70 |
| 27.22.4.1.5.5 | Test Requirement | 75 |
| 27.22.4.1.6 | DISPLAY TEXT (UCS2 display supported)..... | 75 |
| 27.22.4.1.6.1 | Definition and applicability | 75 |
| 27.22.4.1.6.2 | Conformance requirement | 75 |
| 27.22.4.1.6.3 | Test Purpose..... | 76 |
| 27.22.4.1.6.4 | Method of test | 76 |
| 27.22.4.1.6.4.1 | Initial Conditions..... | 76 |
| 27.22.4.1.6.4.2 | Procedure..... | 76 |
| 27.22.4.1.6.5 | Test Requirement | 77 |
| 27.22.4.2 | GET INKEY | 77 |
| 27.22.4.2.1 | GET INKEY(normal) | 77 |
| 27.22.4.2.1.1 | Definition and applicability | 77 |
| 27.22.4.2.1.2 | Conformance Requirement | 77 |
| 27.22.4.2.1.3 | Test Purpose..... | 78 |

| | | |
|-----------------|---|-----|
| 27.22.4.2.1.4 | Method of Test..... | 78 |
| 27.22.4.2.1.4.1 | Initial conditions..... | 78 |
| 27.22.4.2.1.4.2 | Procedure..... | 78 |
| 27.22.4.2.1.5 | Test Requirement..... | 85 |
| 27.22.4.2.2 | GET INKEY (No response from User) | 85 |
| 27.22.4.2.2.1 | Definition and applicability | 85 |
| 27.22.4.2.2.2 | Conformance Requirement | 85 |
| 27.22.4.2.2.3 | Test Purpose..... | 85 |
| 27.22.4.2.2.4 | Method of Test..... | 85 |
| 27.22.4.2.2.4.1 | Initial Conditions..... | 85 |
| 27.22.4.2.2.4.2 | Procedure..... | 86 |
| 27.22.4.2.2.5 | Test Requirement..... | 87 |
| 27.22.4.2.3 | GET INKEY (UCS2 format display) | 87 |
| 27.22.4.2.3.1 | Definition and applicability | 87 |
| 27.22.4.2.3.2 | Conformance Requirement | 87 |
| 27.22.4.2.3.3 | Test Purpose..... | 87 |
| 27.22.4.2.3.4 | Method of Test..... | 87 |
| 27.22.4.2.3.4.1 | Initial Conditions..... | 87 |
| 27.22.4.2.3.4.2 | Procedure..... | 88 |
| 27.22.4.2.3.5 | Test Requirement..... | 90 |
| 27.22.4.2.4 | GET INKEY (UCS2 format of entry) | 90 |
| 27.22.4.2.4.1 | Definition and applicability | 90 |
| 27.22.4.2.4.2 | Conformance Requirement | 90 |
| 27.22.4.2.4.3 | Test Purpose..... | 90 |
| 27.22.4.2.4.4 | Method of Test..... | 90 |
| 27.22.4.2.4.4.1 | Initial Conditions..... | 90 |
| 27.22.4.2.4.4.2 | Procedure..... | 91 |
| 27.22.4.2.4.5 | Test Requirement..... | 92 |
| 27.22.4.2.5 | GET INKEY (“Yes/No” Response) | 92 |
| 27.22.4.2.5.1 | Definition and applicability | 92 |
| 27.22.4.2.5.2 | Conformance Requirement | 92 |
| 27.22.4.2.5.3 | Test Purpose..... | 92 |
| 27.22.4.2.5.4 | Method of Test..... | 92 |
| 27.22.4.2.5.4.1 | Initial Conditions..... | 92 |
| 27.22.4.2.5.4.2 | Procedure..... | 93 |
| 27.22.4.2.5.5 | Test Requirement..... | 94 |
| 27.22.4.2.6 | GET INKEY (display of Icon) | 94 |
| 27.22.4.2.6.1 | Definition and applicability | 94 |
| 27.22.4.2.6.2 | Conformance Requirement | 95 |
| 27.22.4.2.6.3 | Test Purpose..... | 95 |
| 27.22.4.2.6.4 | Method of Test..... | 95 |
| 27.22.4.2.6.4.1 | Initial Conditions..... | 95 |
| 27.22.4.2.6.4.2 | Procedure..... | 95 |
| 27.22.4.2.6.5 | Test Requirement..... | 102 |
| 27.22.4.2.7 | GET INKEY (Help Information)..... | 102 |
| 27.22.4.2.7.1 | Definition and applicability | 102 |
| 27.22.4.2.7.2 | Conformance Requirement | 103 |
| 27.22.4.2.7.3 | Test Purpose..... | 103 |
| 27.22.4.2.7.4 | Method of Test..... | 103 |
| 27.22.4.2.7.4.1 | Initial Conditions..... | 103 |
| 27.22.4.2.7.4.2 | Procedure..... | 103 |
| 27.22.4.2.7.5 | Test Requirement..... | 105 |
| 27.22.4.3. | GET INPUT | 105 |
| 27.22.4.3.1 | GET INPUT (normal)..... | 105 |
| 27.22.4.3.1.1 | Definition and applicability | 105 |
| 27.22.4.3.1.2 | Conformance Requirement | 105 |
| 27.22.4.3.1.3 | Test Purpose..... | 105 |
| 27.22.4.3.1.4 | Method of Test..... | 105 |
| 27.22.4.3.1.4.1 | Initial Conditions..... | 105 |
| 27.22.4.3.1.4.2 | Procedure..... | 106 |
| 27.22.4.3.1.5 | Test Requirement..... | 121 |
| 27.22.4.3.2 | GET INPUT (No response from User) | 121 |

| | | |
|-----------------|--|-----|
| 27.22.4.3.2.1 | Definition and applicability | 121 |
| 27.22.4.3.2.2 | Conformance Requirement | 121 |
| 27.22.4.3.2.3 | Test Purpose..... | 122 |
| 27.22.4.3.2.4 | Method of Test..... | 122 |
| 27.22.4.3.2.4.1 | Initial Conditions..... | 122 |
| 27.22.4.3.2.4.2 | Procedure..... | 122 |
| 27.22.4.3.2.5 | Test Requirement..... | 123 |
| 27.22.4.3.3 | GET INPUT (UCS2 format display) | 123 |
| 27.22.4.3.3.1 | Definition and applicability | 123 |
| 27.22.4.3.3.2 | Conformance Requirement | 123 |
| 27.22.4.3.3.3 | Test Purpose..... | 123 |
| 27.22.4.3.3.4 | Method of Test..... | 124 |
| 27.22.4.3.3.4.1 | Initial Conditions..... | 124 |
| 27.22.4.3.3.4.2 | Procedure..... | 124 |
| 27.22.4.3.3.5 | Test Requirement | 127 |
| 27.22.4.3.4 | GET INPUT (UCS2 format of entry) | 127 |
| 27.22.4.3.4.1 | Definition and applicability | 127 |
| 27.22.4.3.4.2 | Conformance Requirement | 127 |
| 27.22.4.3.4.3 | Test Purpose..... | 127 |
| 27.22.4.3.4.4 | Method of Test..... | 127 |
| 27.22.4.3.4.4.1 | Initial Conditions..... | 127 |
| 27.22.4.3.4.4.2 | Procedure..... | 128 |
| 27.22.4.3.4.5 | Test Requirement | 131 |
| 27.22.4.3.5 | GET INPUT (default text)..... | 131 |
| 27.22.4.3.5.1 | Definition and applicability | 131 |
| 27.22.4.3.5.2 | Conformance Requirement | 131 |
| 27.22.4.3.5.3 | Test Purpose..... | 131 |
| 27.22.4.3.5.4 | Method of Test..... | 131 |
| 27.22.4.3.5.4.1 | Initial Conditions..... | 131 |
| 27.22.4.3.5.4.2 | Procedure..... | 131 |
| 27.22.4.3.5.5 | Test Requirement | 134 |
| 27.22.4.3.6 | GET INPUT (display of Icon) | 134 |
| 27.22.4.3.6.1 | Definition and applicability | 134 |
| 27.22.4.3.6.2 | Conformance Requirement | 134 |
| 27.22.4.3.6.3 | Test Purpose..... | 135 |
| 27.22.4.3.6.4 | Method of Test..... | 135 |
| 27.22.4.3.6.4.1 | Initial Conditions..... | 135 |
| 27.22.4.3.6.4.3 | Procedure..... | 135 |
| 27.22.4.3.7 | GET INPUT (Help Information) | 144 |
| 27.22.4.3.7.1 | Definition and applicability | 144 |
| 27.22.4.3.7.2 | Conformance Requirement | 144 |
| 27.22.4.3.7.3 | Test Purpose..... | 144 |
| 27.22.4.3.7.4 | Method of Test..... | 144 |
| 27.22.4.3.7.4.1 | Initial Conditions..... | 144 |
| 27.22.4.3.7.4.2 | Procedure..... | 145 |
| 27.22.4.3.7.5 | Test Requirement | 146 |
| 27.22.4.4 | MORE TIME | 146 |
| 27.22.4.4.1 | Definition and applicability | 146 |
| 27.22.4.4.2 | Conformance Requirement | 146 |
| 27.22.4.4.3 | Test Purpose | 146 |
| 27.22.4.4.4 | Method of Test | 146 |
| 27.22.4.4.5 | Test Requirement..... | 147 |
| 27.22.4.5 | PLAY TONE..... | 148 |
| 27.22.4.5.1 | Definition and applicability | 148 |
| 27.22.4.5.2 | Conformance Requirement | 148 |
| 27.22.4.5.3 | Test Purpose | 148 |
| 27.22.4.5.4 | Method of Test | 148 |
| 27.22.4.5.5 | Test Requirement..... | 162 |
| 27.22.4.6 | POLL INTERVAL..... | 163 |
| 27.22.4.6.1 | Definition and applicability | 163 |
| 27.22.4.6.2 | Conformance Requirement | 163 |
| 27.22.4.6.3 | Test Purpose | 163 |

| | | |
|-----------------|---|------------|
| 27.22.4.6.4 | Method of Test | 163 |
| 27.22.4.6.5 | Test Requirement | 164 164 |
| 27.22.4.7 | REFRESH | 164 |
| 27.22.4.7.1 | REFRESH (normal)..... Definition and applicability | 164 164 |
| 27.22.4.7.1.1 | Conformance requirement | 165 |
| 27.22.4.7.1.2 | Test Purpose..... | 165 |
| 27.22.4.7.1.3 | Method of test | 165 |
| 27.22.4.7.1.4 | Initial Conditions..... | 165 |
| 27.22.4.7.1.4.1 | Procedure..... | 166 |
| 27.22.4.7.1.4.2 | Test Requirement | 174 |
| 27.22.4.7.1.5 | REFRESH (IMSI changing procedure)..... Definition and applicability | 174 174 |
| 27.22.4.7.2 | Conformance requirement | 174 |
| 27.22.4.7.2.1 | Test Purpose..... | 175 |
| 27.22.4.7.2.2 | Method of test | 175 |
| 27.22.4.7.2.3 | Initial Conditions..... | 175 |
| 27.22.4.7.2.4 | Procedure..... | 175 |
| 27.22.4.7.2.4.1 | Test Requirement | 178 |
| 27.22.4.7.2.4.2 | SET UP MENU and ENVELOPE MENU SELECTION | 178 |
| 27.22.4.7.2.5 | SET UP MENU and ENVELOPE MENU SELECTION (normal)..... Definition and applicability | 178 178 |
| 27.22.4.8 | Conformance Requirement | 178 |
| 27.22.4.8.1 | Test Purpose..... | 179 |
| 27.22.4.8.1.1 | Method of Test..... Initial Conditions..... | 179 179 |
| 27.22.4.8.1.2 | Procedure..... | 180 |
| 27.22.4.8.1.3 | Test Requirement | 192 |
| 27.22.4.8.1.4 | SET UP MENU (help request support) | 192 |
| 27.22.4.8.1.4.1 | Definition and applicability | 192 |
| 27.22.4.8.1.4.2 | Conformance Requirement | 192 |
| 27.22.4.8.1.5 | Test Purpose..... | 192 |
| 27.22.4.8.2 | Method of Test..... Initial Conditions..... | 193 193 |
| 27.22.4.8.2.1 | Procedure..... | 194 |
| 27.22.4.8.2.2 | SET UP MENU (next action support) | 195 |
| 27.22.4.8.2.3 | Definition and applicability | 195 |
| 27.22.4.8.2.4 | Conformance Requirement | 195 |
| 27.22.4.8.2.4.1 | Test Purpose..... | 196 |
| 27.22.4.8.2.4.2 | Method of Test..... Initial Conditions..... | 196 196 |
| 27.22.4.8.3 | Procedure..... | 196 |
| 27.22.4.8.3.1 | SET UP MENU (display of icons) | 198 |
| 27.22.4.8.3.2 | Definition and applicability | 198 |
| 27.22.4.8.3.3 | Conformance Requirement | 198 |
| 27.22.4.8.3.4 | Test Purpose..... | 198 |
| 27.22.4.8.3.4.1 | Method of Test..... Initial Conditions..... | 198 198 |
| 27.22.4.8.3.4.2 | Procedure..... | 199 |
| 27.22.4.8.4 | SET UP MENU (soft keys support) | 205 |
| 27.22.4.8.4.1 | Definition and applicability | 205 |
| 27.22.4.8.4.2 | Conformance Requirement | 205 |
| 27.22.4.8.4.3 | Test Purpose..... | 206 |
| 27.22.4.8.4.4 | Method of Test..... Initial Conditions..... | 206 206 |
| 27.22.4.8.4.4.1 | Procedure..... | 206 |
| 27.22.4.8.4.4.2 | SELECT ITEM | 208 |
| 27.22.4.8.5 | SELECT ITEM (mandatory features for ME supporting SELECT ITEM)..... Definition and applicability | 208 208 |
| 27.22.4.8.5.1 | Conformance Requirement | 208 |
| 27.22.4.8.5.2 | Test Purpose..... | 208 |
| 27.22.4.8.5.3 | Method of Test..... Initial Conditions..... | 206 206 |
| 27.22.4.8.5.4 | Procedure..... | 206 |
| 27.22.4.8.5.4.1 | SELECT ITEM | 208 |
| 27.22.4.8.5.4.2 | SELECT ITEM (mandatory features for ME supporting SELECT ITEM)..... Definition and applicability | 208 208 |
| 27.22.4.9 | Conformance Requirement | 208 |
| 27.22.4.9.1 | Test Purpose..... | 208 |
| 27.22.4.9.1.1 | Method of Test..... Initial Conditions..... | 206 206 |
| 27.22.4.9.1.2 | Procedure..... | 206 |
| 27.22.4.9.1.3 | SELECT ITEM | 208 |

| | | |
|------------------|---|-----|
| 27.22.4.9.1.4 | Method of Test..... | 208 |
| 27.22.4.9.1.4.1 | Initial Conditions..... | 208 |
| 27.22.4.9.1.4.2 | Procedure..... | 209 |
| 27.22.4.9.1.5 | Test Requirement..... | 222 |
| 27.22.4.9.2 | SELECT ITEM (next action support)..... | 222 |
| 27.22.4.9.2.1 | Definition and applicability | 222 |
| 27.22.4.9.2.2 | Conformance Requirement | 223 |
| 27.22.4.9.2.3 | Test Purpose..... | 223 |
| 27.22.4.9.2.4 | Method of Test..... | 223 |
| 27.22.4.9.2.4.1 | Initial Conditions..... | 223 |
| 27.22.4.9.2.4.2 | Procedure..... | 223 |
| 27.22.4.9.3 | SELECT ITEM (default item support)..... | 225 |
| 27.22.4.9.3.1 | Definition and applicability | 225 |
| 27.22.4.9.3.2 | Conformance Requirement | 225 |
| 27.22.4.9.3.3 | Test Purpose..... | 225 |
| 27.22.4.9.3.4 | Method of Test..... | 225 |
| 27.22.4.9.3.4.1 | Initial Conditions..... | 225 |
| 27.22.4.9.3.4.2 | Procedure..... | 225 |
| 27.22.4.9.4 | SELECT ITEM (help request support)..... | 227 |
| 27.22.4.9.4.1 | Definition and applicability | 227 |
| 27.22.4.9.4.2 | Conformance Requirement | 227 |
| 27.22.4.9.4.3 | Test Purpose..... | 227 |
| 27.22.4.9.4.4 | Method of Test..... | 227 |
| 27.22.4.9.4.4.1 | Initial Conditions..... | 227 |
| 27.22.4.9.4.4.2 | Procedure..... | 227 |
| 27.22.4.9.5 | SELECT ITEM (icons support)..... | 229 |
| 27.22.4.9.5.1 | Definition and applicability | 229 |
| 27.22.4.9.5.2 | Conformance Requirement | 229 |
| 27.22.4.9.5.3 | Test Purpose..... | 229 |
| 27.22.4.9.5.4 | Method of Test..... | 229 |
| 27.22.4.9.5.4.1 | Initial Conditions..... | 229 |
| 27.22.4.9.5.4.2 | Procedure..... | 230 |
| 27.22.4.9.6 | SELECT ITEM (presentation style)..... | 235 |
| 27.22.4.9.6.1 | Definition and applicability | 235 |
| 27.22.4.9.6.2 | Conformance Requirement | 235 |
| 27.22.4.9.6.3 | Test Purpose..... | 235 |
| 27.22.4.9.6.4 | Method of Test..... | 235 |
| 27.22.4.9.6.4.1 | Initial Conditions..... | 235 |
| 27.22.4.9.6.4.2 | Procedure..... | 235 |
| 27.22.4.9.7 | SELECT ITEM (soft keys support)..... | 239 |
| 27.22.4.9.7.1 | Definition and applicability | 239 |
| 27.22.4.9.7.2 | Conformance Requirement | 239 |
| 27.22.4.9.7.3 | Test Purpose..... | 239 |
| 27.22.4.9.7.4 | Method of Test..... | 239 |
| 27.22.4.9.7.4.1 | Initial Conditions..... | 239 |
| 27.22.4.9.7.4.2 | Procedure..... | 239 |
| 27.22.4.10 | SEND SHORT MESSAGE..... | 241 |
| 27.22.4.10.1 | SEND SHORT MESSAGE (normal)..... | 241 |
| 27.22.4.10.1.1 | Definition and applicability | 241 |
| 27.22.4.10.1.2 | Conformance requirement | 241 |
| 27.22.4.10.1.4 | Method of test | 241 |
| 27.22.4.10.1.4.1 | Initial Conditions..... | 241 |
| 27.22.4.10.1.4.2 | Procedure..... | 242 |
| 27.22.4.10.1.5 | Test Requirement..... | 262 |
| 27.22.4.10.2 | SEND SHORT MESSAGE (UCS2 support)..... | 262 |
| 27.22.4.10.2.1 | Definition and applicability | 262 |
| 27.22.4.10.2.2 | Conformance requirement | 262 |
| 27.22.4.10.2.3 | Test Purpose..... | 262 |
| 27.22.4.10.2.4 | Method of test | 262 |
| 27.22.4.10.2.4.1 | Initial Conditions..... | 262 |
| 27.22.4.10.2.4.2 | Procedure..... | 263 |
| 27.22.4.10.2.5 | Test Requirement..... | 264 |

| | | |
|-------------------|--|-----|
| 27.22.4.10.3 | SEND SHORT MESSAGE (icon support)..... | 264 |
| 27.22.4.10.3.1 | Definition and applicability | 264 |
| 27.22.4.10.3.2 | Conformance requirement | 265 |
| 27.22.4.10.3.3 | Test Purpose..... | 265 |
| 27.22.4.10.3.4 | Method of test | 265 |
| 27.22.4.10.3.4.1 | Initial Conditions..... | 265 |
| 27.22.4.10.3.4.2 | Procedure..... | 265 |
| 27.22.4.10.3.5 | Test Requirement..... | 271 |
| 27.22.4.11 | SEND SS..... | 271 |
| 27.22.4.11.1 | SEND SS (normal) | 271 |
| 27.22.4.11.1.1 | Definition and applicability | 271 |
| 27.22.4.11.1.2 | Conformance requirement | 271 |
| 27.22.4.11.1.3 | Test Purpose..... | 271 |
| 27.22.4.11.1.4 | Method of test | 271 |
| 27.22.4.11.1.4.1 | Initial Conditions..... | 271 |
| 27.22.4.11.1.4.2 | Procedure..... | 272 |
| 27.22.4.11.1.5 | Test Requirement | 281 |
| 27.22.4.11.2 | SEND SS (Icon support)..... | 281 |
| 27.22.4.11.2.1 | Definition and applicability | 281 |
| 27.22.4.11.2.2 | Conformance requirement | 281 |
| 27.22.4.11.2.3 | Test Purpose..... | 281 |
| 27.22.4.11.2.4 | Method of test | 281 |
| 27.22.4.11.2.4.1 | Initial Conditions..... | 281 |
| .27.22.4.11.2.4.2 | Procedure..... | 282 |
| 27.22.4.11.2.5 | Test Requirement | 287 |
| 27.22.4.11.2 | SEND SS (UCS2 support)..... | 287 |
| 27.22.4.11.2.1 | Definition and applicability | 287 |
| 27.22.4.11.2.2 | Conformance requirement | 287 |
| 27.22.4.11.2.3 | Test Purpose..... | 287 |
| 27.22.4.11.2.4 | Method of test | 287 |
| 27.22.4.11.2.4.1 | Initial Conditions..... | 287 |
| 27.22.4.11.2.4.2 | Procedure..... | 288 |
| 27.22.4.11.2.5 | Test Requirement | 288 |
| 27.22.4.12 | SEND USSD | 288 |
| 27.22.4.12.1 | SEND USSD (normal) | 288 |
| 27.22.4.12.1.1 | Definition and applicability | 288 |
| 27.22.4.12.1.2 | Conformance requirement | 289 |
| 27.22.4.12.1.3 | Test Purpose..... | 289 |
| 27.22.4.12.1.4 | Method of test | 289 |
| 27.22.4.12.1.4.1 | Initial Conditions..... | 289 |
| 27.22.4.12.1.4.2 | Procedure..... | 289 |
| 27.22.4.12.1.5 | Test Requirement | 300 |
| 27.22.4.12.2 | SEND USSD (Icon support)..... | 300 |
| 27.22.4.12.2.1 | Definition and applicability | 300 |
| 27.22.4.12.2.2 | Conformance requirement | 300 |
| 27.22.4.12.2.3 | Test Purpose..... | 300 |
| 27.22.4.12.2.4 | Method of test | 300 |
| 27.22.4.12.2.4.1 | Initial Conditions..... | 300 |
| 27.22.4.12.2.4.2 | Procedure..... | 301 |
| 27.22.4.12.2.5 | Test Requirement | 307 |
| 27.22.4.12.3 | SEND USSD (UCS2 support) | 307 |
| 27.22.4.12.3.1 | Definition and applicability | 307 |
| 27.22.4.12.3.2 | Conformance requirement | 307 |
| 27.22.4.12.3.3 | Test Purpose..... | 307 |
| 27.22.4.12.3.4 | Method of test | 307 |
| 27.22.4.12.3.4.1 | Initial Conditions..... | 307 |
| 27.22.4.12.3.4.2 | Procedure..... | 308 |
| 27.22.4.12.3.5 | Test Requirement | 309 |
| 27.22.4.13 | SET UP CALL | 310 |
| 27.22.4.13.1 | SET UP CALL (normal)..... | 310 |
| 27.22.4.13.1.1 | Definition and applicability | 310 |
| 27.22.4.13.1.2 | Conformance requirement | 310 |

| | | |
|------------------|--|-----|
| 27.22.4.13.1.3 | Test Purpose..... | 310 |
| 27.22.4.13.1.4 | Method of test | 310 |
| 27.22.4.13.1.4.1 | Initial Conditions..... | 310 |
| 27.22.4.13.1.4.2 | Procedure..... | 311 |
| 27.22.4.13.2 | SET UP CALL (second alpha identifier)..... | 326 |
| 27.22.4.13.2.1 | Definition and applicability | 326 |
| 27.22.4.13.2.2 | Conformance requirement | 327 |
| 27.22.4.13.2.3 | Test Purpose..... | 327 |
| 27.22.4.13.2.4 | Method of test | 327 |
| 27.22.4.13.2.4.1 | Initial Conditions..... | 327 |
| 27.22.4.13.1.4.2 | Procedure..... | 327 |
| 27.22.4.13.3.5 | Test Requirement..... | 328 |
| 27.22.4.13.3 | SET UP CALL (display of icons)..... | 328 |
| 27.22.4.13.3.1 | Definition and applicability | 328 |
| 27.22.4.13.3.2 | Conformance requirement | 329 |
| 27.22.4.13.3.3 | Test Purpose..... | 329 |
| 27.22.4.13.3.4 | Method of test | 329 |
| 27.22.4.13.3.4.1 | Initial Conditions..... | 329 |
| 27.22.4.13.3.4.2 | Procedure..... | 330 |
| 27.22.4.13.3.5 | Test Requirement..... | 339 |
| 27.22.4.14 | POLLING OFF | 340 |
| 27.22.4.14.1 | Definition and applicability | 340 |
| 27.22.4.14.2 | Conformance Requirement..... | 340 |
| 27.22.4.14.3 | Test Purpose | 340 |
| 27.22.4.14.4 | Method of Test | 340 |
| 27.22.4.14.4.1 | Initial Conditions | 340 |
| 27.22.4.14.4.2 | Procedure | 340 |
| 27.22.4.14.5 | Test Requirement..... | 342 |
| 27.22.4.15 | PROVIDE LOCAL INFORMATION | 342 |
| 27.22.4.15.1 | Definition and applicability | 342 |
| 27.22.4.15.2 | Conformance requirement | 342 |
| 27.22.4.15.3 | Test Purpose | 342 |
| 27.22.4.15.4 | Method of tests | 342 |
| 27.22.4.15.4.1 | Initial Conditions | 342 |
| 27.22.4.15.4.2 | Procedure | 343 |
| 27.22.4.16 | SET UP EVENT LIST | 348 |
| 27.22.4.16.1 | SET UP EVENT LIST (normal) | 348 |
| 27.22.4.16.1.1 | Definition and applicability | 348 |
| 27.22.4.16.1.2 | Conformance requirement | 348 |
| 27.22.4.16.1.3 | Test Purpose..... | 348 |
| 27.22.4.16.1.4 | Method of test | 348 |
| 27.22.4.16.1.4.1 | Initial Conditions..... | 348 |
| 27.22.4.16.1.4.2 | Procedure..... | 349 |
| 27.22.4.16.1.5 | Test Requirement | 358 |
| 27.22.4.17 | PERFORM CARD APDU | 358 |
| 27.22.4.17.1 | PERFORM CARD APDU (normal)..... | 358 |
| 27.22.4.17.1.1 | Definition and applicability | 358 |
| 27.22.4.17.1.2 | Conformance requirement | 358 |
| 27.22.4.17.1.3 | Test Purpose..... | 359 |
| 27.22.4.17.1.4 | Method of test | 359 |
| 27.22.4.17.1.4.1 | Initial Conditions..... | 359 |
| 27.22.4.17.1.4.2 | Procedure..... | 360 |
| 27.22.4.17.2 | PERFORM CARD APDU (detachable card reader) | 377 |
| 27.22.4.17.2.1 | Definition and applicability | 377 |
| 27.22.4.17.2.2 | Conformance requirement | 377 |
| 27.22.4.17.2.3 | Test Purpose..... | 377 |
| 27.22.4.17.2.4 | Method of test | 377 |
| 27.22.4.17.2.4.1 | Initial Conditions..... | 377 |
| 27.22.4.18 | POWER OFF CARD | 378 |
| 27.22.4.18.1 | POWER OFF CARD (normal)..... | 378 |
| 27.22.4.18.1.1 | Definition and applicability | 378 |
| 27.22.4.18.1.2 | Conformance requirement | 379 |

| | | |
|------------------|--|-----|
| 27.22.4.18.1.3 | Test Purpose..... | 379 |
| 27.22.4.18.1.4 | Method of test | 379 |
| 27.22.4.18.1.4.1 | Initial Conditions..... | 379 |
| 27.22.4.18.1.4.2 | Procedure..... | 379 |
| 27.22.4.18.2 | POWER OFF CARD (detachable card reader) | 381 |
| 27.22.4.18.2.1 | Definition and applicability | 381 |
| 27.22.4.18.2.2 | Conformance requirement | 381 |
| 27.22.4.18.2.3 | Test Purpose..... | 381 |
| 27.22.4.18.2.4 | Method of test | 381 |
| 27.22.4.18.2.4.1 | Initial Conditions..... | 381 |
| 27.22.4.18.2.4.2 | Procedure..... | 382 |
| 27.22.4.19 | POWER ON CARD..... | 383 |
| 27.22.4.19.1 | POWER ON CARD (normal) | 383 |
| 27.22.4.19.1.1 | Definition and applicability | 383 |
| 27.22.4.19.1.2 | Conformance requirement | 383 |
| 27.22.4.19.1.3 | Test Purpose..... | 383 |
| 27.22.4.19.1.4 | Method of test | 383 |
| 27.22.4.19.1.4.1 | Initial Conditions..... | 383 |
| 27.22.4.19.1.4.2 | Procedure..... | 383 |
| 27.22.4.19.2 | POWER ON CARD (detachable card reader)..... | 387 |
| 27.22.4.19.2.1 | Definition and applicability | 387 |
| 27.22.4.19.2.2 | Conformance requirement | 387 |
| 27.22.4.19.2.3 | Test Purpose..... | 387 |
| 27.22.4.19.2.4 | Method of test | 387 |
| 27.22.4.19.2.4.1 | Initial Conditions..... | 387 |
| 27.22.4.19.2.4.2 | Procedure..... | 387 |
| 27.22.4.20 | GET READER STATUS..... | 388 |
| 27.22.4.20.1 | GET READER STATUS (normal) | 388 |
| 27.22.4.20.1.1 | Definition and applicability | 388 |
| 27.22.4.20.1.2 | Conformance requirement | 388 |
| 27.22.4.20.1.4 | Method of test | 389 |
| 27.22.4.20.1.4.1 | Initial Conditions..... | 389 |
| 27.22.4.20.1.4.2 | Procedure..... | 390 |
| 27.22.4.20.2 | GET CARD READER STATUS (detachable card reader)..... | 399 |
| 27.22.4.20.2.1 | Definition and applicability | 399 |
| 27.22.4.20.2.2 | Conformance requirement | 399 |
| 27.22.4.20.2.3 | Test Purpose..... | 399 |
| 27.22.4.20.2.4 | Method of test | 399 |
| 27.22.4.20.2.4.1 | Initial Conditions..... | 399 |
| 27.22.4.21 | TIMER MANAGEMENT and ENVELOPE TIMER EXPIRATION | 401 |
| 27.22.4.21.1 | TIMER MANAGEMENT (normal)..... | 401 |
| 27.22.4.21.1.1 | Definition and applicability..... | 401 |
| 27.22.4.21.1.2 | Conformance Requirement | 401 |
| 27.22.4.21.1.3 | Test Purpose..... | 401 |
| 27.22.4.21.1.4 | Method of Test..... | 402 |
| 27.22.4.21.1.4.1 | Initial Conditions..... | 402 |
| 27.22.4.21.1.4.2 | Procedure..... | 402 |
| 27.22.4.21.2 | ENVELOPE TIMER EXPIRATION (normal)..... | 439 |
| 27.22.4.21.2.1 | Definition and applicability | 439 |
| 27.22.4.21.2.2 | Conformance requirement | 439 |
| 27.22.4.21.2.3 | Test Purpose | 439 |
| 27.22.4.21.2.4 | Method of test..... | 439 |
| 27.22.4.21.2.4.1 | Initial Conditions | 439 |
| 27.22.4.21.2.4.2 | Procedure | 440 |
| 27.22.4.21.2.5 | Test Requirement..... | 446 |
| 27.22.4.22 | SET UP IDLE MODE TEXT..... | 446 |
| 27.22.4.22.1 | SET UP IDLE MODE TEXT (normal)..... | 446 |
| 27.22.4.22.1.1 | Definition and applicability | 446 |
| 27.22.4.22.1.2 | Conformance requirement | 446 |
| 27.22.4.22.1.3 | Test Purpose..... | 446 |
| 27.22.4.22.1.4 | Method of test | 446 |
| 27.22.4.22.1.4.1 | Initial Conditions..... | 446 |

| | | |
|------------------|--|-----|
| 27.22.4.22.1.4.2 | Procedure | 447 |
| 27.22.4.22.3.5 | Test Requirement | 460 |
| 27.22.4.22.2 | SET UP IDLE MODE TEXT (Icon support) | 460 |
| 27.22.4.22.2.1 | Definition and applicability | 460 |
| 27.22.4.22.2.2 | Conformance requirement | 460 |
| 27.22.4.22.2.3 | Test Purpose | 460 |
| 27.22.4.22.2.4 | Method of test | 461 |
| 27.22.4.22.2.4.1 | Initial Conditions | 461 |
| 27.22.4.22.2.4.2 | Procedure | 462 |
| 27.22.4.22.2.5 | Test Requirement | 468 |
| 27.22.4.22.3 | SET UP IDLE MODE TEXT (UCS2 support) | 469 |
| 27.22.4.22.3.1 | Definition and applicability | 469 |
| 27.22.4.22.3.2 | Conformance requirement | 469 |
| 27.22.4.22.3.3 | Test Purpose | 469 |
| 27.22.4.22.3.4 | Method of test | 469 |
| 27.22.4.22.3.4.1 | Initial Conditions | 469 |
| 27.22.4.22.3.4.2 | Procedure | 469 |
| 27.22.4.22.3.5 | Test Requirement | 470 |
| 27.22.4.23 | RUN AT COMMAND | 471 |
| 27.22.4.23.1 | RUN AT COMMAND (normal) | 471 |
| 27.22.4.23.1.1 | Definition and applicability | 471 |
| 27.22.4.23.1.2 | Conformance requirement | 471 |
| 27.22.4.23.1.4 | Method of test | 471 |
| 27.22.4.23.1.4.1 | Initial Conditions | 471 |
| 27.22.4.23.1.4.2 | Procedure | 471 |
| 27.22.4.23.1.5 | Test Requirement | 474 |
| 27.22.4.23.2 | RUN AT COMMAND (Icon support) | 474 |
| 27.22.4.23.2.1 | Definition and applicability | 474 |
| 27.22.4.23.2.2 | Conformance requirement | 474 |
| 27.22.4.23.2.3 | Test Purpose | 474 |
| 27.22.4.23.2.4.1 | Initial Conditions | 474 |
| 27.22.4.23.2.4.2 | Procedure | 475 |
| 27.22.4.23.2.5 | Test Requirement | 479 |
| 27.22.4.24 | SEND DTMF | 480 |
| 27.22.4.24.1 | SEND DTMF (Normal) | 480 |
| 27.22.4.24.1.1 | Definition and applicability | 480 |
| 27.22.4.24.1.2 | Conformance requirement | 480 |
| 27.22.4.24.1.3 | Test Purpose | 480 |
| 27.22.4.24.1.4.1 | Initial Conditions | 480 |
| 27.22.4.24.1.4.2 | Procedure | 480 |
| 27.22.4.24.1.5 | Test Requirement | 485 |
| 27.22.4.24.2 | SEND DTMF (Display of icons) | 485 |
| 27.22.4.24.2.1 | Definition and applicability | 485 |
| 27.22.4.24.2.2 | Conformance requirement | 486 |
| 27.22.4.24.2.3 | Test Purpose | 486 |
| 27.22.4.24.2.4.1 | Initial Conditions | 486 |
| 27.22.4.24.2.4.2 | Procedure | 486 |
| 27.22.4.24.2.5 | Test Requirement | 491 |
| 27.22.4.24.3 | SEND DTMF (UCS2 support) | 491 |
| 27.22.4.24.3.1 | Definition and applicability | 491 |
| 27.22.4.24.3.2 | Conformance requirement | 491 |
| 27.22.4.24.3.3 | Test Purpose | 491 |
| 27.22.4.24.3.4 | Method of test | 491 |
| 27.22.4.24.3.4.1 | Initial Conditions | 491 |
| 27.22.4.24.3.4.2 | Procedure | 491 |
| 27.22.4.12.2.5 | Test Requirement | 492 |
| 27.22.4.25 | LANGUAGE NOTIFICATION | 493 |
| 27.22.4.25.1 | Definition and applicability | 493 |
| 27.22.4.25.2 | Conformance Requirement | 493 |
| 27.22.4.25.3 | Test Purpose | 493 |
| 27.22.4.25.4 | Method of Test | 493 |
| 27.22.4.25.5 | Test Requirement | 495 |

| | | |
|------------------|--|-----|
| 27.22.4.26 | LAUNCH BROWSER..... | 495 |
| 27.22.4.26.1 | LAUNCH BROWSER (No session already launched) | 495 |
| 27.22.4.26.1.1 | Definition and applicability | 495 |
| 27.22.4.26.1.2 | Conformance requirements | 495 |
| 27.22.4.26.1.3 | Test Purpose..... | 496 |
| 27.22.4.26.1.4 | Method of test | 496 |
| 27.22.4.26.1.4.1 | Initial Conditions..... | 496 |
| 27.22.4.26.1.4.2 | Procedure..... | 496 |
| 27.22.4.26.2 | LAUNCH BROWSER (Interaction with current session)..... | 505 |
| 27.22.4.26.2.1 | Definition and applicability | 505 |
| 27.22.4.26.2.2 | Conformance requirements | 505 |
| 27.22.4.26.2.3 | Test Purpose..... | 505 |
| 27.22.4.26.2.4 | Method of test | 505 |
| 27.22.4.26.2.4.1 | Initial Conditions..... | 505 |
| 27.22.4.26.2.4.2 | Procedure..... | 505 |
| 27.22.4.26.3 | LAUNCH BROWSER (UCS2 support)..... | 509 |
| 27.22.4.26.3.1 | Definition and applicability | 509 |
| 27.22.4.26.3.2 | Conformance requirements | 509 |
| 27.22.4.26.3.3 | Test Purpose..... | 509 |
| 27.22.4.26.3.4 | Method of test | 510 |
| 27.22.4.26.3.4.1 | Initial Conditions..... | 510 |
| 27.22.4.26.3.4.2 | Procedure..... | 510 |
| 27.22.4.26.4 | LAUNCH BROWSER (icons support) | 511 |
| 27.22.4.26.4.1 | Definition and applicability | 511 |
| 27.22.4.26.4.2 | Conformance requirements | 511 |
| 27.22.4.26.4.3 | Test Purpose..... | 512 |
| 27.22.4.26.4.4 | Method of test | 512 |
| 27.22.4.26.4.4.1 | Initial Conditions..... | 512 |
| 27.22.4.26.4.4.2 | Procedure..... | 512 |
| 27.22.4.27 | OPEN CHANNEL | 516 |
| 27.22.4.27.1 | Definition and applicability | 516 |
| 27.22.4.27.2 | Conformance requirements..... | 516 |
| 27.22.4.27.3 | Test Purpose | 517 |
| 27.22.4.27.4 | Method of test..... | 517 |
| 27.22.4.27.4.1 | Initial Conditions | 517 |
| 27.22.4.27.4.2 | Procedure | 517 |
| 27.22.4.28 | CLOSE CHANNEL | 538 |
| 27.22.4.28.1 | Definition and applicability | 538 |
| 27.22.4.28.2 | Conformance requirements..... | 538 |
| 27.22.4.28.3 | Test Purpose | 538 |
| 27.22.4.28.4 | Method of Test | 538 |
| 27.22.4.28.4.1 | Initial Conditions | 538 |
| 27.22.4.28.4.2 | Procedure | 538 |
| 27.22.4.29 | RECEIVE DATA..... | 541 |
| 27.22.4.29.1 | Definition and applicability | 541 |
| 27.22.4.29.2 | Conformance requirements..... | 541 |
| 27.22.4.29.3 | Test Purpose | 542 |
| 27.22.4.29.4 | Method of test..... | 542 |
| 27.22.4.29.4.1 | Initial Conditions | 542 |
| 27.22.4.29.4.2 | Procedure | 542 |
| 27.22.4.30 | SEND DATA | 547 |
| 27.22.4.30.1 | Definition and applicability | 547 |
| 27.22.4.30.2 | Conformance requirements..... | 547 |
| 27.22.4.30.3 | Test Purpose | 547 |
| 27.22.4.30.4 | Method of test..... | 547 |
| 27.22.4.30.4.1 | Initial Conditions | 547 |
| 27.22.4.30.4.2 | Procedure | 547 |
| 27.22.4.31 | GET CHANNEL STATUS..... | 559 |
| 27.22.4.31.1 | Definition and applicability | 559 |
| 27.22.4.31.2 | Conformance requirements..... | 559 |
| 27.22.4.31.3 | Test Purpose | 560 |
| 27.22.4.31.4 | Method of test..... | 560 |

| | | |
|-----------------|---|-----|
| 27.22.4.31.4.1 | Initial Conditions | 560 |
| 27.22.4.31.4.2 | Procedure | 560 |
| 27.22.5 | DATA DOWNLOAD TO SIM | 564 |
| 27.22.5 | Data Download to SIM | 564 |
| 27.22.5.1 | SMS-PP Data Download | 564 |
| 27.22.5.1.1 | Definition and applicability | 564 |
| 27.22.5.1.2 | Conformance requirement | 564 |
| 27.22.5.1.3 | Test Purpose | 564 |
| 27.22.5.1.4 | Method of Test | 564 |
| 27.22.5.1.5 | Test Requirement | 574 |
| 27.22.5.2 | SMS-CB Data Download | 574 |
| 27.22.5.2.1 | Definition and applicability | 574 |
| 27.22.5.2.2 | Conformance requirement | 574 |
| 27.22.5.2.3 | Test Purpose | 574 |
| 27.22.5.2.4 | Method of Test | 574 |
| 27.22.5.2.5 | Test Requirement | 578 |
| 27.22.6 | CALL CONTROL BY SIM | 578 |
| 27.22.6.1 | Procedure for Mobile Originated calls | 578 |
| 27.22.6.1.1 | Definition and applicability | 578 |
| 27.22.6.1.2 | Conformance requirement | 578 |
| 27.22.6.1.3 | Test Purpose | 578 |
| 27.22.6.1.4 | method of tests | 579 |
| 27.22.6.1.4.1 | Initial Conditions | 579 |
| 27.22.6.1.4.2 | Procedure | 579 |
| 27.22.6.2 | Procedure for Supplementary (SS) Services | 592 |
| 27.22.6.2.1 | Definition and applicability | 592 |
| 27.22.6.2.2 | Conformance requirement | 592 |
| 27.22.6.2.3 | Test Purpose | 592 |
| 27.22.6.2.4 | method of tests | 592 |
| 27.22.6.2.4.1 | Initial Conditions | 592 |
| 27.22.6.2.4.2 | Procedure | 593 |
| 27.22.6.3 | Interaction with Fixed Dialling Number (FDN) | 596 |
| 27.22.6.3.1 | Definition and applicability | 596 |
| 27.22.6.3.2 | Conformance requirement | 597 |
| 27.22.6.3.3 | Test Purpose | 597 |
| 27.22.6.3.4 | method of tests | 597 |
| 27.22.6.3.4.1 | Initial Conditions | 597 |
| 27.22.6.3.4.2 | Procedure | 597 |
| 27.22.6.4 | Support of Barred Dialling Number (BDN) service | 600 |
| 27.22.6.4.1 | Definition and applicability | 601 |
| 27.22.6.4.2 | Conformance requirement | 601 |
| 27.22.6.2.3 | Test Purpose | 601 |
| 27.22.6.2.4 | method of tests | 601 |
| 27.22.6.2.4.1 | Initial Conditions | 601 |
| 27.22.6.2.4.2 | Procedure | 601 |
| 27.22.7 | EVENT DOWNLOAD | 605 |
| 27.22.7.1 | MT Call Event | 605 |
| 27.22.7.1.1 | MT Call Event (normal) | 605 |
| 27.22.7.1.1.1 | Definition and applicability | 605 |
| 27.22.7.1.1.2 | Conformance requirement | 606 |
| 27.22.7.1.1.3 | Test Purpose | 606 |
| 27.22.7.1.1.4 | Method of test | 606 |
| 27.22.7.1.1.4.1 | Initial Conditions | 606 |
| 27.22.7.1.1.4.2 | Procedure | 606 |
| 27.22.7.1.1.5 | Test Requirement | 609 |
| 27.22.7.2 | Call Connected Event | 609 |
| 27.22.7.2.1 | Call Connected Event (MT and MO call) | 609 |
| 27.22.7.2.1.1 | Definition and applicability | 609 |
| 27.22.7.2.1.2 | Conformance requirement | 609 |
| 27.22.7.2.1.3 | Test Purpose | 609 |
| 27.22.7.2.1.4 | Method of test | 609 |
| 27.22.7.2.1.4.1 | Initial Conditions | 609 |

| | | |
|-----------------|---|-----|
| 27.22.7.2.1.4.2 | Procedure..... | 610 |
| 27.22.7.2.1.5 | Test Requirement..... | 611 |
| 27.22.7.2.2 | Call Connected Event (ME supporting SET UP CALL)..... | 612 |
| 27.22.7.2.2.1 | Definition and applicability | 612 |
| 27.22.7.2.2.2 | Conformance requirement | 612 |
| 27.22.7.2.2.3 | Test Purpose..... | 612 |
| 27.22.7.2.2.4 | Method of test | 612 |
| 27.22.7.2.2.4.1 | Initial Conditions..... | 612 |
| 27.22.7.2.2.4.2 | Procedure..... | 612 |
| 27.22.7.2.2.5 | Test Requirement..... | 614 |
| 27.22.7.3 | Call Disconnected Event | 614 |
| 27.22.7.3.1 | Call Disconnected Event | 614 |
| 27.22.7.3.1.1 | Definition and applicability | 614 |
| 27.22.7.3.1.2 | Conformance requirement | 614 |
| 27.22.7.3.1.3 | Test Purpose..... | 614 |
| 27.22.7.3.1.4 | Method of test | 615 |
| 27.22.7.3.1.4.1 | Initial Conditions..... | 615 |
| 27.22.7.3.1.4.2 | Procedure..... | 616 |
| 27.22.7.3.1.5 | Test Requirement..... | 620 |
| 27.22.7.4 | Location Status Event | 620 |
| 27.22.7.4.1 | Location Status Event (normal)..... | 620 |
| 27.22.7.4.1.1 | Definition and applicability | 620 |
| 27.22.7.4.1.2 | Conformance requirement | 620 |
| 27.22.7.4.1.3 | Test Purpose..... | 621 |
| 27.22.7.4.1.4 | Method of test | 621 |
| 27.22.7.4.1.4.1 | Initial Conditions..... | 621 |
| 27.22.7.4.4.2 | Procedure..... | 621 |
| 27.22.7.4.1.5 | Test Requirement..... | 622 |
| 27.22.7.5 | User Activity Event..... | 622 |
| 27.22.7.5.1 | User Activity Event (normal) | 622 |
| 27.22.7.5.1.1 | Definition and applicability | 622 |
| 27.22.7.5.1.2 | Conformance Requirement | 622 |
| 27.22.7.5.1.3 | Test Purpose..... | 623 |
| 27.22.7.5.1.4 | Method of Test..... | 623 |
| 27.22.7.5.1.4.1 | Initial Conditions..... | 623 |
| 27.22.7.5.1.4.2 | Procedure..... | 623 |
| 27.22.7.5.1.5 | Test Requirement..... | 624 |
| 27.22.7.6 | Idle screen available event | 624 |
| 27.22.7.6.1 | Idle Screen Available (normal)..... | 624 |
| 27.22.7.6.1.1 | Definition and applicability | 624 |
| 27.22.7.6.1.2 | Conformance requirement | 624 |
| 27.22.7.6.1.3 | Test Purpose..... | 625 |
| 27.22.7.6.1.4 | Method of test | 625 |
| 27.22.7.6.1.4.1 | Initial Conditions..... | 625 |
| 27.22.7.6.1.4.2 | Procedure..... | 625 |
| 27.22.7.6.1.5 | Test Requirement..... | 626 |
| 27.22.7.7 | Card reader status event | 627 |
| 27.22.7.7.1 | Card Reader Status (normal) | 627 |
| 27.22.7.7.1.1 | Definition and applicability | 627 |
| 27.22.7.7.1.2 | Conformance requirement | 627 |
| 27.22.7.7.1.3 | Test Purpose..... | 627 |
| 27.22.7.7.1.4 | Method of test | 627 |
| 27.22.7.7.1.4.1 | Initial Conditions..... | 627 |
| 27.22.7.7.1.4.2 | Procedure..... | 628 |
| 27.22.7.7.1.5 | Test Requirement | 632 |
| 27.22.7.7.2 | Card Reader Status(detachable card reader)..... | 632 |
| 27.22.7.7.2.1 | Definition and applicability | 632 |
| 27.22.7.7.2.2 | Conformance requirement | 632 |
| 27.22.7.7.2.3 | Test Purpose..... | 632 |
| 27.22.7.7.2.4 | Method of test | 633 |
| 27.22.7.7.2.4.1 | Initial Conditions..... | 633 |
| 27.22.7.7.2.4.2 | Procedure..... | 633 |

| | | |
|-------------------------------|---|------------|
| 27.22.7.7.1.5 | Test Requirement | 635 |
| 27.22.7.8 | Language selection event | 635 |
| 27.22.7.8.1 | Language selection event (normal)..... | 635 |
| 27.22.7.8.1.1 | Definition and applicability | 635 |
| 27.22.7.8.1.2 | Conformance requirement | 635 |
| 27.22.7.8.1.3 | Test Purpose..... | 635 |
| 27.22.7.8.1.4 | Method of test | 635 |
| 27.22.7.8.1.4.1 | Initial Conditions..... | 635 |
| 27.22.7.8.1.4.2 | Procedure..... | 635 |
| 27.22.7.8.1.5 | Test Requirement | 637 |
| 27.22.7.9 | Browser termination event | 637 |
| 27.22.7.9.1 | Browser termination (normal) | 637 |
| 27.22.7.9.1.1 | Definition and applicability | 637 |
| 27.22.7.9.1.2 | Conformance requirement | 637 |
| 27.22.7.9.1.3 | Test Purpose..... | 637 |
| 27.22.7.9.1.4 | Method of test | 638 |
| 27.22.7.9.1.4.1 | Initial Conditions..... | 638 |
| 27.22.7.9.1.4.2 | Procedure..... | 638 |
| 27.22.7.10 | Data available event | 639 |
| 27.22.7.10.1 | Definition and applicability | 639 |
| 27.22.7.10.2 | Conformance requirements..... | 639 |
| 27.22.7.10.3 | Test Purpose | 639 |
| 27.22.7.10.4 | Method of test..... | 639 |
| 27.22.7.10.4.1 | Initial Conditions | 639 |
| 27.22.7.10.4.2 | Procedure | 640 |
| 27.22.7.11 | Channel Status event | 640 |
| 27.22.7.11.1 | Definition and applicability | 640 |
| 27.22.7.11.2 | Conformance requirements..... | 640 |
| 27.22.7.11.3 | Test Purpose | 640 |
| 27.22.7.11.4 | Method of test..... | 640 |
| 27.22.7.11.4.1 | Initial Conditions | 640 |
| 27.22.7.11.4.2 | Procedure | 642 |
| Annex A (normative): | Void | 643 |
| Annex B (informative): | void | 644 |
| Annex C (normative): | Initial Conditions for Icon Management | 645 |
| Annex D (normative): | Details of Test-SIM (TestSIM)..... | 649 |
| Annex E (informative): | Change History | 652 |
| History | | 653 |

Foreword

This Technical Specification has been produced by the 3rd Generation Partnership Project (3GPP).

The contents of the present document are subject to continuing work within the TSG and may change following formal TSG approval. Should the TSG modify the contents of the present document, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

Version x.y.z

where:

- x the first digit:
 - 1 presented to TSG for information;
 - 2 presented to TSG for approval;
 - 3 or greater indicates TSG approved document under change control.
- y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.
- z the third digit is incremented when editorial only changes have been incorporated in the document.

1 Scope

The present document describes the technical characteristics and methods of test for testing the SIM Application Toolkit implemented in Mobile Stations (MS) for the Pan European digital cellular communications system and Personal Communication Systems (PCS) operating in the 450 MHz, 480 MHz, 700 MHz, 750 MHz, 850 MHz, 900 MHz, 1 800 MHz and 1 900 MHz frequency band (GSM 400, GSM 700, GSM 750, GSM 850, GSM 900, DCS 1 800 and PCS 1 900) within the European digital cellular telecommunications system, in compliance with the relevant requirements, and in accordance with the relevant guidance given in ISO/IEC 9646-7 [19] and ETS 300 406 [20].

The present document is valid for MS implemented according to GSM Phase2+ R96, or R97, or R98, or R99.

The present document covers the minimum characteristics considered necessary in order to provide sufficient performance for mobile equipment and to prevent interference to other services or to other users, and to the PLMNs.

It does not necessarily include all the characteristics which may be required by a user or subscriber, nor does it necessarily represent the optimum performance achievable.

The present document is part of the GSM-series of technical specifications. The present document neither replaces any of the other GSM technical specifications or GSM related ETSs or ENs, nor is it created to provide full understanding of (or parts of) the GSM 400, GSM 700, GSM 850, GSM 900, DCS1800 and PCS1900 systems . The present document lists the requirements, and provides the methods of test for testing the SIM Application Toolkit implemented in a MS for conformance to the GSM standard.

For a full description of the system, reference should be made to all the GSM technical specifications or GSM related ETSs or ENs. Clause 2 provides a complete list of the GSM technical specifications, GSM related ETSs, ENs, and ETRs, on which this conformance test specifications is based.

If there is a difference between this present conformance document, and any other GSM technical specification or GSM related ETS or EN, or 3GPP TS, then the other GSM technical specification or GSM related ETS or EN or 3GPP TS shall prevail.

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the relevant Release*.
 - For a GSM Phase 2+ Release 1999 MS, references to GSM documents are to version 8.x.y (for 01.-series to 12.-series) or (3.x.y for 21.-series to 35.-series), when available.
 - For a GSM Phase 2+ Release 1998 MS, references to GSM documents are to version 7.x.y, when available.
 - For a GSM Phase 2+ Release 1997 MS, references to GSM documents are to version 6.x.y, when available.
 - For a GSM Phase 2+ Release 1996 MS, references to GSM documents are to version 5.x.y., when available.

NOTE: References to 3GPP Technical Specifications and Technical Reports throughout the present document shall be interpreted according to the Release shown in the formal reference in this clause, based upon the Release of the implementation under test.

EXAMPLE: References for a R99 MS shall be interpreted as:

- [1] 3GPP TS 21.905 R99
- [2] 3GPP TS 22.001 R99
- etc.

- [1] 3GPP TS 01.04 (R96 to R98): "Abbreviations and acronyms".
3GPP TR 21.905 (R99 onwards): "Vocabulary for 3GPP Specifications".
- [2] 3GPP TS 02.01 (R96 to R98): "Principles of telecommunication services supported by a GSM Public Land Mobile Network (PLMN)".

3GPP TS 22.001 (R99 onwards): "Principles of circuit telecommunication services supported by a Public Land Mobile Network (PLMN)".
- [3] 3GPP TS 02.03 (R96 to R98): "Teleservices supported by a GSM Public Land Mobile Network (PLMN)".
3GPP TS 22.003 (R99 onwards): "Circuit Teleservices supported by a Public Land Mobile Network (PLMN)".
- [4] 3GPP TS 02.04 (R96 to R98): "General on supplementary services".
3GPP TS 22.004 (R99 onwards): "General on supplementary services".
- [5] 3GPP TS 02.06 (R96 to R98): "Types of Mobile Stations (MS)".
- [6] 3GPP TS 02.07 (R96 to R98): "Mobile Station (MS) features".
- [7] 3GPP TS 03.38 (R96 to R98): "Alphabets and language-specific information".
3GPP TS 23.038 (R99 onwards): "Alphabets and language-specific information".
- [8] 3GPP TS 03.40 (R96 to R98): "Technical realization of the Short Message Service (SMS); Point-to-Point (PP)".
3GPP TS 23.040 (R99 onwards): "Technical realization of the Short Message Service (SMS)".
- [9] 3GPP TS 03.41 (R96 to R98): "Technical realization of Cell Broadcast Service (CBS)".
3GPP TS 23.041 (R99 onwards): "Technical realization of Cell Broadcast Service (CBS)".
- [10] 3GPP TS 04.08 (R96 to R99): "Mobile radio interface layer 3 specification" (see note 1).3GPP TS 24.008 (R99 onwards): "Mobile radio interface layer 3 specification; Core network protocols; Stage 3" (see note 1).
- [11] 3GPP TS 04.11 (R96 to R98): "Point-to-Point (PP) Short Message Service (SMS) support on mobile radio interface".
3GPP TS 24.011 (R99 onwards): "Point-to-Point (PP) Short Message Service (SMS) Support on mobile radio interface".
- [12] 3GPP TS 11.10-1 (Ph2+ to R99): " Digital cellular telecommunications system - Mobile Station (MS) conformance specification Part 1: Conformance specification ".
- [13] 3GPP TS 11.11 (R96 to R99): "Specification of the Subscriber Identity Module - Mobile Equipment (SIM-ME) interface".
- [14] 3GPP TS 11.12 (R96): "Specification of the 3 Volt Subscriber Identity Module - Mobile Equipment (SIM-ME) interface".
- [15] 3GPP TS 11.14 (R96 to R99): "Specification of the SIM application toolkit for the Subscriber Identity Module – Mobile Equipment (SIM – ME) interface".
- [16] 3GPP TS 11.10-2 (Ph2+ to R99): " Digital cellular telecommunications system - Mobile Station (MS) conformance specification Part 2: Protocol Implementation Conformance Statement (PICS) Proforma Specification".
- [17] ISO/IEC 10646-1 “Universal Multiple Octet Coded Character Set (UCS) Part 1: Architecture and Basic Multilingual Plane ”

- ISO/IEC 10646-2 "Universal Multiple Octet Coded Character Set (UCS) Part 2: Supplementary Planes"
- [18] 3GPP TS 27.007 (R99 onwards): "AT Command Set for User Equipment (UE)".
- [19] ISO/IEC 9646-7 (1995): "Information technology – Open Systems Interconnection – Conformance testing methodology and framework – Part 7: Implementation Conformance Statements".
- [20] ETS 300 406 (January 1995): "Methods for Testing and Specification (MTS); Protocol and profile conformance testing specifications; Standardization methodology".

3 Definitions, symbols and abbreviations

3.1 Mobile station definition and configurations

The mobile station definition and configurations specified in 3GPP TSM 11.10-1 [12] clause 3.1 shall apply, unless otherwise specified in the present clause.

3.2 Applicability

3.2.1 Applicability of this specification

The applicability specified in 3GPP TS 11.10-1 [12] clause 3.2.1 shall apply, unless otherwise specified in the present clause.

3.2.2 Applicability of the individual tests

The table B.1 lists the optional features for which the supplier of the implementation states the support.

3.2.3 Applicability to terminal equipment

The applicability to terminal equipment specified in 3GPP TS 11.10-1 [12] clause 3.2.3 shall apply, unless otherwise specified in the present clause.

See table A.1.

3.2.4 Definitions

The definitions specified in 3GPP TS 11.10-1 [12] clause 3.3 shall apply, unless otherwise specified in the present clause.

3.2.4.1 Format of the Table of Optional Features

Option

The optional feature supported or not by the implementation

Support Answer notation

The support columns shall be filled in by the supplier of the implementation. The following common notations, defined in ISO/IEC 9646-7 [19], are used for the support column in the tables below.

Y or y supported by the implementation

N or n not supported by the implementation

N/A, n/a or - no answer required (allowed only if the status is N/A, directly or after evaluation of a conditional status)

Mnemonic column

The Mnemonic column contains mnemonic identifiers for each item.

3.2.4.2 Format of the Applicability Table

The applicability of every test in table B.1 is formally expressed by the use of Boolean expression defined in the following section.

The columns in Table B.1 have the following meaning:

- In the "Item" column a local entry number for the requirement in the table is given.
- In the "Description" column a short non-exhaustive description of the requirement is found.
- The "Release" column gives the Release applicable and onwards, for the item in the "Description" column
- The "Test Sequence(s)" column gives a reference to the test sequence number(s) detailed in this document and required to validate the implementation of the corresponding item in the "Description" column.
- For a given Release, the corresponding "Rel 9x ME" column lists the tests required for a Mobile Station to be declared compliant to this Release.
- The "Support" column is blank in the proforma, and shall be completed by the manufacturer in respect of each particular requirement to indicate the choices, which have been made in the implementation.

3.2.4.3 Status and Notations

The "Release 9x ME" columns shows the status of the entries as follows:

The following notations, defined in ISO/IEC 9646-7 [19], are used for the status column:

| | |
|-----|---|
| M | mandatory – the capability is required to be supported. |
| O | optional – the capability may be supported or not. |
| N/A | not applicable – in the given context, it is impossible to use the capability. |
| X | prohibited (excluded) – there is a requirement not to use this capability in the given context. |
| O.i | qualified optional – for mutually exclusive or selectable options from a set. "i" is an integer which identifies an unique group of related optional items and the logic of their selection which is defined immediately following the table. |
| Ci | conditional – the requirement on the capability ("M", "O", "X" or "N/A") depends on the support of other optional or conditional items. "i" is an integer identifying an unique conditional status expression which is defined immediately following the table. For nested conditional expressions, the syntax "IF ... THEN (IF ... THEN ... ELSE...) ELSE ..." shall be used to avoid ambiguities. |

References to items

For each possible item answer (answer in the support column) there exists a unique reference, used, for example, in the conditional expressions. It is defined as the table identifier, followed by a solidus character "/", followed by the item number in the table. If there is more than one support column in a table, the columns shall be discriminated by letters (a, b, etc.), respectively.

EXAMPLE 1: A.1/4 is the reference to the answer of item 4 in table A.1.

3.3 Table of Optional Features

Support of SIM Application Toolkit is optional for Mobile Equipment. However, if an ME states conformance with a specific GSM release, it is mandatory for the ME to support all functions of that release, as stated in the table, below.

The support of letter classes, which specify mainly ME hardware dependent features, is optional for the ME and may supplement the SIM Application Toolkit functionality described in this document. If an ME states conformance to a letter class, it is mandatory to support all functions within the respective letter class.

The supplier of the implementation shall state the support of possible options in the table A.1 below.

Table A.1: Options

| Item | Option | Status | support | Mnemonic |
|------|------------------------------------|--------|---------|--------------|
| 1 | Capability Configuration parameter | O | | O_Cap_Conf |
| 2 | Sustained text | O | | O_sust_text |
| 3 | UCS2 coding scheme | O | | O_Ucs2 |
| 4 | Extended Text String | O | | O_Ext_Str |
| 5 | Help information | O | | O_Help |
| 6 | Icons | O | | O_Icons |
| 7 | Class A: Dual Slot | O | | O_Dual_Slot |
| 8 | Detachable reader | O | | O_Detach_Rdr |
| 9 | Class B: RUN AT | O | | O_Run_At |
| 10 | Class C: LAUNCH BROWSER | O | | O_LB |
| 11 | Class D: Soft keys | O | | O_Soft_key |
| 12 | Class E : B.I.P | O | | O_BIP |

3.4 Applicability table

Table B.1: Applicability of tests

| Item | Description | Release | Test sequence (s) | Rel 96 ME | Rel 97 ME | Rel 98 ME | Rel 99 ME | Support |
|------|---|---------|-------------------|-----------|-----------|-----------|-----------|---------|
| 1 | PROFILE DOWNLOAD 27.22.1 | R96 | 1 | M | M | M | M | |
| 2 | Contents of the TERMINAL PROFILE command 27.22.2 | R96 | | M | M | M | M | |
| 3 | Servicing of Proactive SIM Commands 27.22.3 | R96 | | M | M | M | M | |
| | | | | | | | | |

| | | | | | | | | |
|----------|-----------------------------------|-----|-----------------------------|---|------|------|------|--|
| 4 | DISPLAY TEXT 27.22.4.1 | | | | | | | |
| | Unpacked | R96 | 1.1 | M | M | M | M | |
| | Screen busy | R96 | 1.2 | M | M | M | M | |
| | high priority | R96 | 1.3 | M | M | M | M | |
| | packed | R96 | 1.4 | M | M | M | M | |
| | clear after delay | R96 | 1.5 | M | M | M | M | |
| | clear after user confirmation | R96 | 1.1 | M | M | M | M | |
| | long text up to 160 bytes | R96 | 1.6 | M | M | M | M | |
| | Backwards move in SIM session | R96 | 1.7 | M | M | M | M | |
| | Session terminated by user | R96 | 1.8 | M | M | M | M | |
| | Command not understood by ME | R96 | 1.9 | M | M | M | M | |
| | no response from user | R96 | 2.1 | M | M | M | M | |
| | Extension Text | R98 | 3.1 | | | C106 | C106 | |
| | sustained text | R98 | 4.1, 4.2, 4.3, 4.4 | | | C104 | C104 | |
| | icons | R98 | 5.1, 5.2, 5.3 | | | C108 | C108 | |
| | UCS2 display | R97 | 6.1 | | C105 | C105 | C105 | |
| | | | | | | | | |
| 5 | GET INKEY 27.22.4.2 | | | | | | | |
| | prompt unpacked | R96 | 1.1 | M | M | M | M | |
| | prompt packed | R96 | 1.2 | M | M | M | M | |
| | digits only | R96 | 1.1 | M | M | M | M | |
| | Backwards move in SIM session | R96 | 1.3 | M | M | M | M | |
| | Session terminated by user | R96 | 1.4 | M | M | M | M | |
| | SMS alphabet | R96 | 1.5 | M | M | M | M | |
| | Long text up to 160 bytes | R96 | 1.6 | M | M | M | M | |

| | | | | | | | | |
|----------|---|-----|-----------------------------|---|------|------|------|--|
| | no response from user | R96 | 2.1 | M | M | M | M | |
| | UCS2 display | R97 | 3.1 | | C105 | C105 | C105 | |
| | UCS2 display, Long text up to 70 chars | R97 | 3.2 | | C105 | C105 | C105 | |
| | UCS2 format of entry | R97 | 4.1 | | C105 | C105 | C105 | |
| | "Yes/No" response | R98 | 5.1 | | | M | M | |
| | Icons | R98 | 6.1, 6.2, 6.3, 6.4 | | | C108 | C108 | |
| | Help information | R97 | 7.1 | | C107 | C107 | C107 | |
| | | | | | | | | |
| 6 | GET INPUT | | | | | | | |
| | 27.22.4.3 | | | | | | | |
| | input unpacked | R96 | 1.1 | M | M | M | M | |
| | input packed | R96 | 1.2 | M | M | M | M | |
| | digits only | R96 | 1.1 | M | M | M | M | |
| | SMS alphabet | R96 | 1.3 | M | M | M | M | |
| | hidden input | R96 | 1.4 | M | M | M | M | |
| | min / max acceptable length | R96 | 1.5, 1.9 | M | M | M | M | |
| | Backwards move in SIM session | R96 | 1.6 | M | M | M | M | |
| | Session terminated by user | R96 | 1.7 | M | M | M | M | |
| | Prompt text up to 160 bytes | R96 | 1.8 | M | M | M | M | |
| | SMS default alphabet, ME to echo text, packing not required | R96 | 1.9 | M | M | M | M | |
| | Null length for the text string | R96 | 1.10 | M | M | M | M | |
| | no response from user | R96 | 2.1 | M | M | M | M | |
| | UCS2 display | R97 | 3.1, 3.2 | | C105 | C105 | C105 | |
| | UCS2 entry | R97 | 4.1, 4.2 | | C105 | C105 | C105 | |
| | default text for the input | R97 | 5.1, 5.2 | | M | M | M | |

| | | | | | | | | |
|-----------|--|------------|-----------------------------|---|------|------|------|--|
| | icons | R98 | 6.1, 6.2, 6.3, 6.4 | | | C108 | C108 | |
| | help information | R97 | 7.1 | | C107 | C107 | C107 | |
| | | | | | | | | |
| 7 | MORE TIME 27.22.4.4 | R96 | 1.1 | M | M | M | M | |
| | | | | | | | | |
| 8 | PLAY TONE 27.22.4.5 | | | | | | | |
| | play all tones | R96 | 1.1 | M | M | M | M | |
| | display alpha | R96 | 1.1 | M | M | M | M | |
| | user termination | R96 | 1.1 | M | M | M | M | |
| | superimpose | R96 | 1.1 | M | M | M | M | |
| | backwards move key not interacting with play tone | R96 | 1.2 | M | M | M | M | |
| | UCS2 display | R97 | TBD | | | | | |
| | icons | R98 | TBD | | | | | |
| | | | | | | | | |
| 9 | POLL INTERVAL 27.22.4.6 | | | | | | | |
| | duration | R96 | 1.1 | M | M | M | M | |
| | | | | | | | | |
| 10 | REFRESH 27.22.4.7 | | | | | | | |
| | SIM initialisation, enabling FDN mode | R96 | 1.1 | M | M | M | M | |
| | file change notification of FDN file | R96 | 1.2 | M | M | M | M | |
| | SIM initialisation and file change notification of PLMN | R96 | 1.3 | M | M | M | M | |
| | SIM initialisation and full file change notification, enabling FDN mode | R96 | 1.4 | M | M | M | M | |
| | SIM reset | R96 | 1.5 | M | M | M | M | |
| | SIM Initialisation after SMS-PP | R96 | 1.6 | M | M | M | M | |

| | | | | | | | | |
|-----------|---|-----|-----------------------------|---|------|------|------|--|
| | data download | | | | | | | |
| | IMSI Changing procedure | R98 | 2.1 | | | M | M | |
| | | | | | | | | |
| 11 | SET UP MENU 27.22.4.8 | | | | | | | |
| | Set up, menu selection, replace and remove menu | R96 | 1.1 | M | M | M | M | |
| | Large menu | R96 | 1.2 | M | M | M | M | |
| | help information | R97 | 2.1 | | C107 | C107 | C107 | |
| | next action indicator | R97 | 3.1 | | M | M | M | |
| | icons | R98 | 4.1, 4.2 | | | C108 | C108 | |
| | soft key access | R99 | 5.1 | | | | C112 | |
| | | | | | | | | |
| 12 | SELECT ITEM 27.22.4.9 | | | | | | | |
| | Mandatory features | R96 | 1.1 | M | M | M | M | |
| | Large menu | R96 | 1.2, 1.3, 1.5,1. 6 | M | M | M | M | |
| | Backwards move | R96 | 1.4 | M | M | M | M | |
| | user termination | R96 | 1.5 | M | M | M | M | |
| | next action indicator | R97 | 2.1 | | M | M | M | |
| | default selected item | R97 | 3.1 | | M | M | M | |
| | help information | R97 | 4.1 | | C107 | C107 | C107 | |
| | icons | R98 | 5.1, 5.2 | | | C108 | C108 | |
| | Presentation style | R98 | 6.1, 6.2 | | | M | M | |
| | Soft keys | R99 | 7.1 | | | | C112 | |
| | | | | | | | | |
| 13 | SEND SMS 27.22.4.10 | | | | | | | |
| | Packing not required | R96 | 1.1, 1.3 1.5 | M | M | M | M | |
| | Packing required | R96 | 1.2, 1.4 | M | M | M | M | |

| | | | | | | | | |
|-----------|---|-----|-----------------------------|---|------|------|------|--|
| | 8 bit data | R96 | 1.1, 1.2 | M | M | M | M | |
| | SMS default alphabet | R96 | 1.3, 1.4, 1.5 | M | M | M | M | |
| | 160 bytes length | R96 | 1.4, 1.5 | M | M | M | M | |
| | Alpha identifier | R96 | 1.6, 1.7, 1.8 | M | M | M | M | |
| | UCS2 SMS | R97 | 2.1 | | C105 | C105 | C105 | |
| | icons | R98 | 3.1, 3.2 | | | C108 | C108 | |
| | | | | | | | | |
| 14 | SEND SS 27.22.4.11 | | | | | | | |
| | call forward unconditional, all bearers, successful | R96 | 1.1 | M | M | M | M | |
| | call forward unconditional, all bearers, Return Error | R96 | 1.2 | M | M | M | M | |
| | call forward unconditional, all bearers, Reject | R96 | 1.3 | M | M | M | M | |
| | call forward unconditional, all bearers, successful, SS request size limit | R96 | 1.4 | M | M | M | M | |
| | interrogate CLIR status, successful, alpha identifier limits | R96 | 1.5 | M | M | M | M | |
| | call forward unconditional, all bearers, successful, null data alpha identifier | R96 | 1.6 | M | M | M | M | |
| | call forward unconditional, all bearers, successful, icon support | R98 | 2.1, 2.2, 2.3, 2.4 | | | C108 | C108 | |
| | UCS2 display | R97 | 3.1 | | C105 | C105 | C105 | |
| | | | | | | | | |
| 15 | SEND USSD 27.22.4.12 | | | | | | | |
| | 7-bit data, | R96 | 1.1 | M | M | M | M | |

| | | | | | | | | |
|-----------|--|-----|-----------------------------|----------|------|------|------|--|
| | successful | | | | | | | |
| | 8-bit data, successful | R96 | 1.2 | M | M | M | M | |
| | UCS2 data, successful | R96 | 1.3 | M | M | M | M | |
| | 7-bit data, unsuccessful | R96 | 1.4 | M | M | M | M | |
| | 7-bit data, unsuccessful | R96 | 1.5 | M | M | M | M | |
| | 256 octets, 7-bit data, successful, long alpha identifier | R96 | 1.6 | M | M | M | M | |
| | 7-bit data, successful, no alpha identifier | R96 | 1.7 | M | M | M | M | |
| | 7-bit data, successful, null length alpha identifier | R96 | 1.8 | M | M | M | M | |
| | icons | R98 | 2.1, 2.2, 2.3, 2.4 | | | C108 | C108 | |
| | UCS2 | R97 | 3.1 | | C105 | C105 | C105 | |
| | | | | | | | | |
| 16 | SET UP CALL 27.22.4.13 | | | | | | | |
| | Call confirmed by the user and connected | R96 | 1.1 | M | M | M | M | |
| | call rejected by the user | R96 | 1.2 | M | M | M | M | |
| | redial | R96 | 1.3 | M | M | M | M | |
| | putting all other calls on hold, ME busy | R96 | 1.4 | M | M | M | M | |
| | disconnecting all other calls, ME busy | R96 | 1.5 | M | M | M | M | |
| | only if not currently busy on another call, ME busy | R96 | 1.6 | M | M | M | M | |
| | putting all other calls on hold, call hold is not allowed | R96 | 1.7 | M | M | M | M | |
| | Capability configuration | R96 | 1.8 | C1 01 | C101 | C101 | C101 | |

| | | | | | | | | |
|----|---|-----|--------------------------|---|---|------|------|--|
| | long dialing number string | R96 | 1.9 | M | M | M | M | |
| | long first alpha identifier | R96 | 1.10 | M | M | M | M | |
| | Called party subaddress | R96 | 1.11 | M | M | M | M | |
| | maximum duration for the redial mechanism | R96 | 1.12 | M | M | M | M | |
| | second alpha identifier | R98 | 2.1 | | | M | M | |
| | UCS2 Display | R97 | TBD | | | | | |
| | icons | R98 | 3.1,3. 2, 3.3, 3.4 | | | C108 | C108 | |
| | | | | | | | | |
| 17 | POLLING OFF 27.22.4.14 | R96 | 1.1 | M | M | M | M | |
| | | | | | | | | |
| 18 | PROVIDE LOCAL INFO 27.22.4.15 | | | | | | | |
| | location information | R96 | 1.1 | M | M | M | M | |
| | IMEI | R96 | 1.2 | M | M | M | M | |
| | network measurement results and BCCH channel list | R98 | 1.3 | | | M | M | |
| | Date, time and time zone | R98 | 1.4 | | | M | M | |
| | language setting | R99 | 1.5 | | | | M | |
| | Timing advance | R99 | 1.6 | | | | M | |
| | | | | | | | | |
| 19 | SET UP EVENT LIST 27.22.4.16 | | | | | | | |
| | Set up call connected event | R97 | 1.1 | | M | M | M | |
| | Replace by new event list | R97 | 1.2 | | M | M | M | |
| | Remove event | R97 | 1.3 | | M | M | M | |
| | Remove Event on ME Power Cycle | R97 | 1.4 | | M | M | M | |
| | | | | | | | | |

| | | | | | | | |
|-----------|---|-----|-----|--|--|------|------|
| 20 | PERFORM CARD APDU 27.22.4.17 | | | | | | |
| | Additional card inserted, Select MF and Get Response | R98 | 1.1 | | | C109 | C109 |
| | Additional card inserted, Select DF GSM, Select EF PLMN , Update Binary, Read Binary on EF PLMN | R98 | 1.2 | | | C109 | C109 |
| | Additional card inserted, card powered off | R98 | 1.3 | | | C109 | C109 |
| | No card inserted, card powered off | R98 | 1.4 | | | C109 | C109 |
| | Invalid card reader identifier | R98 | 1.5 | | | C109 | C109 |
| | Detachable reader | R98 | 2.1 | | | C116 | C116 |
| | | | | | | | |
| 21 | POWER OFF CARD 27.22.4.18 | | | | | | |
| | Additional card inserted | R98 | 1.1 | | | C109 | C109 |
| | No card inserted | R98 | 1.2 | | | C109 | C109 |
| | Detachable reader | R98 | 2.1 | | | C116 | C116 |
| | | | | | | | |
| 22 | POWER ON CARD 27.22.4.19 | | | | | | |
| | Additional card inserted | R98 | 1.1 | | | C109 | C109 |
| | No ATR | R98 | 1.2 | | | C109 | C109 |
| | No card inserted | R98 | 1.3 | | | C109 | C109 |
| | Detachable reader | R98 | 2.1 | | | C116 | C116 |
| | | | | | | | |
| 23 | GET READER STATUS | | | | | | |

| | | | | | | | | |
|-----------|--|-----|-----|--|--|------|------|--|
| | 27.22.4.20 | | | | | | | |
| | Additional card inserted, card powered | R98 | 1.1 | | | C109 | C109 | |
| | Additional card inserted, card not powered | R98 | 1.2 | | | C109 | C109 | |
| | Additional card inserted, card not present | R98 | 1.3 | | | C109 | C109 | |
| | Detachable reader | R98 | 2.1 | | | C116 | C116 | |
| | | | | | | | | |
| 24 | TIMER MANAGEMENT | | | | | | | |
| | 27.22.4.21.1 | | | | | | | |
| | Start timer 1 several times, get the current value of the timer and deactivate the timer successfully | R98 | 1.1 | | | M | M | |
| | Start timer 2 several times, get the current value of the timer and deactivate the timer successfully | R98 | 1.2 | | | M | M | |
| | Start timer 8 several times, get the current value of the timer and deactivate the timer successfully | R98 | 1.3 | | | M | M | |
| | Try to get the current value of a timer which is not started: action in contradiction with the current timer state | R98 | 1.4 | | | M | M | |
| | Try to deactivate a timer which is not started: action in contradiction with the current timer state | R98 | 1.5 | | | M | M | |
| | Start 8 timers successfully | R98 | 1.6 | | | M | M | |
| | | | | | | | | |
| 25 | ENVELOPPE TIMER EXPIRATION | | | | | | | |

| | | | | | | | | |
|-----------|--------------------------------------|-----|-------------------------------------|--|--|------|------|--|
| | 27.22.4.21.2 | | | | | | | |
| | Pending proactive SIM command | R98 | 2.1 | | | M | M | |
| | SIM application toolkit busy | R98 | 2.2 | | | M | M | |
| | | | | | | | | |
| 26 | SET UP IDLE MODE TEXT | | | | | | | |
| | 27.22.4.22 | | | | | | | |
| | Display idle mode text | R98 | 1.1 | | | M | M | |
| | Replace idle mode text | R98 | 1.2 | | | M | M | |
| | Remove idle mode test | R98 | 1.3 | | | M | M | |
| | Competing information on ME display | R98 | 1.4 | | | M | M | |
| | ME powered cycled | R98 | 1.5 | | | M | M | |
| | Refresh with SIM initialisation | R98 | 1.6 | | | M | M | |
| | Large text string | R98 | 1.7 | | | M | M | |
| | Followed by a Display Text | R98 | 1.8 | | | M | M | |
| | Followed by a Play Tone | R98 | 1.9 | | | M | M | |
| | icons | R98 | 2.1, 2.2, 2.3, 2.4 | | | C108 | C108 | |
| | UCS2 display | R98 | 3.1 | | | C105 | C105 | |
| | | | | | | | | |
| 27 | RUN AT COMMAND | | | | | | | |
| | 27.22.4.23 | | | | | | | |
| | No alpha Identifier | R98 | 1.1 | | | C110 | C110 | |
| | null data alpha identifier presented | R98 | 1.2 | | | C110 | C110 | |
| | alpha identifier presented | R98 | 1.3 | | | C110 | C110 | |
| | icons | R98 | 2.1, 2.2, 2.3, 2.4, 2.5 | | | C114 | C114 | |

| | | | | | | | | |
|-----------|---|-----|---------------------|--|--|------|------|--|
| | | | | | | | | |
| 28 | SEND DTMF 27.22.4.24 | | | | | | | |
| | A call has been successfully established before the beginning of the test | R98 | 1.1 | | | M | M | |
| | alpha identifier | R98 | 1.2, 1.3 | | | M | M | |
| | Mobile is not in a speech call | R98 | 1.4 | | | M | M | |
| | Icons | R98 | 2.1, 2.2, 2.3 | | | C108 | C108 | |
| | UCS2 display | R98 | 3.1 | | | C105 | C105 | |
| | | | | | | | | |
| 29 | LANGUAGE NOTIFICATION 27.22.4.25 | | | | | | | |
| | Specific language notification | R99 | 1.1 | | | | M | |
| | Non specific language notification | R99 | 1.2 | | | | M | |
| | | | | | | | | |
| 30 | LAUNCH BROWSER 27.22.4.26 | | | | | | | |
| | No session already launched : Connect to the default URL | R99 | 1.1 | | | | C111 | |
| | connect to the specified URL, alpha identifier length=0 | R99 | 1.2 | | | | C111 | |
| | Browser identity, no alpha identifier | R99 | 1.3 | | | | C111 | |
| | one bearer specified and gateway/proxy identity | R99 | 1.4 | | | | C111 | |
| | several bearers specified, gateway/proxy id specified | R99 | 1.5 | | | | C111 | |
| | Interaction with | R99 | 2.1, 2.2, | | | | C111 | |

| | | | | | | | | |
|-----------|--|-----|---|--|--|--|------|--|
| | current session | | 2.3 | | | | | |
| | UCS2 display | R99 | 3.1 | | | | C117 | |
| | icons | R99 | 4.1, 4.2 | | | | C115 | |
| | | | | | | | | |
| 31 | OPEN CHANNEL | | | | | | | |
| | 27.22.4.27 | | | | | | | |
| | Immediate link establishment, CSD, 9600 bps | R99 | 1.1, 1.2, 1.3, 1.4, 1.5, 1.6 | | | | C113 | |
| | immediate link establishment, CSD, 9600 bps, performed with modification | R99 | 1.7 | | | | C113 | |
| | immediate link establishment, CSD, Network currently unable to process command | R99 | 1.8 | | | | C113 | |
| | immediate link establishment, CSD, No channel available | R99 | 1.9 | | | | C113 | |
| | ME busy | R99 | 1.10 | | | | M | |
| | | | | | | | | |
| 32 | CLOSE CHANNEL | | | | | | | |
| | 27.22.4.28 | | | | | | | |
| | successful | R99 | 1.1 | | | | C113 | |
| | with an invalid channel identifier | R99 | 1.2 | | | | C113 | |
| | on an already closed channel | R99 | 1.3 | | | | C113 | |
| 33 | RECEIVE DATA | | | | | | | |
| | 27.22.4.29 | | | | | | | |
| | already opened channel | R99 | 1.1 | | | | C113 | |
| | | | | | | | | |
| 34 | SEND DATA | | | | | | | |
| | 27.22.4.30 | | | | | | | |

| | | | | | | | | |
|-----------|--|-----|-------------|---|---|---|------|--|
| | immediate mode | R99 | 1.1 | | | | C113 | |
| | Store mode | R99 | 1.2 | | | | C113 | |
| | Store mode, Tx buffer fully used | R99 | 1.3 | | | | C113 | |
| | 2 consecutive SEND DATA Store mode | R99 | 1.4 | | | | C113 | |
| | immediate mode with a bad channel identifier | R99 | 1.5 | | | | C113 | |
| | immediate mode, Proactive SIM session terminated by the user | R99 | 1.6 | | | | C113 | |
| | | | | | | | | |
| 35 | GET CHANNEL STATUS 27.22.4.31 | | | | | | | |
| | without any BIP channel opened | R99 | 1.1 | | | | C113 | |
| | with a BIP channel currently opened | R99 | 1.2 | | | | C113 | |
| | after a link dropped | R99 | 1.3 | | | | C113 | |
| | | | | | | | | |
| 36 | DATA DOWNLOAD TO SIM 27.22.5 | | | | | | | |
| 37 | SMS-PP DATA DOWNLOAD 27.22.5.1 | | | | | | | |
| | General data coding, SIM responds with '90 00' | R96 | 1.1 | M | M | M | M | |
| | SIM responds with '91 XX' | R96 | 1.2 | M | M | M | M | |
| | More time | R96 | 1.3 | M | M | M | M | |
| | 8 bit alphabet | R96 | 1.4 | M | M | M | M | |
| | Data coding / message class | R96 | 1.5, 1.6 | M | M | M | M | |
| | | | | | | | | |
| 38 | SMS-CB DATA DOWNLOAD 27.22.5.2 | | | | | | | |

| | | | | | | | | |
|-----------|---|-----|--------------------|---|---|---|---|--|
| | ME does not display message | R96 | 1.1 | M | M | M | M | |
| | More time | R96 | 1.2 | M | M | M | M | |
| | ME displays message | R96 | 1.3 | M | M | M | M | |
| | | | | | | | | |
| 39 | CALL CONTROL BY SIM 27.22.6 | | | | | | | |
| | Procedure for MO calls (Cell identity in envelope call control) | R97 | 1.1 to 1.14 | | M | M | M | |
| | Procedure for SS (Cell identity in envelope call control) | R97 | 2.1, 2.2, 2.3, 2.4 | | M | M | M | |
| | Interaction with FDN (Cell identity in envelope call control) | R97 | 3.1, 3.2, 3.3, 3.5 | | M | M | M | |
| | Support of BDN service (Cell identity in envelope call control) | R97 | 4.1, 4.2, 4.3, 4.4 | | M | M | M | |
| | MO SMS control by SIM | R97 | TBD | | | | | |
| | | | | | | | | |
| 40 | EVENT DOWNLOAD 27.22.7 | | | | | | | |
| | 27.22.7.1 : MT call event | R97 | 1.1 | | M | M | M | |
| | 27.22.7.2.1 : call connected event | R97 | 1.1 | | M | M | M | |
| | 27.22.7.2.2 : ME supporting SET UP CALL | R97 | 2.1 | | M | M | M | |
| | 27.22.7.3 : call disconnected event | R97 | 1.1 | | M | M | M | |
| | 27.22.7.4 : location status event | R97 | 1.1 | | M | M | M | |
| | 27.22.7.5 : user activity event | R97 | 1.1 | | M | M | M | |
| | 27.22.7.6 : idle screen available | R97 | 1.1 | | M | M | M | |

| | event | | | | | | | |
|--|---|-----|-----|--|--|------|------|--|
| | 27.22.7.7.1 : Card reader status normal | R98 | 1.1 | | | C109 | C109 | |
| | 27.22.7.7.2 : Detachable card reader | R98 | 2.1 | | | C116 | C116 | |
| | 27.22.7.8 : language selection event | R99 | 1.1 | | | | M | |
| | 27.22.7.9 : Browser termination event | R99 | 1.1 | | | | C111 | |
| | 27.22.7.10 : Data available event | R99 | 1.1 | | | | C113 | |
| | 27.22.7.11 : Channel status event | R99 | 1.1 | | | | C113 | |

| | | |
|------------|---|---------------------------------|
| C101 | IF A.1/1 THEN M ELSE N/A | -- O_Cap_Conf |
| C102, C103 | void | |
| C104 | IF A.1/2 THEN M ELSE N/A | -- O_Sust_text |
| C105 | IF A.1/3 THEN M ELSE N/A | -- O_Ucs2 |
| C106 | IF A.1/4 THEN M ELSE N/A | -- O_Ext_Str |
| C107 | IF A.1/5 THEN M ELSE N/A | -- O_Help |
| C108 | IF A.1/6 THEN (O.1 OR O.2) ELSE N/A | -- O_Icons |
| C109 | IF A.1/7 THEN M ELSE N/A | -- O_Dual_Slot |
| C110 | IF A.1/9 THEN M ELSE N/A | -- O_Run_At |
| C111 | IF A.1/10 THEN M ELSE N/A | -- O_LB |
| C112 | IF A.1/11 THEN M ELSE N/A | O_Soft_key |
| C113 | IF A.1/12 THEN M ELSE N/A | O_BIP |
| C114 | IF C110 AND C108 THEN M ELSE N/A | -- O_Run_At AND O_Icons |
| C115 | IF C111 AND C108 THEN M ELSE N/A | -- O_LB AND O_Icons |
| C116 | IF C105 AND A.1/8 THEN M ELSE N/A | -- O_Dual_Slot AND O_Detach_Rdr |
| C117 | IF C111 AND C105 THEN M ELSE N/A | -- O_LB AND O_Ucs2 |
| O.1 | IF (the ME supports icons as defined in record 1 of EF _(IMG) , tests x.1A M ELSE tests x.1B M (where x is the expected sequence number value)) | |
| O.2 | IF the ME supports icons as defined in record 2 of EF _(IMG) , tests x.2A M ELSE x.2B M (where x is the expected sequence number value) | |

3.5 Conventions for mathematical notations

The conventions for mathematical notations specified in 3GPP TS 11.10-1 [12] clause 3.4 shall apply, unless otherwise specified in the present clause.

3.6 Conventions on electrical terms

The conventions on electrical terms specified in 3GPP TS 11.10-1 [12] clause 3.5 shall apply, unless otherwise specified in the present clause.

3.7 Terms on test conditions

The terms on test conditions specified in 3GPP TS 11.10-1 [12] clause 3.6 shall apply, unless otherwise specified in the present clause.

4 Test Equipment

The test equipment is specified in 3GPP TS 11.10-1 [12] clause 4.

5 Testing methodology in general

5.1 Testing of optional functions and procedures

Any function or procedure which is optional, as indicated in the present document, may be subject to a conformance test if it is implemented in the ME.

5.2 Test interfaces and facilities

The test interfaces and facilities specified in 3GPP TS 11.10-1 [12] clause 5.2 shall apply, unless otherwise specified in the present clause.

The SIM interface provides the main test interface for the purpose of performing conformance tests.

5.3 Different protocol layers

The different protocol layers specified in 3GPP TS 11.10-1 [12] clause 5.3 shall apply, unless otherwise specified in the present clause.

5.4 Information to be provided by the apparatus supplier

The information to be provided by the apparatus supplier specified in 3GPP TS 11.10-1 [12] clause 5.4 shall apply, unless otherwise specified in the present clause.

In addition, the apparatus supplier shall provide the information with respect the Supported Option Table A.1.

5.5 Definitions of transmit and receive times

The definitions of transmit and receive times specified in 3GPP TS 11.10-1 [12] clause 5.5 shall apply, unless otherwise specified in the present clause.

6 Reference test methods

The reference test methods specified in 3GPP TS 11.10-1 [12] clause 6 shall apply, unless otherwise specified.

7 Implicit testing

For some GSM features conformance is not verified explicitly in this document. This does not imply that correct functioning of these features is not essential, but that these are implicitly tested to a sufficient degree in other tests.

It should be noted that for these features some aspects have to be and are explicitly tested, e.g. the ability to switch between 3v and 5v operation.

Some SIM features will be explicitly tested as result of other tests. These should be identified for the following reason:

- To identify the areas of overlap and thus provide a more efficient testing.

8 Measurement uncertainty

The measured value relating to the corresponding limit shall be used to determine whether or not a terminal equipment meets the requirement. (ETR 028 annex B).

This process is often referred to as "shared risk".

9 Format of tests

In general the following basic format for tests is used:

27.22.X.X. Tested command

27.22.X.X.1. Command tested in «environment #1 » (NORMAL, ICONS, UCS2 ...)

27.22.X.X. 1.1 Definition and applicability

This section refers back to Section 3.2.2..

27.22.X.X. 1.2 Conformance requirement

Only if required, this section details the necessary core specification references.

27.22.X.X. 1.3 Test Purpose

This section details the purpose of the test.

27.22.X.X. 1.4 Method of test

27.22.X.X. 1.4.1. Initial Conditions

If present this section defines the initial conditions to be established before running each test sequence.

27.22.X.X. 1.4.2 Procedure

This section details the test procedure. Each test sequence shall be carried out independently unless otherwise stated.

- Sequence 1.1 (further initial conditions, added here)

| |
|--------------------------------------|
| Command 1.1.1 |
| TERMINAL RESPONSE1.1.1A or 1.1.1B |
| Command 1.1.2 |

| |
|------------------------|
| TERMINAL RESPONSE1.1.2 |
|------------------------|

PROACTIVE COMMAND 1.1. 1

TERMINAL RESPONSE 1.1.1A

TERMINAL RESPONSE 1.1.1B

PROACTIVE COMMAND 1.1.2

TERMINAL RESPONSE 1.1.2

- Sequence 1.2

| |
|---|
| Command 1. 2.1 |
| TERMINAL RESPONSE1.2.1 |
| Command 1.2 .2 |
| TERMINAL RESPONSE1.2.2 (same as TERMINAL RESPONSE1.2.1) |
| Command 1.2.3 |
| TERMINAL RESPONSE1.2.3 |

PROACTIVE COMMAND 1.2 .1

PROACTIVE COMMAND 1.2 .2

PROACTIVE COMMAND 1.2 .3

TERMINAL RESPONSE 1.2.1, TERMINAL RESPONSE 1.2.2

TERMINAL RESPONSE 1.2.3

- Sequence 1.3

| |
|------------------------|
| Command 1.3.1 |
| TERMINAL RESPONSE1.3.1 |

PROACTIVE COMMAND1.3 .1

TERMINAL RESPONSE1.3.1

27.22.X.X.1.5 Test Requirement

This section details the conditions to be met for successful completion of the test.

27.22.X.X.2. Command tested in « environment #2 » (NORMAL, ICONS, UCS2 ...)

27.22.X.X. 2.1 Definition and applicability

27.22.X.X. 2.2 Conformance requirement**27.22.X.X. 2.3 Test Purpose****27.22.X.X. 2.4 Method of test****27.22.X.X. 2.4.1.1 Initial Conditions****27.22.X.X. 2.4.1.2 Procedure**

- Sequence 2.1

| |
|--------------------------------------|
| Command 2.1.1 |
| TERMINAL RESPONSE2.1.1A or 2.1.1B |
| Command 2.1.2 |
| TERMINAL RESPONSE2.1.2 |

PROACTIVE COMMAND 2.1. 1

TERMINAL RESPONSE 2.1.1A

TERMINAL RESPONSE 2.1.1B

PROACTIVE COMMAND 2.1.2

TERMINAL RESPONSE 2.1.2

- Sequence 2.2

| |
|---|
| Command 2.2.1 |
| TERMINAL RESPONSE2.2.1 |
| Command 2.2 .2 |
| TERMINAL RESPONSE2.2.2 (same as TERMINAL RESPONSE2.2.1) |
| Command 2.2.3 |
| TERMINAL RESPONSE2.2.3 |

PROACTIVE COMMAND2.2 .1

PROACTIVE COMMAND2.2 .2

PROACTIVE COMMAND2.2 .3

Coding TERMINAL RESPONSE2.2.1, TERMINAL RESPONSE2.2.2

Coding TERMINAL RESPONSE2.2.3

27.22.X.X.2.5 Test Requirement

10 Generic call set up procedures

The generic call set up procedure specified in 3GPP TS 11.10-1 [12] clause 10 shall apply, unless otherwise specified in the present clause.

11 - 26 Not used

27 Testing of the SIM/ME interface

This clause is an addition to 3GPP TS 11.10- [12] clause 27 to confirm the correct interpretation of the SIM Application Toolkit commands and the correct operation of the Toolkit facilities.

The definitions, declarations and default values specified in 3GPP TS 11.10-1 [12] clause 27 shall apply, unless otherwise specified in the present clause.

A SIM Simulator with the appropriate SIM Application Toolkit functionality will be required. The SIM data defined below shall be used for all test cases unless otherwise specified within the test case.

27.1 - 27.21 Not used

27.22 SIM Application Toolkit

General Test Purpose

Testing of functional conformance to SIM Application Toolkit commands, including pro-active SIM commands.

All facilities given by the TERMINAL PROFILE as supported, for which tests exist in this specification, shall be tested.

Many of the proactive SIM commands include an alpha identifier data object. This is intended to be a short one or two word identifier for the ME to optionally display on the screen along with any other indications, at the same time as the ME performs the SIM command.

NOTE: The sequence of SIM Application Toolkit commands are specific to the Toolkit Application being executed within the SIM, hence sequential testing of commands is not possible. The testing will therefore have to be performed on a command by command basis.

Definition of default values for SIM Application Toolkit testing

A SIM containing the following default values is used for all tests of this section unless otherwise stated.

For each item, the logical default values and the coding within the elementary files (EF) of the SIM follow.

NOTE1: Bx represents byte x of the coding

NOTE2: Unless otherwise defined, the coding values are hexadecimal.

The FDN, BDN and SMS-MO Control features are disabled.

EF_{SST} (SIM Service Table)

Logically:

- Abbreviated Dialling Numbers allocated and activated
- Extension 1 allocated and activated
- Fixed Dialling Numbers allocated and activated
- Extension 2 allocated and activated
- Cell Broadcast Message Identifier allocated and activated
- Data download via SMS-CB allocated and activated
- Data download via SMS-PP allocated and activated
- Menu selection allocated and activated
- Call control allocated and activated
- Proactive SIM allocated and activated
- Cell Broadcast Message Identifier Ranges allocated and activated
- Barred Dialling Numbers allocated and activated
- Extension4 allocated and activated

| | | | | |
|-------------------------|----------------|----------------|----------------|-------------------------|
| Coding: | B1 xx1111xx | B2 xxxxxxxx | B3 xx1111xx | B4 xxxx11xx (binary) |
| | B5 xxxxxxxx | B6 xxxxxxxx | B7 11111111 | B8 11111111 (binary) |
| B9 xxxxxxxx (binary) | | | | |

EF_{Phase} (SIM Phase Identification)

Logically: Phase 2+

Coding: '03'

EF_{IMSI} (International Mobile Subscriber Identity)

Logically:

| | |
|---------|-------------------|
| Length: | 8 bytes |
| IMSI: | 001 01 0123456789 |

Coding: '08 09 10 10 10 32 54 76 98'

EF_{CBMI} (Cell Broadcast Message Identifier)

Logically:

Cell Broadcast Message Identifier 1: '0C 0C'

Coding: 0C 0C FF .. FF

EF_{CBMID} (Cell Broadcast Message Identifier for Data Download)

Logically:

Cell Broadcast Message Identifier 1: '10 01'

Coding: 10 01 FF .. FF

EF_{FDN} (Fixed Dialling Numbers)

Logically:

At least 10 records

Record 1:

Length of alpha identifier: 32 characters
 Alpha identifier: "ABC"
 Length of BCD number: "03"
 TON and NPI: Telephony and Unknown
 Dialled number: 123
 CCI: None
 Ext2: None

| | | | | | | | | | | | | | |
|-----------|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Coding: | B1 | B2 | B3 | B4 | ... | B32 | B33 | B34 | B35 | B36 | B37 | ... | B46 |
| Record 1: | 41 | 42 | 43 | FF | ... | FF | 03 | 81 | 21 | F3 | FF | ... | FF |

Record 2:

Length of alpha identifier: 32 characters
 Alpha identifier: "DEF"
 Length of BCD number: "04"
 TON and NPI: Telephony and Unknown
 Dialled number: 9876
 CCI: None
 Ext2: None

| | | | | | | | | | | | | | |
|-----------|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Coding: | B1 | B2 | B3 | B4 | ... | B32 | B33 | B34 | B35 | B36 | B37 | ... | B46 |
| Record 1: | 44 | 45 | 46 | FF | ... | FF | 03 | 81 | 89 | 67 | FF | ... | FF |

EF_{BDN} (Barred Dialling Numbers)

Logically:

At least 10 records

Record 1:

Length of alpha identifier: 32 characters
 Alpha identifier: "CBA"
 Length of BCD number: "03"
 TON and NPI: Telephony and Unknown
 Dialled number: 321
 CCI: None
 Ext4: None
 Comparison Method Info: None

| | | | | | | | | | | | | | |
|-----------|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Coding: | B1 | B2 | B3 | B4 | ... | B32 | B33 | B34 | B35 | B36 | B37 | ... | B46 |
| Record 1: | 43 | 42 | 41 | FF | ... | FF | 03 | 81 | 23 | F1 | FF | ... | FF |

EF_{ECC} (Emergency Call Codes)

Logically:

Emergency Call Code 1: '1020'

| | | | |
|---------|----|----|----|
| Coding: | 01 | 02 | FF |
|---------|----|----|----|

EF_{SMS_P} (Short message service parameters)

Logically:

| | | | | | | | | | | | | | | | |
|----------------------------|-----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Record 1: | | | | | | | | | | | | | | | |
| Record length: | 28 bytes | | | | | | | | | | | | | | |
| Parameter Indicators: | | | | | | | | | | | | | | | |
| TP-Destination Address: | Parameter absent | | | | | | | | | | | | | | |
| TS-Service Centre Address: | Parameter present | | | | | | | | | | | | | | |
| TP-Protocol Identifier: | Parameter absent | | | | | | | | | | | | | | |
| TP-Data Coding Scheme: | Parameter absent | | | | | | | | | | | | | | |
| TP-Validity Period: | Parameter absent | | | | | | | | | | | | | | |
| TS-Service Centre Address: | | | | | | | | | | | | | | | |
| TON: | International Number | | | | | | | | | | | | | | |
| NPI: | “ISDN / telephone numbering plan” | | | | | | | | | | | | | | |
| Dialled number string: | “112233445566778” | | | | | | | | | | | | | | |
| Coding: | B1 | B2 | B3 | ... | B13 | B14 | B15 | B16 | B17 | B18 | B19 | B20 | B21 | B22 | B23 |
| Record 1: | FD | FF | FF | ... | FF | 09 | 91 | 11 | 22 | 33 | 44 | 55 | 66 | 77 | F8 |
| | B24 | B25 | B26 | B27 | B28 | | | | | | | | | | |
| | FF | FF | FF | FF | FF | | | | | | | | | | |

27.22.1 Initialisation of SIM Application Toolkit Enabled SIM by SIM Application Toolkit Enabled ME (Profile Download)

27.22.1.1 Definition and applicability

See Section 3.2.2.

27.22.1.2 Conformance requirement

The ME shall support the PROFILE DOWNLOAD command as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile).

27.22.1.3 Test Purpose

To verify that the ME sends a TERMINAL PROFILE command in accordance with the above requirements.

27.22.1.4 Method of test

27.22.1.4.1 Initial Conditions

The ME is connected to the SIM Simulator. All elementary files are coded as the default Toolkit personalisation, with the CHV1 enabled.

27.22.1.4.2 Procedure

Expected Sequence 1 (PROFILE DOWNLOAD)

| Step | Direction | Message / Action | Comments |
|------|-----------|--|--|
| 1 | USER → ME | Power on ME | |
| 2 | ME → USER | PIN entry request | |
| 3 | USER → ME | Enter "1111" | |
| ... | | | |
| 4 | ME → SIM | VERIFY CHV1 1.1A | [CHV1 code: "1111"] |
| 5 | SIM → ME | VERIFY CHV ATTEMPT UNSUCCESSFUL 1.1A | |
| ... | | | |
| 6 | ME → USER | PIN entry request | |
| 7 | USER → ME | Enter "1234" | |
| 8 | ME → SIM | VERIFY CHV1 1.1B | [CHV1 code: "1234"] |
| 9 | SIM → ME | NORMAL ENDING OF COMMAND 1.1A | |
| 10 | ME → SIM | SELECT EF PHASE 1.2 | |
| 11 | ME → SIM | READ BINARY (EF PHASE) 1.3 | Expected PHASE = 03 returned by SIM PROFILE DOWNLOAD |
| 12 | ME → SIM | TERMINAL PROFILE 1.4 | |
| 13 | SIM → ME | NORMAL ENDING OF COMMAND 1.1A | |
| 14 | ME → SIM | SELECT EF IMSI 1.5 or SELECT EF LOCI 1.6 | |

VERIFY CHV1 : 1.1A

Logically:

Coding:

| | | | | | | | | | |
|----------|--------|--------|-------|-------|-------|----|----|----|--|
| APDU: | CLA=A0 | INS=20 | P1=00 | P2=01 | P3=08 | | | | |
| DATA IN: | 31 | 31 | 31 | 31 | FF | FF | FF | FF | |

VERIFY CHV1 ATTEMPT UNSUCCESSFUL : 1.1A

Logically:

Coding:

SW1=98 SW2=04

VERIFY CHV1 : 1.1B

Logically:

Coding:

| | | | | | | | | | |
|-------|--------|--------|-------|-------|-------|--|--|--|--|
| APDU: | CLA=A0 | INS=20 | P1=00 | P2=01 | P3=08 | | | | |
|-------|--------|--------|-------|-------|-------|--|--|--|--|

| | | | | | | | |
|----------|----|----|----|----|----|----|----|
| DATA IN: | 31 | 32 | 33 | 34 | FF | FF | FF |
|----------|----|----|----|----|----|----|----|

NORMAL ENDING OF COMMAND : 1.1A

Logically:

Coding:

| | |
|--------|--------|
| SW1=90 | SW2=00 |
|--------|--------|

SELECT EF PHASE : 1.2

Logically:

Coding:

| | | | | | |
|-------|--------|--------|-------|-------|-------|
| APDU: | CLA=A0 | INS=A4 | P1=00 | P2=00 | P3=02 |
|-------|--------|--------|-------|-------|-------|

| | | | |
|----------|----------|----|----|
| Response | DATA IN: | 6F | AE |
|----------|----------|----|----|

| | |
|--------|--------|
| SW1=9F | SW2=0F |
|--------|--------|

SW1= 9F , SW2= 0F

READ BINARY (EF PHASE) : 1.3

Logically:

Coding:

| | | | | | |
|-------|--------|--------|-------|-------|-------|
| APDU: | CLA=A0 | INS=B0 | P1=00 | P2=00 | P3=01 |
|-------|--------|--------|-------|-------|-------|

Response

| | |
|-----------|----|
| DATA OUT: | 03 |
|-----------|----|

| | |
|--------|--------|
| SW1=90 | SW2=00 |
|--------|--------|

TERMINAL PROFILE : 1.4

Logically:

Coding:

| | | | | | |
|-------|--------|--------|-------|-------|-------|
| APDU: | CLA=A0 | INS=10 | P1=00 | P2=01 | P3=XX |
|-------|--------|--------|-------|-------|-------|

| | | | |
|----------|----|----|-----|
| DATA IN: | YY | ZZ | ... |
|----------|----|----|-----|

With XX representing the length of the following DATA IN depending on the SIM Toolkit commands supported by the ME, and with YY, ZZ, ... representing here the bytes of the TERMINAL PROFILE data, as specified in the 11.14 [15], clause 5.2

SELECT EF IMSI : 1.5

Logically:

Coding:

| | | | | | |
|----------|--------|--------|-------|-------|-------|
| APDU: | CLA=A0 | INS=A4 | P1=00 | P2=00 | P3=02 |
| DATA IN: | 6F | 07 | | | |

SELECT EF LOCI : 1.6

Logically:

Coding:

| | | | | | |
|----------|--------|--------|-------|-------|-------|
| APDU: | CLA=A0 | INS=A4 | P1=00 | P2=00 | P3=02 |
| DATA IN: | 6F | 7E | | | |

27.22.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 1.

27.22.2 Contents of the TERMINAL PROFILE command

27.22.2.1 Definition and applicability

See Section 3.2.2.

27.22.2.2 Conformance requirement

The ME shall support the PROFILE DOWNLOAD command as defined in the following technical specifications:
3GPP TS 11.14 [15] clause 5.2 (Terminal Profile).

27.22.2.3 Test Purpose

1. Verify that the TERMINAL PROFILE indicates that Profile Download facility is supported.
2. Record which SIM Application Toolkit facilities are supported by the ME, to determine which subsequent tests are required.

27.22.2.4 Method of Test

27.22.2.4.1 Initial Conditions

The ME is connected to the SIM Simulator. All elementary files are coded as the default SIM Application Toolkit personalisation.

27.22.1.4.2 Procedure

- a) The ME is powered on.
- b) After the ME sends the TERMINAL PROFILE command to the SIM Simulator, the SIM Simulator shall record the content of the TERMINAL PROFILE.
- c) The SIM Simulator shall return SW1 / SW2 of '90 00'.

The test is terminated upon the ME sending the TERMINAL PROFILE command to the SIM Simulator.

27.22.2.5 Test Requirement

- 1) After step a) the ME shall send the TERMINAL PROFILE command to the SIM Simulator with bit 1 of the first byte set to 1 (facility supported by ME).

27.22.3 Servicing of Proactive SIM Commands

27.22.3.1 Definition and applicability

See Section 3.2.2.

27.22.3.2 Conformance requirement

On detection of a pending SIM Application Toolkit command from the SIM the ME shall perform the FETCH command to retrieve the proactive SIM command. The result of the executed command shall be transmitted from the ME to the SIM within a TERMINAL RESPONSE command.

The MORE TIME proactive command is used in this test. The ME shall have knowledge of this command, but may not support this SIM Application Toolkit facility.

3GPP TS 11.14 [15] clause 6.3.

27.22.3.3 Test Purpose

To verify that the ME uses the FETCH command to obtain the proactive SIM command, after detection of a pending proactive SIM command. The pending proactive SIM command is indicated by the response parameters '91 xx' from the SIM.

To verify that the ME transmits the result of execution of the proactive SIM command to the SIM in the TERMINAL RESPONSE command.

27.22.3.4 Method of test

27.22.3.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as the SIM Application Toolkit default.

The SIM Simulator is configured to indicate that a proactive SIM command is pending.

The SIM Simulator is configured to monitor the SIM - ME interface.

27.22.3.4.2 Procedure

- a) The ME is powered on.
- b) After the ME has performed the PROFILE DOWNLOAD procedure, the SIM Simulator indicates that a Proactive SIM Command is pending with SW1 / SW2 of '91 0B'.
- c) After the ME sends the FETCH command to the SIM Simulator, the SIM Simulator returns Proactive SIM Command 2.1: MORE TIME.

27.22.3.5 Test Requirement

- 1) After step b) the ME shall send the FETCH command to the SIM.
- 2) After step c) the ME shall send the TERMINAL REONSE command with command number "01", type of command "02" and command qualifier "00".

27.22.4 Proactive SIM Commands

27.22.4.1 DISPLAY TEXT

27.22.4.1.1 DISPLAY TEXT (Normal)

27.22.4.1.1.1 Definition and applicability

See Section 3.2.2.

27.22.4.1.1.2 Conformance requirements

The ME shall support the DISPLAY TEXT command as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.1 (Display Text), clause 6.5.4 (Icon Identifier), clause 6.6.1 (Display Text), clause 6.8 (Terminal Response), clause 6.11, clause 12.6 (Commands details), clause 12.15 (Text String), clause 12.15.1/2/3 (Data Coding Scheme), clause 12.31 (Icon identifier).

27.22.4.1.1.3 Test Purpose

To verify that the ME displays the text contained in the DISPLAY TEXT proactive SIM command, and returns a successful result in the TERMINAL RESPONSE command send to the SIM.

27.22.4.1.1.4 Method of test

27.22.4.1.1.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.1.1.4.2 Procedure

Expected Sequence 1.1 (DISPLAY TEXT normal priority, Unpacked 8 bit data for Text String, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|------------------|----------|
|------|-----------|------------------|----------|

| | | | |
|---|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: DISPLAY TEXT 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : DISPLAY TEXT 1.1.1 Display "Toolkit Test 1" | [Normal priority, wait for user to clear message, unpacked, 8 bit data] |
| 4 | ME → USER | Clear Message | |
| 5 | USER → ME | | |
| 6 | ME → SIM | TERMINAL RESPONSE : DISPLAY TEXT 1.1.1 | [Command performed successfully] |
| 7 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

PROACTIVE COMMAND : DISPLAY TEXT 1.1.1

Logically:

Command details

| | |
|---------------------|---|
| Command number: | 1 |
| Command type: | DISPLAY TEXT |
| Command qualifier: | normal priority, wait for user to clear message |
| Device identities | |
| Source device: | SIM |
| Destination device: | Display |
| Text String | |
| Data coding scheme: | unpacked, 8 bit data |
| Text: | "Toolkit Test 1" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1A | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 81 | 02 | 8D |
| | 0F | 04 | 54 | 6F | 6F | 6C | 6B | 69 | 74 | 20 | 54 | 65 |
| | 73 | 74 | 20 | 31 | | | | | | | | |

TERMINAL RESPONSE : DISPLAY TEXT 1.1.1

Logically:

Command details

| | |
|---------------------|---|
| Command number: | 1 |
| Command type: | DISPLAY TEXT |
| Command qualifier: | normal priority, wait for user to clear message |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 1.2 (DISPLAY TEXT normal priority, Unpacked 8 bit data for Text String, screen busy)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|------------------|----------|
|------|-----------|------------------|----------|

| | | | |
|---|-----------|--|---|
| 1 | USER → ME | Set the ME screen to a display mode other than the normal stand-by display | The ME will be set to a mode so that normal priority text commands shall be rejected. |
| 2 | SIM → ME | PROACTIVE COMMAND PENDING: DISPLAY TEXT 1.2.1 | |
| 3 | ME → SIM | FETCH | [Normal priority] |
| 4 | SIM → ME | PROACTIVE COMMAND : DISPLAY TEXT 1.2.1 | |
| 5 | ME → USER | No change of the currently being used display. | |
| 6 | ME → SIM | TERMINAL RESPONSE : DISPLAY TEXT 1.2.1 | [ME currently unable to process command - screen busy] |
| 7 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

PROACTIVE COMMAND : DISPLAY TEXT 1.2.1 : same as 1.1.1**TERMINAL RESPONSE : DISPLAY TEXT 1.2.1**

Logically:

Command details

Command number: 1
 Command type: DISPLAY TEXT
 Command qualifier: normal priority, wait for user to clear message

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: ME currently unable to process command
 Additional information: Screen is busy

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 82 | 81 | 83 | 02 | 20 |
| | 01 | | | | | | | | | | | |

Expected Sequence 1.3 (DISPLAY TEXT, high priority, Unpacked 8 bit data for Text String, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: DISPLAY TEXT 1.3.1 | The ME screen is in a mode other than the normal stand by display. |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : DISPLAY TEXT 1.3.1 | [High priority] |
| 4 | ME → USER | Display "Toolkit Test 2" | |
| 5 | USER → ME | Clear Message | |
| 6 | ME → SIM | TERMINAL RESPONSE : DISPLAY TEXT 1.3.1 | |
| 7 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 8 | USER → ME | Set the ME screen back to normal stand-by display | |

PROACTIVE COMMAND : DISPLAY TEXT 1.3.1

Logically:

Command details

| | |
|--------------------|---|
| Command number: | 1 |
| Command type: | DISPLAY TEXT |
| Command qualifier: | high priority, wait for user to clear message |

Device identities

| | |
|---------------------|---------|
| Source device: | SIM |
| Destination device: | Display |

Text String

| | |
|---------------------|----------------------|
| Data coding scheme: | unpacked, 8 bit data |
| Text: | "Toolkit Test 2" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1A | 81 | 03 | 01 | 21 | 81 | 82 | 02 | 81 | 02 | 8D |
| | 0F | 04 | 54 | 6F | 6F | 6C | 6B | 69 | 74 | 20 | 54 | 65 |
| | 73 | 74 | 20 | 32 | | | | | | | | |

TERMINAL RESPONSE : DISPLAY TEXT 1.3.1

Logically:

Command details

| | |
|--------------------|---|
| Command number: | 1 |
| Command type: | DISPLAY TEXT |
| Command qualifier: | high priority, wait for user to clear message |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|--------------------------------|
| General Result: | Command performed successfully |
|-----------------|--------------------------------|

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 21 | 81 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 1.4 (DISPLAY TEXT, Packed, SMS default alphabet, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|--------------|---|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: DISPLAY TEXT 1.4.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : DISPLAY TEXT 1.4.1 Display "Toolkit Test 3" | [Packed, SMS default alphabet] |
| 4 | ME → USER | | |
| 5 | USER → ME | Clear Message | |
| 6 | ME → SIM | TERMINAL RESPONSE : DISPLAY TEXT 1.4.1 | [Command performed successfully] |

PROACTIVE COMMAND : DISPLAY TEXT 1.4.1

Logically:

Command details

| | |
|--------------------|---|
| Command number: | 1 |
| Command type: | DISPLAY TEXT |
| Command qualifier: | normal priority, wait for user to clear message |

Device identities

| | |
|---------------------|---------|
| Source device: | SIM |
| Destination device: | Display |

Text string

| | |
|---------------------|------------------------------|
| Data coding scheme: | packed, SMS default alphabet |
| Text: | "Toolkit Test 3" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 19 | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 81 | 02 | 8D |
| | 0E | 00 | D4 | F7 | 9B | BD | 4E | D3 | 41 | D4 | F2 | 9C |
| | 0E | 9A | | 01 | | | | | | | | |

TERMINAL RESPONSE : DISPLAY TEXT 1.4.1

Logically:

Command details

| | |
|--------------------|---|
| Command number: | 1 |
| Command type: | DISPLAY TEXT |
| Command qualifier: | normal priority, wait for user to clear message |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|--------------------------------|
| General Result: | Command performed successfully |
|-----------------|--------------------------------|

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 1.5 (DISPLAY TEXT, Clear message after delay, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|--------------|--|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: DISPLAY TEXT 1.5.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : DISPLAY TEXT 1.5.1 | [Clear message after a delay] |
| 4 | ME → USER | Display "Toolkit Test 4" and clear this message after a short delay | |
| 5 | ME → SIM | TERMINAL RESPONSE : DISPLAY TEXT 1.5.1 | [Command performed successfully] |
| 6 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

PROACTIVE COMMAND : DISPLAY TEXT 1.5.1

Logically:

Command details

| | |
|--------------------|--|
| Command number: | 1 |
| Command type: | DISPLAY TEXT |
| Command qualifier: | normal priority, clear message after a delay |

Device identities

| | |
|---------------------|---------|
| Source device: | SIM |
| Destination device: | Display |

Text string

| | |
|---------------------|----------------------|
| Data coding scheme: | unpacked, 8 bit data |
| Text: | "Toolkit Test 4" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1A | 81 | 03 | 01 | 21 | 00 | 82 | 02 | 81 | 02 | 8D |
| | 0F | 04 | 54 | 6F | 6F | 6C | 6B | 69 | 74 | 20 | 54 | 65 |
| | 73 | 74 | 20 | 34 | | | | | | | | |

TERMINAL RESPONSE : DISPLAY TEXT 1.5.1

Logically:

Command details

| | |
|--------------------|--|
| Command number: | 1 |
| Command type: | DISPLAY TEXT |
| Command qualifier: | normal priority, clear message after a delay |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|--------------------------------|
| General Result: | Command performed successfully |
|-----------------|--------------------------------|

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 21 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 1.6 (DISPLAY TEXT, Text string with 160 bytes, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: DISPLAY TEXT 1.6.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : DISPLAY TEXT 1.6.1 | [Text string with 160 bytes – maximum for non extension text] |
| 4 | ME → USER | Display " This command instructs the ME to display a text message. It allows the SIM to define the priority of that message, and the text string format. Two types of prio" | |
| 5 | USER → ME | Clear Message | |
| 6 | ME → SIM | TERMINAL RESPONSE : DISPLAY TEXT 1.6.1 | Command performed successfully |

PROACTIVE COMMAND : DISPLAY TEXT 1.6.1

Logically:

| | |
|---------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | DISPLAY TEXT |
| Command qualifier: | normal priority, wait for user to clear message |
| Device identities | |
| Source device: | SIM |
| Destination device: | Display |
| Text String | |
| Data coding scheme: | unpacked, 8 bit data |
| Text: | "This command instructs the ME to display a text message. It allows the SIM to define the priority of that message, and the text string format. Two types of prio" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 81 | AD | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 81 | 02 |
| | 8D | 81 | A1 | 04 | 54 | 68 | 69 | 73 | 20 | 63 | 6F | 6D |
| | 6D | 61 | 6E | 64 | 20 | 69 | 6E | 73 | 74 | 72 | 75 | 63 |
| | 74 | 73 | 20 | 74 | 68 | 65 | 20 | 4D | 45 | 20 | 74 | 6F |
| | 20 | 64 | 69 | 73 | 70 | 6C | 61 | 79 | 20 | 61 | 20 | 74 |
| | 65 | 78 | 74 | 20 | 6D | 65 | 73 | 73 | 61 | 67 | 65 | 2E |
| | 20 | 49 | 74 | 20 | 61 | 6C | 6C | 6F | 77 | 73 | 20 | 74 |
| | 68 | 65 | 20 | 53 | 49 | 4D | 20 | 74 | 6F | 20 | 64 | 65 |
| | 66 | 69 | 6E | 65 | 20 | 74 | 68 | 65 | 20 | 70 | 72 | 69 |
| | 6F | 72 | 69 | 74 | 79 | 20 | 6F | 66 | 20 | 74 | 68 | 61 |
| | 74 | 20 | 6D | 65 | 73 | 73 | 61 | 67 | 65 | 2C | 20 | 61 |
| | 6E | 64 | 20 | 74 | 68 | 65 | 20 | 74 | 65 | 78 | 74 | 20 |
| | 73 | 74 | 72 | 69 | 6E | 67 | 20 | 66 | 6F | 72 | 6D | 61 |
| | 74 | 2E | 20 | 54 | 77 | 6F | 20 | 74 | 79 | 70 | 65 | 73 |
| | 20 | 6F | 66 | 20 | 70 | 72 | 69 | 6F | | | | |

TERMINAL RESPONSE : DISPLAY TEXT 1.6.1

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | DISPLAY TEXT |
| Command qualifier: | normal priority, wait for user to clear message |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 1.7 (DISPLAY TEXT, Backward move in SIM session, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|----------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: DISPLAY TEXT 1.7.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : DISPLAY TEXT 1.7.1 | |
| 4 | ME → USER | Display "<GO-BACKWARDS" | |

| | | | |
|---|-----------|--|--|
| 5 | USER → ME | Indicate the need to go backwards in the proactive SIM application session | |
| 6 | ME → SIM | TERMINAL RESPONSE : DISPLAY TEXT 1.7.1 | [Backward move in the proactive SIM session requested by the user] |

PROACTIVE COMMAND : DISPLAY TEXT 1.7.1

Logically:

Command details

| | |
|--------------------|---|
| Command number: | 1 |
| Command type: | DISPLAY TEXT |
| Command qualifier: | normal priority, wait for user to clear message |

Device identities

| | |
|---------------------|---------|
| Source device: | SIM |
| Destination device: | Display |

Text string

| | |
|---------------------|----------------------|
| Data coding scheme: | unpacked, 8 bit data |
| Text: | "<GO-BACKWARDS>" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1A | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 81 | 02 | 8D |
| | 0F | 04 | 3C | 47 | 4F | 2D | 42 | 41 | 43 | 4B | 57 | 41 |
| | 52 | 44 | 53 | 3E | | | | | | | | |

TERMINAL RESPONSE : DISPLAY TEXT 1.7.1

Logically:

Command details

| | |
|--------------------|---|
| Command number: | 1 |
| Command type: | DISPLAY TEXT |
| Command qualifier: | normal priority, wait for user to clear message |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|--|
| General Result: | Backward move in the proactive SIM session requested by the user |
|-----------------|--|

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 82 | 81 | 83 | 01 | 11 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 1.8 (DISPLAY TEXT, session terminated by user)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|----------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: DISPLAY TEXT 1.8.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : DISPLAY TEXT 1.8.1 | |
| 4 | ME → USER | Display "<ABORT>" | |

| | | | |
|---|-----------|--|--|
| 5 | USER → ME | Indicate the need to end the proactive SIM application session | |
| 6 | ME → SIM | TERMINAL RESPONSE : DISPLAY TEXT 1.8.1 | [Proactive SIM session terminated by the user] |
| 7 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

PROACTIVE COMMAND : DISPLAY TEXT 1.8.1

Logically:

Command details

| | |
|--------------------|---|
| Command number: | 1 |
| Command type: | DISPLAY TEXT |
| Command qualifier: | normal priority, wait for user to clear message |

Device identities

| | |
|---------------------|---------|
| Source device: | SIM |
| Destination device: | Display |

Text string

| | |
|---------------------|----------------------|
| Data coding scheme: | unpacked, 8 bit data |
| Text: | "<ABORT>" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 13 | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 81 | 02 | 8D |
| | 08 | 04 | 3C | 41 | 42 | 4F | 52 | 54 | 3E | | | |

TERMINAL RESPONSE : DISPLAY TEXT 1.8.1

Logically:

Command details

| | |
|--------------------|---|
| Command number: | 1 |
| Command type: | DISPLAY TEXT |
| Command qualifier: | normal priority, wait for user to clear message |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|--|
| General Result: | Proactive SIM session terminated by the user |
|-----------------|--|

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 82 | 81 | 83 | 01 | 10 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 1.9 (DISPLAY TEXT, icon and text to be displayed, no text string given, not understood by ME)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: DISPLAY TEXT 1.9.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : DISPLAY TEXT 1.9.1 | Including icon identifier, icon shall be displayed together with the alpha text string, but no text string given |

| | | | |
|---|----------|---|---|
| 4 | ME → SIM | TERMINAL RESPONSE : DISPLAY TEXT 1.9.1 | [Command data not understood by ME (clause 6.5.4)] |
| 5 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

PROACTIVE COMMAND : DISPLAY TEXT 1.9.1

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | DISPLAY TEXT |
| Command qualifier: | normal priority, wait for user to clear message |
| Device identities | |
| Source device: | SIM |
| Destination device: | Display |
| Text string | |
| Contents: | null data object |
| Icon Identifier: | |
| Icon qualifier: | icon is self-explanatory |
| Icon Identifier: | record 1 in EF _(IMG) |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0F | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 81 | 02 | 8D |
| | 00 | 9E | 02 | 01 | 01 | | | | | | | |

TERMINAL RESPONSE : DISPLAY TEXT 1.9.1

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | DISPLAY TEXT |
| Command qualifier: | normal priority, wait for user to clear message |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command data not understood by ME |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 82 | 81 | 83 | 01 | 32 |
| | | | | | | | | | | | | |

27.22.4.1.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 1 to 8 .

27.22.4.1.2 DISPLAY TEXT (Support of “No response from user”)

27.22.4.1.2.1 Definition and applicability

See Section 3.2.2.

27.22.4.1.2.2 Conformance requirement

The ME shall support the DISPLAY TEXT command as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.1 (Display Text), clause 6.6.1 (Display Text), clause 6.8 (Terminal Response), clause 6.11, clause 12.6 (Commands details), clause 12.15 (Text String), clause 12.15.1/2/3 (Data Coding Scheme)

27.22.4.1.2.3 Test Purpose

To verify that the ME displays the text contained in the DISPLAY TEXT proactive SIM command, and returns a “No response from user” result value in the TERMINAL RESPONSE command send to the SIM.

27.22.4.1.2.4 Method of test

27.22.4.1.2.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

ME Manufacturers shall set the “no response from user” period of time.

The SIM simulator shall be set to that period of time.

27.22.4.1.2.4.1 Procedure

Expected Sequence 2.1 (DISPLAY TEXT, no response from user)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: DISPLAY TEXT 2.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : DISPLAY TEXT 2.1.1 | [Normal priority, wait for user to clear message, unpacked, 8 bit data] |
| 4 | ME → USER | Display "<TIME-OUT>" | |
| 6 | ME → SIM | TERMINAL RESPONSE : DISPLAY TEXT 2.1.1 | [No response from user] within 5 seconds after the end of that defined period of time |
| 7 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

PROACTIVE COMMAND : DISPLAY TEXT 2.1.1

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | DISPLAY TEXT |
| Command qualifier: | normal priority, wait for user to clear message |
| Device identities | |
| Source device: | SIM |
| Destination device: | Display |
| Text string | |
| Data coding scheme: | unpacked, 8 bit data |
| Text: | "<TIME-OUT>" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 16 | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 81 | 02 | 8D |
| | 0B | 04 | 3C | 54 | 49 | 4D | 45 | 2D | 4F | 55 | 54 | 3E |

TERMINAL RESPONSE : DISPLAY TEXT 2.1.1

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | DISPLAY TEXT |
| Command qualifier: | normal priority, wait for user to clear message |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | No response from user |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 82 | 81 | 83 | 01 | 12 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

27.22.4.1.2.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 1.

27.22.4.1.3 DISPLAY TEXT (Display of extension text)

27.22.4.1.3.1 Definition and applicability

See Section 3.2.2.

27.22.4.1.3.2 Conformance requirement

The ME shall support the DISPLAY TEXT command as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.1 (Display Text), clause 6.6.1 (Display Text), clause 6.8 (Terminal Response), clause 6.11, clause 12.6 (Commands details), clause 12.15 (Text String), clause 12.15.1/2/3 (Data Coding Scheme).

27.22.4.1.3.3 Test Purpose

To verify that the ME displays the extension text contained in the DISPLAY TEXT proactive SIM command, and returns a successful result in the TERMINAL RESPONSE command send to the SIM.

27.22.4.1.3.4 Method of test

27.22.4.1.3.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.1.3.4.2 Procedure

Expected Sequence 3.1 (DISPLAY TEXT, display of the extension text)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: DISPLAY TEXT 3.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : DISPLAY TEXT 3.1.1 | [Text string with the maximum of 240 bytes] |
| 4 | ME → USER | Display "This command instructs the ME to display a text message, and/or an icon (see 6.5.4). It allows the SIM to define the priority of that message, and the text string format. Two types of priority are defined:- display normal priority text and/" | |
| 5 | USER → ME | Clear Message | |
| 6 | ME → SIM | TERMINAL RESPONSE : DISPLAY TEXT 3.1.1 | [Command performed successfully] |
| 7 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

PROACTIVE COMMAND : DISPLAY TEXT 3.1.1

Logically:

Command details

| | |
|--------------------|---|
| Command number: | 1 |
| Command type: | DISPLAY TEXT |
| Command qualifier: | normal priority, wait for user to clear message |

Device identities

| | |
|---------------------|---------|
| Source device: | SIM |
| Destination device: | Display |

Text String

| | |
|---------------------|--|
| Data coding scheme: | unpacked, 8 bit data |
| Text: | "This command instructs the ME to display a text |

message and/or an icon (see 6.5.4). It allows the SIM to define the priority of that message, and the text string format. Two types of priority are defined:- display normal priority text and/”

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 81 | FD | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 81 | 02 |
| | 8D | 81 | F1 | 04 | 54 | 68 | 69 | 73 | 20 | 63 | 6F | 6D |
| | 6D | 61 | 6E | 64 | 20 | 69 | 6E | 73 | 74 | 72 | 75 | 63 |
| | 74 | 73 | 20 | 74 | 68 | 65 | 20 | 4D | 45 | 20 | 74 | 6F |
| | 20 | 64 | 69 | 73 | 70 | 6C | 61 | 79 | 20 | 61 | 20 | 74 |
| | 65 | 78 | 74 | 20 | 6D | 65 | 73 | 73 | 61 | 67 | 65 | 2C |
| | 20 | 61 | 6E | 64 | 2F | 6F | 72 | 20 | 61 | 6E | 20 | 69 |
| | 63 | 6F | 6E | 20 | 28 | 73 | 65 | 65 | 20 | 36 | 2E | 35 |
| | 2E | 34 | 29 | 2E | 20 | 49 | 74 | 20 | 61 | 6C | 6C | 6F |
| | 77 | 73 | 20 | 74 | 68 | 65 | 20 | 53 | 49 | 4D | 20 | 74 |
| | 6F | 20 | 64 | 64 | 66 | 69 | 6E | 65 | 20 | 74 | 68 | 65 |
| | 20 | 70 | 72 | 69 | 6f | 72 | 69 | 74 | 79 | 20 | 6F | 66 |
| | 20 | 74 | 68 | 61 | 74 | 20 | 6D | 65 | 73 | 73 | 61 | 67 |
| | 65 | 2C | 20 | 61 | 6E | 64 | 20 | 74 | 68 | 65 | 20 | 74 |
| | 65 | 78 | 74 | 20 | 73 | 74 | 72 | 69 | 6E | 67 | 20 | 66 |
| | 6F | 72 | 6D | 61 | 74 | 2E | 20 | 54 | 77 | 6F | 20 | 74 |
| | 79 | 70 | 65 | 73 | 20 | 6F | 66 | 20 | 70 | 72 | 69 | 6F |
| | 72 | 69 | 74 | 79 | 20 | 61 | 72 | 65 | 20 | 64 | 65 | 66 |
| | 69 | 6E | 65 | 64 | 3A | 2D | 20 | 64 | 69 | 73 | 70 | 6C |
| | 61 | 79 | 20 | 6E | 6F | 72 | 6D | 61 | 6C | 20 | 70 | 72 |
| | 69 | 6F | 72 | 69 | 74 | 79 | 20 | 74 | 65 | 78 | 74 | 20 |
| | 61 | 6E | 64 | 2F | | | | | | | | |

TERMINAL RESPONSE : DISPLAY TEXT 3.1.1

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | DISPLAY TEXT |
| Command qualifier: | normal priority, wait for user to clear message |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

27.22.4.1.3.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 1.

27.22.4.1.4 DISPLAY TEXT (Sustained text)

27.22.4.1.4.1 Definition and applicability

See Section 3.2.2.

27.22.4.1.4.2 Conformance requirement

The ME shall support the DISPLAY TEXT command as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.1 (Display Text), clause 6.6.1 (Display Text), clause 6.8 (Terminal Response), clause 6.11, clause 12.6 (Commands details), clause 12.15 (Text String), clause 12.15.1/2/3 (Data Coding Scheme) and clause 12.43 (immediate response).

27.22.4.1.4.3 Test Purpose

To verify that the ME displays the text contained in the DISPLAY TEXT proactive SIM command, returns a successful result in the TERMINAL RESPONSE command send to the SIM and sustain the display beyond sending the TERMINAL response.

27.22.4.1.4.4 Method of test

27.22.4.1.4.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.1.4.4.2 Procedure

Expected Sequence 4.1 (DISPLAY TEXT, sustained text, unpacked data 8 bits, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: DISPLAY TEXT 4.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : DISPLAY TEXT 4.1.1 | [Normal priority, wait for user to clear message, unpacked, 8 bit data] |
| 4 | ME → USER | Display "Toolkit Test 1" | |
| 6 | ME → SIM | TERMINAL RESPONSE : DISPLAY TEXT 4.1.1 | [Command performed successfully] |
| 7 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 8 | ME → USER | Display of "Toolkit Test 1" shall sustain | Text shall sustain until - a subsequent proactive command is received containing display data. |

PROACTIVE COMMAND : DISPLAY TEXT 4.1.1

Logically:

Command details

| | |
|--------------------|---|
| Command number: | 1 |
| Command type: | DISPLAY TEXT |
| Command qualifier: | normal priority, wait for user to clear message |

Device identities

| | |
|---------------------|---------|
| Source device: | SIM |
| Destination device: | Display |

Text String

| | |
|---------------------|----------------------|
| Data coding scheme: | unpacked, 8 bit data |
| Text: | "Toolkit Test 1" |

Immediate Response

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1C | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 81 | 02 | 8D |
| | 0F | 04 | 54 | 6F | 6F | 6C | 6B | 69 | 74 | 20 | 54 | 65 |
| | 73 | 74 | 20 | 31 | AB | 00 | | | | | | |

TERMINAL RESPONSE : DISPLAY TEXT 4.1.1

Logically:

Command details

| | |
|--------------------|---|
| Command number: | 1 |
| Command type: | DISPLAY TEXT |
| Command qualifier: | normal priority, wait for user to clear message |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|--------------------------------|
| General Result: | Command performed successfully |
|-----------------|--------------------------------|

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 4.2 (DISPLAY TEXT, sustained text, clear message after delay, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: DISPLAY TEXT 4.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : DISPLAY TEXT 4.2.1 Display "Toolkit Test 2" | [Clear message after a delay] |
| 4 | ME → USER | | |
| 5 | ME → SIM | TERMINAL RESPONSE : DISPLAY TEXT 4.2.1 | [Command performed successfully] |
| 6 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 7 | ME → USER | Display "Toolkit Test 2" | Text shall sustain until – the expiration of a short delay. |

PROACTIVE COMMAND : DISPLAY TEXT 4.2.1

Logically:

Command details

| | |
|--------------------|--|
| Command number: | 1 |
| Command type: | DISPLAY TEXT |
| Command qualifier: | normal priority, clear message after a delay |

Device identities

| | |
|---------------------|---------|
| Source device: | SIM |
| Destination device: | Display |

Text String

| | |
|---------------------|----------------------|
| Data coding scheme: | unpacked, 8 bit data |
| Text: | "Toolkit Test 2" |

Immediate Response

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1C | 81 | 03 | 01 | 21 | 00 | 82 | 02 | 81 | 02 | 8D |
| | 0F | 04 | 54 | 6F | 6F | 6C | 6B | 69 | 74 | 20 | 54 | 65 |
| | 73 | 74 | 20 | 32 | AB | 00 | | | | | | |

TERMINAL RESPONSE : DISPLAY TEXT 4.2.1

Logically:

Command details

| | |
|--------------------|--|
| Command number: | 1 |
| Command type: | DISPLAY TEXT |
| Command qualifier: | normal priority, clear message after a delay |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|--------------------------------|
| General Result: | Command performed successfully |
|-----------------|--------------------------------|

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 21 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 4.3 (DISPLAY TEXT, sustained text, wait for user MMI to clear, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: DISPLAY TEXT 4.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : DISPLAY TEXT 4.3.1 | [wait for user to clear message] |
| 4 | ME → USER | Display "Toolkit Test 3" | |
| 5 | ME → SIM | TERMINAL RESPONSE : DISPLAY TEXT 4.3.1 | [Command performed successfully] |
| 6 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 7 | ME → USER | Display of "Toolkit Test 3" | Text shall sustain until – a user MMI action. |
| 8 | USER → ME | Clear message | |

PROACTIVE COMMAND : DISPLAY TEXT 4.3.1

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | DISPLAY TEXT |
| Command qualifier: | normal priority, wait for user to clear message |
| Device identities | |
| Source device: | SIM |
| Destination device: | Display |
| Text String | |
| Data coding scheme: | unpacked, 8 bit data |
| Text: | "Toolkit Test 3" |
| Immediate Response | |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1C | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 81 | 02 | 8D |
| | 0F | 04 | 54 | 6F | 6F | 6C | 6B | 69 | 74 | 20 | 54 | 65 |
| | 73 | 74 | 20 | 33 | AB | 00 | | | | | | |

TERMINAL RESPONSE : DISPLAY TEXT 4.3.1

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | DISPLAY TEXT |
| Command qualifier: | normal priority, wait for user to clear message |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 4.4 (DISPLAY TEXT, sustained text, wait for high priority event to clear, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: DISPLAY TEXT 4.4.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : DISPLAY TEXT 4.4.1 | [wait for user to clear message] |
| 4 | ME → USER | Display "Toolkit Test 4" | |
| 5 | ME → SIM | TERMINAL RESPONSE : DISPLAY TEXT 4.4.1 | [Command performed successfully] |
| 6 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 7 | ME → USER | Display of "Toolkit Test 4" | Text shall sustain until – a higher priority event occurs. |
| 8 | SS → ME | INCOMING MOBILE TERMINATED CALL | |

PROACTIVE COMMAND : DISPLAY TEXT 4.4.1

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | DISPLAY TEXT |
| Command qualifier: | normal priority, wait for user to clear message |
| Device identities | |
| Source device: | SIM |
| Destination device: | Display |
| Text String | |
| Data coding scheme: | unpacked, 8 bit data |
| Text: | "Toolkit Test 4" |
| Immediate Response | |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1C | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 81 | 02 | 8D |
| | 0F | 04 | 54 | 6F | 6F | 6C | 6B | 69 | 74 | 20 | 54 | 65 |
| | 73 | 74 | 20 | 34 | AB | 00 | | | | | | |

TERMINAL RESPONSE : DISPLAY TEXT 4.4.1

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | DISPLAY TEXT |
| Command qualifier: | normal priority, wait for user to clear message |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

27.22.4.1.4.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 1 to 4.

27.22.4.1.5 DISPLAY TEXT (Display of icons)

27.22.4.1.5.1 Definition and applicability

See section 3.2.2

27.22.4.1.5.2 Conformance requirement

The ME shall support the DISPLAY TEXT command as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.1 (Display Text), clause 6.5.4 (Icon Identifier), clause 6.6.1 (Display Text), clause 6.8 (Terminal Response), clause 6.11, clause 12.6 (Commands details), clause 12.15 (Text String), clause 12.15.1/2/3 (Data Coding Scheme), clause 12.31 (Icon identifier).

27.22.4.1.5.3 Test Purpose

To verify that the ME displays the icons which are referred to in the contents of the DISPLAY TEXT proactive SIM command, and returns a successful result in the TERMINAL RESPONSE command send to the SIM.

27.22.4.1.5.4 Method of test

27.22.4.1.5.4.1 Initial Conditions

See Annex C

27.22.4.1.5.4.2 Procedure

Expected Sequence 5.1A (DISPLAY TEXT, display of basic icon, self-explanatory, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: DISPLAY TEXT 5.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : DISPLAY TEXT 5.1.1 | [BASIC-ICON, self-explanatory] |
| 4 | ME → USER | Display the BASIC-ICON | |
| 5 | USER → ME | Clear Message | |
| 6 | ME → SIM | TERMINAL RESPONSE : DISPLAY TEXT 5.1.1A | [Command performed successfully] |

PROACTIVE COMMAND : DISPLAY TEXT 5.1.1

Logically:

Command details

| | |
|--------------------|---|
| Command number: | 1 |
| Command type: | DISPLAY TEXT |
| Command qualifier: | normal priority, wait for user to clear message |

Device identities

| | |
|---------------------|---------|
| Source device: | SIM |
| Destination device: | Display |

Text String

| | |
|---------------------|----------------------|
| Data coding scheme: | unpacked, 8 bit data |
| Text: | “Basic Icon” |

Icon Identifier:

| | |
|------------------|---------------------------------|
| Icon qualifier: | icon is self-explanatory |
| Icon Identifier: | record 1 in EF _(IMG) |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1A | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 81 | 02 | 8D |
| | 0B | 04 | 42 | 61 | 73 | 69 | 63 | 20 | 49 | 63 | 6F | 6E |
| | 9E | 02 | 00 | 01 | | | | | | | | |

TERMINAL RESPONSE : DISPLAY TEXT 5.1.1A

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | DISPLAY TEXT |
| Command qualifier: | normal priority, wait for user to clear message |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 5.1B (DISPLAY TEXT, display of basic icon, self-explanatory, requested icon could not be displayed)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: DISPLAY TEXT 5.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : DISPLAY TEXT 5.1.1 | [BASIC-ICON, self-explanatory] |
| 4 | ME → USER | Display "Basic Icon" without icon | |
| 5 | USER → ME | Clear Message | |
| 6 | ME → SIM | TERMINAL RESPONSE : DISPLAY TEXT 5.1.1B | [Command performed successfully, but requested icon could not be displayed] |

TERMINAL RESPONSE : DISPLAY TEXT 5.1.1B

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | DISPLAY TEXT |
| Command qualifier: | normal priority, wait for user to clear message |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully, but requested icon could not be displayed |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 82 | 81 | 83 | 01 | 04 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 5.2A (DISPLAY TEXT, display of colour icon, successful)

| Step | Direction | MESSAGE / Action | Comments |
|-------------|------------------|--|----------------------------------|
| 7 | SIM → ME | PROACTIVE COMMAND PENDING: DISPLAY TEXT 5.2.1 | |
| 8 | ME → SIM | FETCH | |
| 9 | SIM → ME | PROACTIVE COMMAND : DISPLAY TEXT 5.2.1 | [COLOUR-ICON] |
| 10 | ME → USER | Display the COLOUR-ICON | |
| 11 | USER → ME | Clear Message | |
| 12 | ME → SIM | TERMINAL RESPONSE : DISPLAY TEXT 5.2.1A | [Command performed successfully] |

PROACTIVE COMMAND : DISPLAY TEXT 5.2.1

Logically:

Command details

Command number: 1
 Command type: DISPLAY TEXT
 Command qualifier: normal priority, wait for user to clear message

Device identities

Source device: SIM
 Destination device: Display

Text String

Data coding scheme: unpacked, 8 bit data
 Text: “Colour Icon”

Icon Identifier:

Icon qualifier: icon is self-explanatory
 Icon Identifier: record 2 in EF_(IMG)

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1B | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 81 | 02 | 8D |
| | 0C | 04 | 43 | 6F | 6C | 6F | 75 | 72 | 20 | 49 | 63 | 6F |
| | 6E | 9E | 02 | 00 | 02 | | | | | | | |

TERMINAL RESPONSE : DISPLAY TEXT 5.2.1A

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | DISPLAY TEXT |
| Command qualifier: | normal priority, wait for user to clear message |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

BER-TLV: 81 03 01 21 80 82 02 82 81 83 01 00

Expected Sequence 5.2B (DISPLAY TEXT, display of colour icon, requested icon could not be displayed)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 7 | SIM → ME | PROACTIVE COMMAND PENDING: DISPLAY TEXT 5.2.1 | |
| 8 | ME → SIM | FETCH | |
| 9 | SIM → ME | PROACTIVE COMMAND : DISPLAY TEXT 5.2.1 | [COLOUR-ICON] |
| 10 | ME → USER | Display "Colour Icon" without the icon | |
| 11 | USER → ME | Clear Message | |
| 12 | ME → SIM | TERMINAL RESPONSE : DISPLAY TEXT 5.2.1B | [Command performed successfully, but requested icon could not be displayed] |

TERMINAL RESPONSE : DISPLAY TEXT 5.2.1B

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | DISPLAY TEXT |
| Command qualifier: | normal priority, wait for user to clear message |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully, but requested icon could not be displayed |

Coding:

BER-TLV: 81 03 01 21 80 82 02 82 81 83 01 04

Expected Sequence 5.3A (DISPLAY TEXT, display of basic icon, not self explanatory, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|----------|
| 13 | SIM → ME | PROACTIVE COMMAND PENDING: DISPLAY TEXT 5.3.1 | |

| | | | | |
|----|-----------|--|------------------------------------|--|
| 14 | ME → SIM | FETCH | | |
| 15 | SIM → ME | PROACTIVE COMMAND : DISPLAY TEXT 5.3.1 | [BASIC-ICON, not self-explanatory] | |
| 16 | ME → USER | Display the BASIC-ICON And | | |
| 17 | USER → ME | Display "Basic Icon" Clear Message | | |
| 18 | ME → SIM | TERMINAL RESPONSE : DISPLAY TEXT 5.3.1A | [Command performed successfully] | |
| 19 | SIM → ME | PROACTIVE SIM SESSION ENDED | | |

PROACTIVE COMMAND : DISPLAY TEXT 5.3.1

Logically:

Command details

| | |
|--------------------|---|
| Command number: | 1 |
| Command type: | DISPLAY TEXT |
| Command qualifier: | normal priority, wait for user to clear message |

Device identities

| | |
|---------------------|---------|
| Source device: | SIM |
| Destination device: | Display |

Text String

| | |
|---------------------|----------------------|
| Data coding scheme: | unpacked, 8 bit data |
| Text: | "Basic Icon" |

Icon Identifier:

| | |
|------------------|---------------------------------|
| Icon qualifier: | icon is not self-explanatory |
| Icon Identifier: | record 1 in EF _(IMG) |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1A | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 81 | 02 | 8D |
| | 0B | 04 | 42 | 61 | 73 | 69 | 63 | 20 | 49 | 63 | 6F | 6E |
| | 9E | 02 | 01 | 01 | | | | | | | | |

TERMINAL RESPONSE : DISPLAY TEXT 5.3.1A

Logically:

Command details

| | |
|--------------------|---|
| Command number: | 1 |
| Command type: | DISPLAY TEXT |
| Command qualifier: | normal priority, wait for user to clear message |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|--------------------------------|
| General Result: | Command performed successfully |
|-----------------|--------------------------------|

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 5.3B (DISPLAY TEXT, display of basic icon, not self explanatory, requested icon could not be displayed)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 13 | SIM → ME | PROACTIVE COMMAND PENDING: DISPLAY TEXT 5.3.1 | |
| 14 | ME → SIM | FETCH | |
| 15 | SIM → ME | PROACTIVE COMMAND : DISPLAY TEXT 5.3.1 | [BASIC-ICON, not self-explanatory] |
| 16 | ME → USER | Display "Basic Icon" without the icon | |
| 17 | USER → ME | Clear Message | |
| 18 | ME → SIM | TERMINAL RESPONSE : DISPLAY TEXT 5.3.1B | [Command performed successfully, but requested icon could not be displayed] |
| 19 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

TERMINAL RESPONSE : DISPLAY TEXT 5.3.1B

Logically:

Command details

| | |
|--------------------|---|
| Command number: | 1 |
| Command type: | DISPLAY TEXT |
| Command qualifier: | normal priority, wait for user to clear message |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|---|
| General Result: | Command performed successfully, but requested icon could not be displayed |
|-----------------|---|

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 82 | 81 | 83 | 01 | 04 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

27.22.4.1.5.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 1.

27.22.4.1.6 DISPLAY TEXT (UCS2 display supported)

27.22.4.1.6.1 Definition and applicability

See Section 3.2.2.

27.22.4.1.6.2 Conformance requirement

The ME shall support the DISPLAY TEXT command as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.1 (Display Text), clause 6.5.4 (Icon Identifier), clause 6.6.1 (Display Text), clause 6.8 (Terminal Response), clause 6.11, clause 12.6 (Commands details), clause 12.15 (Text String), clause 12.15.1/2/3 (Data Coding Scheme), clause 12.31 (Icon identifier).

The ME shall support the UCS2 alphabet for the coding of the Cyrillic alphabet, as defined in the following technical specification: ISO/IEC 10646 [17], “Universal Multiple Octet Coded Character Set (UCS)”.

27.22.4.1.6.3 Test Purpose

To verify that the ME displays the text contained in the DISPLAY TEXT proactive SIM command, and returns a successful result in the TERMINAL RESPONSE command send to the SIM.

27.22.4.1.6.4 Method of test

27.22.4.1.6.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.1.6.4.2 Procedure

Expected Sequence 6.1 (DISPLAY TEXT, UCS2 coded)

| Step | Direction | MESSAGE / Action | Comments |
|------|--------------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: DISPLAY TEXT 6.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : DISPLAY TEXT 6.1.1 | [Normal priority, wait for user to clear message, UCS2 coded] ["Hello" in russian] |
| 4 | ME → USER | Display " ЗДРАВСТВУЙТЕ " | |
| 5 | USER → ME | Clear message | |
| 6 | ME → SIM | TERMINAL RESPONSE : DISPLAY TEXT 6.1.1 | |

PROACTIVE COMMAND : DISPLAY TEXT 6.1.1

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | DISPLAY TEXT |
| Command qualifier: | normal priority, wait for user to clear message |
| Device identities | |
| Source device: | SIM |
| Destination device: | Display |
| Text String | |
| Data coding scheme: | UCS2 (16bit) |
| Text: | “ЗДРАВСТВУЙТЕ” |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 24 | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 81 | 02 | 8D |
| | 19 | 08 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 | 04 | 12 |
| | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 | 04 | 22 |
| | 04 | 15 | | | | | | | | | | |

TERMINAL RESPONSE : DISPLAY TEXT 6.1.1

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | DISPLAY TEXT |
| Command qualifier: | normal priority, wait for user to clear message |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

27.22.4.1.6.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 1.

27.22.4.2 GET INKEY

27.22.4.2.1 GET INKEY(normal)

27.22.4.2.1.1 Definition and applicability

See Section 3.2.2.

27.22.4.2.1.2 Conformance Requirement

The ME shall support the GET INKEY command as defined in the following technical specifications :

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.2 (Get Inkey), clause 6.6.2 (Get Inkey), clause 6.8 (Terminal Response), clause 6.11, clause 12.6 (Commands details), clause 12.15 (Text String), clause 12.15.1/2/3 (Data Coding Scheme).

27.22.4.2.1.3 Test Purpose

To verify that the ME displays the text contained in the GET INKEY proactive SIM command, and returns the single character entered in the TERMINAL RESPONSE command sent to the SIM.

27.22.4.2.1.4 Method of Test

27.22.4.2.1.4.1 Initial conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be set to a display other than the idle display.

27.22.4.2.1.4.2 Procedure

Expected Sequence 1.1 (GET INKEY, digits only for character, Unpacked 8 bit data for Text String, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INKEY 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INKEY 1.1.1 | [digits only, no help info available] |
| 4 | ME → USER | Display "Enter "+" " | |
| 5 | USER → ME | Enter the input "+" and completion | Text string coding in unpacked format |
| 6 | ME → SIM | TERMINAL RESPONSE : GET INKEY 1.1.1 | [command performed successfully] |

PROACTIVE COMMAND : GET INKEY 1.1.1

Logically:

Command details

| | |
|--------------------|--|
| Command number: | 1 |
| Command type: | GET INKEY |
| Command qualifier: | digits (0-9, *, # and +) only, no help information available |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Text string

| | |
|---------------------|----------------------|
| Data coding scheme: | unpacked, 8 bit data |
| Text: | "Enter "+" " |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 15 | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 0A | 04 | 45 | 6E | 74 | 65 | 72 | 20 | 22 | 2B | 22 | |

Terminal Response: GET INKEY 1.1.1

Logically:

| Command details | |
|---------------------|--|
| Command number: | 1 |
| Command type: | GET INKEY |
| Command qualifier: | digits (0-9, *, # and +) only, no help information available |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Text String | “_” |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 22 | 80 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 02 | 04 | 2B | | | | | | | | |

Expected Sequence 1.2 (GET INKEY, digits only for character set, SMS default Alphabet for Text String, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INKEY 1.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INKEY 1.2.1 | [digits only, no help info available] |
| 4 | ME → USER | Display “Enter “0”” | Text string coding in packed format |
| 5 | USER → ME | Enter the input “0” and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE : GET INKEY 1.2.1 | [command performed successfully] |

PROACTIVE COMMAND : GET INKEY 1.2.1

Logically:

Command details

| | |
|--------------------|--|
| Command number: | 1 |
| Command type: | GET INKEY |
| Command qualifier: | digits (0-9, *, # and +) only, no help information available |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Text string

| | |
|---------------------|----------------------|
| Data coding scheme: | SMS default alphabet |
| Text: | "Enter "0"" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 14 | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 09 | 00 | 45 | 37 | BD | 2C | 07 | 89 | 60 | 22 | | |

TERMINAL RESPONSE : GET INKEY 1.2.1

Logically:

Command details

| | |
|--------------------|--|
| Command number: | 1 |
| Command type: | GET INKEY |
| Command qualifier: | digits (0-9, *, # and +) only, no help information available |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|--------------------------------|
| General Result: | Command performed successfully |
| Text String | "0" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 02 | 04 | 00 | | | | | | | | |

Expected Sequence 1.3 (GET INKEY, backward move)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INKEY 1.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INKEY 1.3.1 | [digits only, no help information available] |
| 4 | ME → USER | Display "<GO-BACKWARDS>" | |
| 5 | USER → ME | Backwards move MMI action | Text string coding in unpacked format |
| 6 | ME → SIM | TERMINAL RESPONSE : GET INKEY 1.3.1 | [backward move in the proactive SIM session requested by the user] |

PROACTIVE COMMAND : GET INKEY 1.3.1

Logically:

Command details

| | |
|--------------------|--|
| Command number: | 1 |
| Command type: | GET INKEY |
| Command qualifier: | digits (0-9, *, # and +) only, no help information available |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Text string

| | |
|---------------------|----------------------|
| Data coding scheme: | unpacked, 8 bit data |
| Text: | "<GO-BACKWARDS>" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1A | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 0F | 04 | 3C | 47 | 4F | 2D | 42 | 41 | 43 | 4B | 57 | 41 |
| | 52 | 44 | 53 | 3E | | | | | | | | |

TERMINAL RESPONSE : GET INKEY 1.3.1

Logically:

Command details

| | |
|--------------------|--|
| Command number: | 1 |
| Command type: | GET INKEY |
| Command qualifier: | digits (0-9, *, # and +) only, no help information available |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|--|
| General Result: | backward move in the proactive SIM session requested by the user |
|-----------------|--|

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 11 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 1.4 (GET INKEY, abort)

| Step | Direction | MESSAGE / Action | Comments |
|------|--------------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INKEY 1.4.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INKEY 1.4.1 | [digits only,, no help information available] |
| 4 | ME → USER | Display "<ABORT>" | Text string coding in unpacked format |
| 5 | USER → ME | Terminate the Proactive SIM session MMI action | |
| 6 | ME → SIM | TERMINAL RESPONSE : GET INKEY 1.4.1 | [Proactive SIM session terminated by the user] |

PROACTIVE COMMAND : GET INKEY 1.4.1

Logically:

Command details

| | |
|--------------------|--|
| Command number: | 1 |
| Command type: | GET INKEY |
| Command qualifier: | digits (0-9, *, # and +) only, no help information available |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Text string

| | |
|---------------------|----------------------|
| Data coding scheme: | unpacked, 8 bit data |
| Text: | "<ABORT>" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 13 | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 08 | 04 | 3C | 41 | 41 | 4F | 52 | 54 | 3E | | | |

TERMINAL RESPONSE : GET INKEY 1.4.1

Logically:

Command details

| | |
|--------------------|--|
| Command number: | 1 |
| Command type: | GET INKEY |
| Command qualifier: | digits (0-9, *, # and +) only, no help information available |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|--|
| General Result: | Proactive SIM session terminated by the user |
|-----------------|--|

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 22 | 80 | 82 | 02 | 82 | 81 | 83 | 01 | 10 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 1.5 (GET INKEY, SMS default alphabet for character set, Unpacked 8 bit data for Text String, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INKEY 1.5.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INKEY 1.5.1 | [characters from SMS default alphabet, no help info available] |
| 4 | ME → USER | Display "Enter "q"" | Text string coding in unpacked format |
| 5 | USER → ME | Enter the input "q" and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE : GET INKEY 1.5.1 | [command performed successfully] |

PROACTIVE COMMAND : GET INKEY 1.5.1

Logically:

Command details

| | |
|--------------------|---|
| Command number: | 1 |
| Command type: | GET INKEY |
| Command qualifier: | SMS default alphabet, no help information available |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Text string

| | |
|---------------------|----------------------|
| Data coding scheme: | unpacked, 8 bit data |
| Text: | "Enter "q"" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 15 | 81 | 03 | 01 | 22 | 01 | 82 | 02 | 81 | 82 | 8D |
| | 0A | 04 | 45 | 6E | 74 | 65 | 72 | 20 | 22 | 71 | 22 | |

TERMINAL RESPONSE : GET INKEY 1.5.1

Logically:

Command details

| | |
|--------------------|---|
| Command number: | 1 |
| Command type: | GET INKEY |
| Command qualifier: | SMS default alphabet, no help information available |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|--------------------------------|
| General Result: | Command performed successfully |
| Text String | "q" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 22 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 02 | 04 | 71 | | | | | | | | |

Expected Sequence 1.6 (GET INKEY, Max length for the Text String, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INKEY 1.6.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INKEY 1.6.1 | [digits only, no help info available] |
| 4 | ME → USER | Display "Enter "x". This command instructs the ME to display text, and to expect the user to enter a single character. Any response entered by the user shall be passed t " | 160 characters Text string coding in unpacked format |
| 5 | USER → ME | Enter the input "x" and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE : GET INKEY 1.6.1 | [command performed successfully] |

PROACTIVE COMMAND : GET INKEY 1.6.1

Logically:

Command details

Command number: 1
 Command type: GET INKEY
 Command qualifier: SMS default alphabet, no help information available

Device identities

Source device: SIM
 Destination device: ME

Text string

Data coding scheme: unpacked, 8 bit data
 Text: "Enter "x". This command instructs the ME to display text, and to expect
the user to enter a single character. Any response entered by the user shall
be passed t"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 81 | AC | 81 | 03 | 01 | 22 | 01 | 82 | 02 | 81 | 82 |
| | 8D | 81 | A1 | 04 | 45 | 6E | 74 | 65 | 72 | 20 | 22 | 78 |
| | 22 | 2E | 20 | 54 | 68 | 69 | 73 | 20 | 63 | 6F | 6D | 6D |
| | 61 | 6E | 64 | 20 | 69 | 5E | 73 | 74 | 72 | 75 | 63 | 74 |
| | 73 | 20 | 74 | 68 | 65 | 20 | 4D | 45 | 20 | 74 | 6F | 20 |
| | 64 | 69 | 73 | 70 | 6C | 61 | 79 | 20 | 74 | 65 | 78 | 74 |
| | 2C | 20 | 61 | 6E | 64 | 20 | 74 | 6F | 20 | 65 | 78 | 70 |
| | 65 | 63 | 74 | 20 | 74 | 68 | 65 | 20 | 75 | 73 | 65 | 72 |
| | 20 | 74 | 6F | 20 | 65 | 6E | 74 | 65 | 72 | 20 | 61 | 20 |
| | 73 | 69 | 6E | 67 | 6C | 65 | 20 | 53 | 68 | 61 | 72 | 61 |
| | 63 | 74 | 65 | 72 | 2E | 20 | 41 | 6E | 79 | 20 | 72 | 65 |
| | 73 | 70 | 6F | 6E | 73 | 65 | 20 | 65 | 6E | 74 | 65 | 72 |
| | 65 | 64 | 20 | 62 | 79 | 20 | 74 | 68 | 65 | 20 | 75 | 73 |
| | 65 | 72 | 20 | 73 | 68 | 61 | 6C | 6C | 20 | 62 | 65 | 20 |
| | 70 | 61 | 73 | 73 | 65 | 64 | 20 | 74 | | | | |

TERMINAL RESPONSE : GET INKEY 1.6.1

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | GET INKEY |
| Command qualifier: | SMS default alphabet, no help information available |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Text String | “x” |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 22 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 02 | 04 | 78 | | | | | | | | |

27.22.4.2.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 1 to 6.

27.22.4.2.2 GET INKEY (No response from User)

27.22.4.2.2.1 Definition and applicability

See Section 3.2.2.

27.22.4.2.2.2 Conformance Requirement

The ME shall support the GET INKEY command as defined in the following technical specifications :

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.2 (Get Inkey), clause 6.6.2 (Get Inkey), clause 6.8 (Terminal Response), clause 6.11, clause 12.6 (Commands details), clause 12.15 (Text String), clause 12.15.1/2/3 (Data Coding Scheme).

27.22.4.2.2.3 Test Purpose

To verify that the ME displays the text contained in the GET INKEY proactive SIM command, and returns a “No response from user” result value in the TERMINAL RESPONSE command send to the SIM.

27.22.4.2.2.4 Method of Test

27.22.4.2.2.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default with the following exceptions.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

ME Manufacturers shall set the “no response from user” period of time.

The SIM simulator shall be set to that period of time.

27.22.4.2.2.4.2 Procedure

Expected Sequence 2.1 (GET INKEY, no response from the user)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INKEY 2.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INKEY 2.1.1 | [digits only, no help information available] |
| 4 | ME → USER | Display "<TIME-OUT>" | Text string coding in unpacked format |
| 5 | USER | Waiting and no completion | |
| 6 | ME → SIM | TERMINAL RESPONSE : GET INKEY 2.1.1 | [No response from user] within 5 seconds after the end of that defined period of time |
| 7 | USER | Check the delay of TERMINAL RESPONSEis reasonable or not | |

PROACTIVE COMMAND : GET INKEY 2.1.1

Logically:

Command details

Command number: 1
 Command type: GET INKEY
 Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: SIM
 Destination device: ME

Text string

Data coding scheme: unpacked, 8 bit data
 Text: "<TIME-OUT>"

Response length

Minimum length: 0
 Maximum length: 10

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 16 | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 0B | 04 | 3C | 54 | 49 | 4D | 45 | 2D | 4F | 55 | 54 | 3E |

TERMINAL RESPONSE : GET INKEY 2.1.1

Logically:

Command details

Command number: 1
 Command type: GET INKEY
 Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: No response from user

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 12 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

27.22.4.2.2.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 1.

27.22.4.2.3 GET INKEY (UCS2 format display)**27.22.4.2.3.1 Definition and applicability**

See Section 3.2.2.

27.22.4.2.3.2 Conformance Requirement

The ME shall support the GET INKEY command as defined in the following technical specifications :

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.2 (Get Inkey), clause 6.6.2 (Get Inkey), clause 6.8 (Terminal Response), clause 6.11, clause 12.6 (Commands details), clause 12.15 (Text String), clause 12.15.1/2/3 (Data Coding Scheme).

Additionnally, the ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in the following technical specifications: ISO/IEC 10646 [17], “Universal Multiple Octet Coded Character Set (UCS)”.

27.22.4.2.3.3 Test Purpose

To verify that the ME displays the text contained in the GET INKEY proactive SIM command, and returns the text string entered in the TERMINAL RESPONSE command sent to the SIM.

27.22.4.2.3.4 Method of Test**27.22.4.2.3.4.1 Initial Conditions**

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default with the following exceptions.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.2.3.4.2 Procedure

Expected Sequence 3.1 (GET INKEY, Text String coding in UCS2 Alphabet, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INKEY 3.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INKEY 3.1.1 | [Digits only, no help information available] |
| 4 | ME → USER | Display “ЗДРАВСТВУЙТЕ” | Text string “Hello” in Russian coding in 16 bits UCS2 alphabet format |
| 5 | USER → ME | Enter the input “+” and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE : GET INKEY 3.1.1 | [command performed successfully] |

PROACTIVE COMMAND : GET INKEY 3.1.1

Logically:

Command details

Command number: 1
 Command type: GET INKEY
 Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: SIM
 Destination device: ME

Text string

Data coding scheme: 16 bit data UCS2 alphabet format
 Text: “ЗДРАВСТВУЙТЕ”

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 24 | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 19 | 08 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 | 04 | 12 |
| | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 | 04 | 22 |
| | 04 | 15 | | | | | | | | | | |

TERMINAL RESPONSE : GET INKEY 3.1.1

Logically:

Command details

Command number: 1
 Command type: GET INKEY
 Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully
 Text String: “+”

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 02 | 04 | 2B | | | | | | | | |

Expected Sequence 3.2 (GET INKEY, max length for the Text String coding in UCS2 Alphabet, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INKEY 3.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INKEY 3.2.1 | [digits only, no help information available] |
| 4 | ME → USER | Display "ЗДРАВСТВУЙТЕЗДРАВСТВУ ЙТЕЗДРАВСТВУЙТЕЗДРАВС ТВУЙТЕЗДРАВСТВУЙТЕЗДРАВ СТВУЙ" | Text string length 70 characters, coding in 16 bits UCS2 alphabet format |
| 5 | USER → ME | Enter the input "+" and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE : GET INKEY 3.2.1 | [command performed successfully] |

PROACTIVE COMMAND : GET INKEY 3.2.1

Logically:

Command details

Command number: 1
 Command type: GET INKEY
 Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: SIM
 Destination device: ME

Text string

Data coding scheme: 16 bit data UCS2 alphabet format
 Text:
 "ЗДРАВСТВУЙТЕЗДРАВСТВУЙТЕ
 ЗДРАВСТВУЙТЕЗДРАВСТВУЙТЕ
 ЗДРАВСТВУЙТЕЗДРАВСТВУЙ"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 81 | 99 | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 81 | 82 |
| | 8D | 81 | 8D | 08 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 |
| | 04 | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 |
| | 04 | 22 | 04 | 15 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 |
| | 04 | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 |
| | 04 | 22 | 04 | 15 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 |
| | 04 | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 |
| | 04 | 22 | 04 | 15 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 |
| | 04 | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 |
| | 04 | 22 | 04 | 15 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 |
| | 04 | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 |
| | 04 | 22 | 04 | 15 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 |
| | 04 | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 |

TERMINAL RESPONSE : GET INKEY 3.2.1

Logically:

| | |
|---------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | GET INKEY |
| Command qualifier: | digits (0-9, *, # and +) only, no help information available |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Text String: | “+” |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 02 | 04 | 2B | | | | | | | | |

27.22.4.2.3.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 1 to 2.

27.22.4.2.4 GET INKEY (UCS2 format of entry)

27.22.4.2.4.1 Definition and applicability

See Section 3.2.2.

27.22.4.2.4.2 Conformance Requirement

The ME shall support the GET INKEY command as defined in the following technical specifications :

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.2 (Get Inkey), clause 6.6.2 (Get Inkey), clause 6.8 (Terminal Response), clause 6.11, clause 12.6 (Commands details), clause 12.15 (Text String), clause 12.15.1/2/3 (Data Coding Scheme).

Additionnally, the ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in the following technical specifications: ISO/IEC 10646 [17], “Universal Multiple Octet Coded Character Set (UCS)”.

27.22.4.2.4.3 Test Purpose

To verify that the ME displays the text contained in the GET INKEY proactive SIM command, and returns the text string entered in the TERMINAL RESPONSE command sent to the SIM.

27.22.4.2.4.4 Method of Test

27.22.4.2.4.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default with the following exceptions.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.2.4.4.2 Procedure

Expected Sequence 4.1 (GET INKEY, characters from UCS2 alphabet, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INKEY 4.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INKEY 4.1.1 | [characters from UCS2 alphabet, no help information available] |
| 4 | ME → USER | Display "Enter" | Text string coding in unpacked format |
| 5 | USER → ME | Enter the input "Д" and completion | Russian character, coding in UCS2 format |
| 6 | ME → SIM | TERMINAL RESPONSE : GET INKEY 4.1.1 | [command performed successfully] |

PROACTIVE COMMAND : GET INKEY 4.1.1

Logically:

Command details

| | |
|--------------------|--|
| Command number: | 1 |
| Command type: | GET INKEY |
| Command qualifier: | characters from UCS2 alphabet, no help information available |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Text string

| | |
|---------------------|----------------------|
| Data coding scheme: | unpacked, 8 bit data |
| Text: | "Enter" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 11 | 81 | 03 | 01 | 22 | 03 | 82 | 02 | 81 | 82 | 8D |
| | 06 | 04 | 45 | 6E | 74 | 65 | 72 | | | | | |

TERMINAL RESPONSE : GET INKEY 4.1.1

Logically:

Command details

| | |
|--------------------|--|
| Command number: | 1 |
| Command type: | GET INKEY |
| Command qualifier: | characters from UCS2 alphabet, no help information available |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|--------------------------------|
| General Result: | Command performed successfully |
| Text String: | "Д" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 22 | 03 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 03 | 08 | 04 | 14 | | | | | | | |

27.22.4.2.4.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 1.

27.22.4.2.5 GET INKEY ("Yes/No" Response)

27.22.4.2.5.1 Definition and applicability

See Section 3.2.2.

27.22.4.2.5.2 Conformance Requirement

The ME shall support the GET INKEY command as defined in the following technical specifications :

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.2 (Get Inkey), clause 6.6.2 (Get Inkey), clause 6.8 (Terminal Response), clause 6.11, clause 12.6 (Commands details), clause 12.15 (Text String), clause 12.15.1/2/3 (Data Coding Scheme).

27.22.4.2.5.3 Test Purpose

To verify that the ME displays the text contained in the GET INKEY proactive SIM command, and returns the text string entered in the TERMINAL RESPONSE command sent to the SIM.

27.22.4.2.5.4 Method of Test

27.22.4.2.5.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default with the following exceptions.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.2.5.4.2 Procedure

Expected Sequence 5.1(GET INKEY, "Yes/No" Response for the input, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INKEY 5.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INKEY 5.1.1 | [“Yes/No” Response, no help information available] |
| 4 | ME → USER | Display “Enter” | Text string coding in unpacked format |
| 5 | USER → ME | Choice “Yes” and Completion | |
| 6 | ME → SIM | TERMINAL RESPONSE : GET INKEY 5.1.1 | [command performed successfully] Check if it is in accordance with the user choice (value ‘01’ in the Text String data object) |
| 7 | SIM → ME | PROACTIVE COMMAND PENDING: GET INKEY 5.1.2 | |
| 8 | ME → SIM | FETCH | |
| 9 | SIM → ME | PROACTIVE COMMAND : GET INKEY 5.1.2 | [“Yes/No” Response, no help information available] |
| 10 | ME → USER | Display “Enter Yes/No.” | Text string coding in unpacked format |
| 11 | USER → ME | Choice “No” and Completion | |
| 12 | ME → SIM | TERMINAL RESPONSE : GET INKEY 5.1.2 | [command performed successfully] Check if it is in accordance with the user choice (value ‘00’ in the Text String data object) |

PROACTIVE COMMAND : GET INKEY 5.1.1

Logically:

Command details

| | |
|--------------------|--|
| Command number: | 1 |
| Command type: | GET INKEY |
| Command qualifier: | “Yes/No” Response, no help information available |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Text string

| | |
|---------------------|----------------------|
| Data coding scheme: | unpacked, 8 bit data |
| Text: | “Enter” |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 11 | 81 | 03 | 01 | 22 | 04 | 82 | 02 | 81 | 82 | 8D |
| | 06 | 04 | 45 | 6E | 74 | 65 | 72 | | | | | |

TERMINAL RESPONSE : GET INKEY 5.1.1

Logically:

| | |
|---------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | GET INKEY |
| Command qualifier: | “Yes/No” Response, no help information available |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Text String: | “1” |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 22 | 04 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 02 | 04 | 01 | | | | | | | | |

PROACTIVE COMMAND : GET INKEY 5.1.2 : same as 5.1.1

TERMINAL RESPONSE : GET INKEY 5.1.2

Logically:

| | |
|---------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | GET INKEY |
| Command qualifier: | “Yes/No” Response, no help information available |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Text String: | “0” |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 22 | 04 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 02 | 04 | 00 | | | | | | | | |

27.22.4.2.5.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 1.

27.22.4.2.6 GET INKEY (display of Icon)

27.22.4.2.6.1 Definition and applicability

See section 3.2.2.

27.22.4.2.6.2 Conformance Requirement

The ME shall support the GET INKEY command as defined in the following technical specifications :

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.2 (Get Inkey), clause 6.5.4 (Icon Identifier), clause 6.6.2 (Get Inkey), clause 6.8 (Terminal Response), clause 6.11, clause 12.6 (Commands details), clause 12.15 (Text String), clause 12.15.1/2/3 (Data Coding Scheme) , clause 12.31 (Icon identifier).

27.22.4.2.6.3 Test Purpose

To verify that the ME displays the Icon contained in the GET INKEY proactive SIM command, and returns the text string entered in the TERMINAL RESPONSE command sent to the SIM.

27.22.4.2.6.4 Method of Test

27.22.4.2.6.4.1 Initial Conditions

See Annex C

27.22.4.2.6.4.2 Procedure

Expected Sequence 6.1A (GET INKEY, Basic icon, self-explanatory, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INKEY 6.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INKEY 6.1.1 | [BASIC-ICON self-explanatory for the Text string] |
| 4 | ME → USER | Display the BASIC-ICON for the prompt | |
| 5 | USER → ME | Enter “+” and completion | Text string coding in unpacked format |
| 6 | ME → SIM | TERMINAL RESPONSE : GET INKEY 6.1.1A | Command performed successfully] |

PROACTIVE COMMAND : GET INKEY 6.1.1

Logically:

Command details

Command number: 1
 Command type: GET INKEY
 Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: SIM
 Destination device: ME

Text string

Data coding scheme: unpacked, 8 bit data
 Text: "<NO-ICON>"

Icon Identifier

Icon qualifier: self-explanatory
 Icon identifier: 1 (number of record in EF_{Img})

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 19 | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 0A | 04 | 3C | 4E | 4F | 2D | 49 | 43 | 4F | 4E | 3E | 1E |
| | 02 | 00 | 01 | | | | | | | | | |

TERMINAL RESPONSE : GET INKEY 6.1.1A

Logically:

| | |
|---------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | GET INKEY |
| Command qualifier: | digits (0-9, *, # and +) only, no help information available |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Text String | “+” |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 22 | 04 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 02 | 04 | 2B | | | | | | | | |

Expected Sequence 6.1B (GET INKEY, Basic icon, self-explanatory, requested icon could not be displayed

)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INKEY 6.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INKEY 6.1.1 | [BASIC-ICON self-explanatory for the Text string] |
| 4 | ME → USER | Display "<NO-ICON>" for the prompt without the icon | |
| 5 | USER → ME | Enter “+” and completion | Text string coding in unpacked format |
| 6 | ME → SIM | TERMINAL RESPONSE : GET INKEY 6.1.1B | [Command performed successfully, but requested icon could not be displayed] |

TERMINAL RESPONSE : GET INKEY 6.1.1B

Logically:

| | |
|---------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | GET INKEY |
| Command qualifier: | digits (0-9, *, # and +) only, no help information available |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully but requested icon could not be displayed |
| Text String: | “+” |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 04 |
| | 8D | 02 | 04 | 2B | | | | | | | | |

Expected Sequence 6.2A (GET INKEY, Basic icon, non self-explanatory, successful)

| Step | Direction | MESSAGE / Action | Comments |
|-------------|------------------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INKEY 6.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INKEY 6.2.1 | [BASIC-ICON non self-explanatory for the Text string] |
| 4 | ME → USER | Display "<BASIC-ICON>" and Display the BASIC-ICON for the prompt | Text string coding in unpacked format |
| 5 | USER → ME | Enter the input "+" and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE : GET INKEY 6.2.1A | [Command performed successfully] |

PROACTIVE COMMAND : GET INKEY 6.2.1

Logically:

Command details

| | |
|--------------------|--|
| Command number: | 1 |
| Command type: | GET INKEY |
| Command qualifier: | digits (0-9, *, # and +) only, no help information available |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Text string

| | |
|---------------------|----------------------|
| Data coding scheme: | unpacked, 8 bit data |
| Text: | "<BASIC-ICON>" |

Icon Identifier

| | |
|------------------|--|
| Icon qualifier: | not self-explanatory |
| Icon identifier: | 1 (number of record in EF _{Img}) |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1C | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 0D | 04 | 3C | 42 | 41 | 53 | 49 | 43 | 2D | 49 | 43 | 4F |
| | 4E | 3E | 1E | 02 | 01 | 01 | | | | | | |

TERMINAL RESPONSE : GET INKEY 6.2.1A

Logically:

| | |
|---------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | GET INKEY |
| Command qualifier: | digits (0-9, *, # and +) only, no help information available |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Text String: | “+” |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 02 | 04 | 2B | | | | | | | | |

Expected Sequence 6.2B (GET INKEY, Basic icon, non self-explanatory, requested icon could not be displayed

)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INKEY 6.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INKEY 6.2.1 | [BASIC-ICON non self-explanatory for the Text string] |
| 4 | ME → USER | Display “<BASIC-ICON>” for the prompt without the icon | Text string coding in unpacked format |
| 5 | USER → ME | Enter the input “+” and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE : GET INKEY 6.2.1B | [Command performed successfully, but requested icon could not be displayed] |

TERMINAL RESPONSE : GET INKEY 6.2.1B

Logically:

| | |
|---------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | GET INKEY |
| Command qualifier: | digits (0-9, *, # and +) only, no help information available |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully but requested icon could not be displayed |
| Text String: | “+” |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 04 |
| | 8D | 02 | 04 | 2B | | | | | | | | |

Expected Sequence 6.3A (GET INKEY, Colour icon, self-explanatory, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INKEY 6.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INKEY 6.3.1 | [COLOUR-ICON self-explanatory for the Text string] |
| 4 | ME → USER | Display the COLOUR-ICON for the prompt | Text string coding in unpacked format |
| 5 | USER → ME | Enter the input "+" and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE : GET INKEY 6.3.1A | [Command performed successfully] |

PROACTIVE COMMAND : GET INKEY 6.3.1

Logically:

Command details

| | |
|--------------------|--|
| Command number: | 1 |
| Command type: | GET INKEY |
| Command qualifier: | digits (0-9, *, # and +) only, no help information available |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Text string

| | |
|---------------------|----------------------|
| Data coding scheme: | unpacked, 8 bit data |
| Text: | "<NO-ICON>" |

Icon Identifier

| | |
|------------------|--|
| Icon qualifier: | self-explanatory |
| Icon identifier: | 2 (number of record in EF _{Img}) |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1D | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 0A | 04 | 3C | 4E | 4F | 2D | 49 | 43 | 4F | 4E | 3E | 1E |
| | 02 | 00 | 02 | | | | | | | | | |

TERMINAL RESPONSE : GET INKEY 6.3.1A

Logically:

| | |
|---------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | GET INKEY |
| Command qualifier: | digits (0-9, *, # and +) only, no help information available |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Text String: | “+” |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 02 | 04 | 2B | | | | | | | | |

Expected Sequence 6.3B (GET INKEY, Colour icon, self-explanatory, requested icon could not be displayed)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INKEY 6.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INKEY 6.3.1 | [COLOUR-ICON self-explanatory for the Text string] |
| 4 | ME → USER | Display "<NO-ICON>" for the prompt without the icon | Text string coding in unpacked format |
| 5 | USER → ME | Enter the input “+” and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE : GET INKEY 6.3.1B | [Command performed successfully, but requested icon could not be displayed] |

TERMINAL RESPONSE : GET INKEY 6.3.1B

Logically:

| | |
|---------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | GET INKEY |
| Command qualifier: | digits (0-9, *, # and +) only, no help information available |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully but requested icon could not be displayed |
| Text String: | “+” |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 04 |
| | 8D | 02 | 04 | 2B | | | | | | | | |

Expected Sequence 6.4A (GET INKEY, Colour icon, non self-explanatory, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INKEY 6.4.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INKEY 6.4.1 | [COLOUR-ICON non self-explanatory for the Text string] |
| 4 | ME → USER | Display "<COLOUR-ICON>" and Display the COLOUR-ICON for the prompt | |
| 5 | USER → ME | Enter the input "+" and completion | Text string coding in unpacked format |
| 6 | ME → SIM | TERMINAL RESPONSE : GET INKEY 6.4.1A | [Command performed successfully] |

PROACTIVE COMMAND : GET INKEY 6.4.1

Logically:

Command details

| | |
|--------------------|--|
| Command number: | 1 |
| Command type: | GET INKEY |
| Command qualifier: | digits (0-9, *, # and +) only, no help information available |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Text string

| | |
|---------------------|----------------------|
| Data coding scheme: | unpacked, 8 bit data |
| Text: | "<COLOUR-ICON>" |

Icon Identifier

| | |
|------------------|--|
| Icon qualifier: | not self-explanatory |
| Icon identifier: | 2 (number of record in EF _{Img}) |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1D | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 0F | 04 | 3C | 43 | 4F | 4C | 4F | 55 | 52 | 2D | 49 | 43 |
| | 4F | 4E | 3E | 1E | 02 | 01 | 02 | | | | | |

TERMINAL RESPONSE : GET INKEY 6.4.1A

Logically:

Command details

| | |
|--------------------|--|
| Command number: | 1 |
| Command type: | GET INKEY |
| Command qualifier: | digits (0-9, *, # and +) only, no help information available |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|--------------------------------|
| General Result: | Command performed successfully |
| Text String: | "+" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 02 | 04 | 2B | | | | | | | | |

Expected Sequence 6.4B (GET INKEY, Colour icon, non self-explanatory, requested icon could not be displayed)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INKEY 6.4.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INKEY 6.4.1 | [COLOUR-ICON non self-explanatory for the Text string] |
| 4 | ME → USER | Display "<COLOUR-ICON>" for the prompt without the icon | |
| 5 | USER → ME | Enter the input "+" and completion | Text string coding in unpacked format |
| 6 | ME → SIM | TERMINAL RESPONSE : GET INKEY 6.4.1B | [Command performed successfully, but requested icon could not be displayed] |

TERMINAL RESPONSE : GET INKEY 6.4.1B

Logically:

Command details

| | |
|--------------------|--|
| Command number: | 1 |
| Command type: | GET INKEY |
| Command qualifier: | digits (0-9, *, # and +) only, no help information available |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|--|
| General Result: | Command performed successfully but requested icon could not be displayed |
| Text String: | "+" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 04 |
| | 8D | 02 | 04 | 2B | | | | | | | | |

27.22.4.2.6.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 1 to 4.

27.22.4.2.7 GET INKEY (Help Information)

27.22.4.2.7.1 Definition and applicability

See Section 3.2.2.

27.22.4.2.7.2 Conformance Requirement

The ME shall support the GET INKEY command as defined in the following technical specifications :

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.2 (Get Inkey), clause 6.5.4 (Icon Identifier), clause 6.6.2 (Get Inkey), clause 6.8 (Terminal Response), clause 6.11, clause 12.6 (Commands details), clause 12.15 (Text String), clause 12.15.1/2/3 (Data Coding Scheme) , clause 12.31 (Icon identifier).

27.22.4.2.7.3 Test Purpose

To verify that the ME displays the text contained in the GET INKEY proactive SIM command, and returns the text string entered in the TERMINAL RESPONSE command sent to the SIM.

27.22.4.2.7.4 Method of Test

27.22.4.2.7.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default with the following exceptions.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.2.7.4.2 Procedure

Expected Sequence 7.1 (GET INKEY, help information available)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INKEY 7.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INKEY 7.1.1 | [digits only, help information available] |
| 4 | ME → USER | Display “Enter “+”” | |
| 5 | USER → ME | Press “help” key | |
| 6 | ME → SIM | TERMINAL RESPONSE : GET INKEY 7.1.1 | [help info required] |
| 7 | ME → SIM | FETCH | |
| 8 | SIM → ME | PROACTIVE COMMAND : DISPLAY TEXT (help info) | |
| 9 | ME → SIM | TERMINAL RESPONSE : DISPLAY TEXT (help info) | |
| 10 | ME → SIM | FETCH | |
| 11 | SIM → ME | PROACTIVE COMMAND : GET INKEY 7.1.2 | [digits only, help information available] |
| 12 | ME → USER | Display “Enter “+”” | |
| 13 | USER → ME | Enter the input “+” and completion | Repetition of get inkey |
| 14 | ME → SIM | TERMINAL RESPONSE : GET INKEY 7.1.2 | [Command performed successfully] |

PROACTIVE COMMAND : GET INKEY 7.1.1

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | GET INKEY |
| Command qualifier: | digits (0-9, *, # and +) only, help information available |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| Text string | |
| Data coding scheme: | unpacked, 8 bit data |
| Text: | "Enter "+" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 15 | 81 | 03 | 01 | 22 | 80 | 82 | 02 | 81 | 82 | 8D |
| | 0A | 04 | 45 | 6E | 74 | 65 | 72 | 20 | 22 | 2B | 22 | |

TERMINAL RESPONSE : GET INKEY 7.1.1

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | GET INKEY |
| Command qualifier: | digits (0-9, *, # and +) only, help information available |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Help information required by the user |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 22 | 80 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

PROACTIVE COMMAND : GET INKEY 7.1.2

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | GET INKEY |
| Command qualifier: | digits (0-9, *, # and +) only, help information available |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| Text string | |
| Data coding scheme: | unpacked, 8 bit data |
| Text: | "Enter "+" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 15 | 81 | 03 | 01 | 22 | 80 | 82 | 02 | 81 | 82 | 8D |
| | 0A | 04 | 45 | 6E | 74 | 65 | 72 | 20 | 22 | 2B | 22 | |

TERMINAL RESPONSE : GET INKEY 7.1.2

Logically:

| Command details | |
|---------------------|---|
| Command number: | 1 |
| Command type: | GET INKEY |
| Command qualifier: | digits (0-9, *, # and +) only, help information available |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Text String: | “+” |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 22 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 04 |
| | 8D | 02 | 04 | 2B | | | | | | | | |

27.22.4.2.7.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 1.

27.22.4.3. GET INPUT

27.22.4.3.1 GET INPUT (normal)

27.22.4.3.1.1 Definition and applicability

See Section 3.2.2.

27.22.4.3.1.2 Conformance Requirement

The ME shall support the GET INPUT command as defined in the following technical specifications :

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.3 (Get Input), clause 6.6.3 (Get Input), clause 6.8 (Terminal Response), clause 6.11, clause 12.6 (Commands details), clause 12.15 (Text String), clause 12.15.1/2/3 (Data Coding Scheme), clause 12.13 (Default text).

27.22.4.3.1.3 Test Purpose

To verify that the ME displays the text contained in the GET INPUT proactive SIM command, and returns the text string entered in the TERMINAL RESPONSE command sent to the SIM.

27.22.4.3.1.4 Method of Test

27.22.4.3.1.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.3.1.4.2 Procedure

Expected Sequence 1.1 (GET INPUT, digits only, SMS default alphabet, ME to echo text, ME supporting 8 bit data Message)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INPUT 1.1.1 | [digits only, SMS default alphabet, ME to echo text, packing not required, no help info available] |
| 4 | ME → USER | Display "Enter 12345" | Range of expected length is 5-5 Text string coding in unpacked format |
| 5 | USER → ME | Enter the input "12345" and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE : GET INPUT 1.1.1 | [command performed successfully] |

PROACTIVE COMMAND : GET INPUT 1.1.1

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | GET INPUT |
| Command qualifier: | digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| Text string | |
| Data coding scheme: | unpacked, 8 bit data |
| Text: | "Enter 12345" |
| Response length | |
| Minimum length: | 5 |
| Maximum length: | 5 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1B | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 0C | 04 | 45 | 6E | 74 | 65 | 72 | 20 | 31 | 32 | 33 | 34 |
| | 35 | 91 | 02 | 05 | 05 | | | | | | | |

TERMINAL RESPONSE : GET INPUT 1.1.1

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | GET INPUT |
| Command qualifier: | digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Text string | |
| Data coding scheme: | unpacked, 8 bit data |
| Text: | ”12345” |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 80 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 06 | 04 | 31 | 32 | 33 | 34 | 35 | | | | |

Expected Sequence 1.2 (GET INPUT, digits only, SMS default alphabet, ME to echo text, packing SMS Point-to-point required by ME)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 1.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INPUT 1.2.1 | [digits only, SMS default alphabet, ME to echo text, packing required, no help information available] |
| 4 | ME → USER | Display “ Enter 67*#+”” | Range of expected length is 5-5 |
| 5 | USER → ME | Enter the input “67*#+”” and completion | Text string coding in packed format |
| 6 | ME → SIM | TERMINAL RESPONSE : GET INPUT 1.2.1 | [command performed successfully] |

PROACTIVE COMMAND : GET INPUT 1.2.1

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | GET INPUT |
| Command qualifier: | digits (0-9, *, # and +) only, SMS default alphabet, input in packed SMS format, ME to echo text, no help information available |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| Text string | |
| Data coding scheme: | SMS default alphabet |
| Text: | ”Enter 67*#+”” |
| Response length | |
| Minimum length: | 5 |
| Maximum length: | 5 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1A | 81 | 03 | 01 | 23 | 08 | 82 | 02 | 81 | 82 | 8D |
| | 0B | 00 | 45 | 37 | BD | 2C | 07 | D9 | 6E | AA | D1 | 0A |
| | 91 | 02 | 05 | 05 | | | | | | | | |

TERMINAL RESPONSE : GET INPUT 1.2.1

Logically:

| | | | |
|---------------------|---|-------------------|----------|
| Command details | | | |
| Command number: | 1 | | |
| Command type: | GET INPUT | | |
| Command qualifier: | digits (0-9, *, # and +) only, SMS default alphabet, input in packed SMS format, ME to echo text, no help information available | | |
| Device identities | | | |
| Source device: | ME | | |
| Destination device: | SIM | | |
| Result | | | |
| General Result: | Command performed successfully | | |
| Text string | Data coding scheme: | packed SMS format | Text: |
| | | | “67*#+”” |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 08 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 08 | 00 | 36 | 37 | 2A | 23 | 2B | 22 | | | |

Expected Sequence 1.3 (GET INPUT, character set, SMS Default Alphabet, ME to echo text, ME supporting 8 bit data Message)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 1.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INPUT 1.3.1 | [character set, SMS default alphabet, ME to echo text, packing not required, no help information available] |
| 4 | ME → USER | Display “Enter AbCdE” | Range of expected length is 5-5 Text string coding in unpacked format |
| 5 | USER → ME | Enter the input “AbCdE” and completion | |
| 6 | ME | Echo “ AbCdE” | |
| 7 | ME → SIM | TERMINAL RESPONSE : GET INPUT 1.3.1 | [command performed successfully] |

PROACTIVE COMMAND : GET INPUT 1.3.1

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | GET INPUT |
| Command qualifier: | Character set, SMS default alphabet, input in unpacked format, ME to echo text, no help information available |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| Text string | |
| Data coding scheme: | unpacked, 8 bit data |
| Text: | "Enter AbCdE" |
| Response length | |
| Minimum length: | 5 |
| Maximum length: | 5 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1B | 81 | 03 | 01 | 23 | 01 | 82 | 02 | 81 | 82 | 8D |
| | 0C | 04 | 45 | 6E | 74 | 65 | 72 | 20 | 41 | 62 | 43 | 64 |
| | 45 | 91 | 02 | 05 | 05 | | | | | | | |

TERMINAL RESPONSE : GET INPUT 1.3.1

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | GET INPUT |
| Command qualifier: | Character set, SMS default alphabet, input in unpacked format, ME to echo text, no help information available |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Text string | |
| Data coding scheme: | unpacked, 8 bit data |
| Text: | "AbCdE" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 06 | 04 | 41 | 62 | 43 | 64 | 45 | | | | |

Expected Sequence 1.4 (GET INPUT, digits only, SMS default alphabet, ME to hide text, ME supporting 8 bit data Message)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 1.4.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INPUT 1.4.1 | [digits only, SMS default alphabet, ME to hide text, packing not required, no help information available] |
| 4 | ME → USER | Display "Password 1<SEND>2345678" | Range of expected length is 4-8 Text string coding in unpacked format |
| 5 | USER → ME | Enter the input "2345678" and completion | |
| 6 | ME | input not displayed | optionally indication of key entries such as by displaying "**" |
| 7 | ME → SIM | TERMINAL RESPONSE : GET INPUT 1.4.1 | [command performed successfully] |

PROACTIVE COMMAND : GET INPUT 1.4.1

Logically:

Command details

| | |
|--------------------|---|
| Command number: | 1 |
| Command type: | GET INPUT |
| Command qualifier: | digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to hide text, no help information available |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Text string

| | |
|---------------------|---------------------------|
| Data coding scheme: | unpacked, 8 bit data |
| Text: | "Password 1<SEND>2345678" |

Response length

| | |
|-----------------|---|
| Minimum length: | 4 |
| Maximum length: | 8 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 27 | 81 | 03 | 01 | 23 | 04 | 82 | 02 | 81 | 82 | 8D |
| | 18 | 04 | 50 | 61 | 73 | 73 | 77 | 6F | 72 | 64 | 20 | 31 |
| | 3C | 53 | 45 | 4E | 44 | 3E | 32 | 33 | 34 | 35 | 36 | 37 |
| | 38 | 91 | 02 | 04 | 08 | | | | | | | |

TERMINAL RESPONSE : GET INPUT 1.4.1

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | GET INPUT |
| Command qualifier: | digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to hide text, no help information available |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Text string | |
| Data coding scheme: | unpacked, 8 bit data |
| Text: | “2345678” |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 04 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 08 | 04 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | | |

Expected Sequence 1.5 (GET INPUT, digits only, SMS default alphabet, ME to echo text, ME supporting 8 bit data Message)

| Step | Direction | MESSAGE / Action | Comments |
|------|------------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 1.5.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INPUT 1.5.1 | [digits only, SMS default alphabet, ME to echo text, packing not required, no help information available] |
| 4 | ME → USER | Display “Enter 1..9,0..9,0(1)” | Range of expected length is 1-20 Text string coding in unpacked format |
| 5 | USER → ME | Completion without input | |
| 6 | MMI ->USER | Display “invalid length” | |
| 7 | USER ->ME | Enter “12345678901234567890” and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE : GET INPUT 1.5.1 | [command performed successfully] |

PROACTIVE COMMAND : GET INPUT 1.5.1

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | GET INPUT |
| Command qualifier: | digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| Text string | |
| Data coding scheme: | unpacked, 8 bit data |
| Text: | ” Enter 1..9,0..9,0(1)” |
| Response length | |
| Minimum length: | 1 |
| Maximum length: | 20 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 24 | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 15 | 04 | 45 | 6E | 74 | 65 | 72 | 20 | 31 | 2E | 2E | 39 |
| | 2C | 30 | 2E | 2E | 39 | 2C | 30 | 28 | 31 | 29 | 91 | 02 |
| | 01 | 14 | | | | | | | | | | |

TERMINAL RESPONSE : GET INPUT 1.5.1

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | GET INPUT |
| Command qualifier: | digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Text string | |
| Data coding scheme: | unpacked, 8 bit data |
| Text: | “12345678901234567890” |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 15 | 04 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 |
| | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 30 | |

Expected Sequence 1.6 (GET INPUT, backwards move,)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|----------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 1.6.1 | |

| | | | |
|---|-----------|--|---|
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INPUT 1.6.1 | [digits only, SMS default alphabet, ME to echo text, packing not required, no help information available] |
| 4 | ME → USER | Display “<GO-BACKWARDS>” | Range of expected length is 0-8 Text string coding in unpacked format |
| 5 | USER → ME | Backwards move MMI action | |
| 6 | ME → SIM | TERMINAL RESPONSE : GET INPUT 1.6.1 | [backward move in the proactive SIM session requested by the user] |

PROACTIVE COMMAND : GET INPUT 1.6.1

Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available

Device identities

Source device: SIM

Destination device: ME

Text string

Data coding scheme: unpacked, 8 bit data

Text: "<GO-BACKWARDS>"

Response length

Minimum length: 0

Maximum length: 8

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1E | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 0F | 04 | 3C | 47 | 4F | 2D | 42 | 41 | 43 | 4B | 57 | 41 |
| | 52 | 44 | 53 | 3E | 91 | 02 | 00 | 08 | | | | |

TERMINAL RESPONSE : GET INPUT 1.6.1

Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available

Device identities

Source device: ME

Destination device: SIM

Result

General Result: backward move in the proactive SIM session requested by the user

Coding:

BER-TLV: 81 03 01 23 00 82 02 82 81 83 01 11

Expected Sequence 1.7 (GET INPUT, abort)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 1.7.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INPUT 1.7.1 | [digits only, SMS default alphabet, ME to echo text, packing not required, no help information available] |
| 4 | ME → USER | Display "<ABORT>" | Range if expected length is 0-8 Text string coding in unpacked format |
| 5 | USER → ME | Terminate the Proactive SIM session MMI action | |
| 6 | ME → SIM | TERMINAL RESPONSE : GET INPUT 1.7.1 | [Proactive SIM session terminated by the user] |

PROACTIVE COMMAND : GET INPUT 1.7.1

Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available

Device identities

Source device: SIM

Destination device: ME

Text string

Data coding scheme: unpacked, 8 bit data

Text: "<ABORT>"

Response length

Minimum length: 0

Maximum length: 8

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 17 | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 08 | 04 | 3C | 41 | 42 | 4F | 52 | 54 | 3E | 91 | 02 | 00 |
| | 08 | | | | | | | | | | | |

TERMINAL RESPONSE : GET INPUT 1.7.1

Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Proactive SIM session terminated by the user

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 10 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 1.8 (GET INPUT, digits only, SMS default alphabet, ME to echo text, ME supporting 8 bit data Message)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|----------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 1.8.1 | |
| 2 | ME → SIM | FETCH | |

| | | | | |
|---|-----------|---|---|--|
| 3 | SIM → ME | PROACTIVE COMMAND : GET INPUT 1.8.1 | [digits only, SMS default alphabet, ME to echo text, packing not required, no help information available] | |
| 4 | ME → USER | Display "***111111111###***22222 22222###***333333333### ***4444444444###***55555 55555###***6666666666### ***7777777777###***88888 88888###***9999999999### ***0000000000###" | Range of length expected is 160-160 Text string coding in unpacked format | |
| 5 | USER → ME | Enter the input "***111111111###***22222 22222###***333333333### ***4444444444###***55555 55555###***6666666666### ***7777777777###***88888 88888###***9999999999### ***0000000000###" and completion | | |
| 6 | ME → SIM | TERMINAL RESPONSE : GET INPUT 1.8.1 | [command performed successfully] | |

PROACTIVE COMMAND : GET INPUT 1.8.1

Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available

Device identities

Source device: SIM

Destination device: ME

Text string

Data coding scheme: unpacked, 8 bit data

Text:

"***111111111###***222222222###***333333333###***444444444###***555555555###***666666666
6###***7777777777###***8888888888###***9999999999###***0000000000###"

Response length

Minimum length: 160

Maximum length: 160

Coding:

BER-TLV: D0 81 B1 81 03 01 23 00 82 02 81 82

| | | | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|----|----|----|
| 8D | 81 | A1 | 04 | 2A | 2A | 2A | 31 | 31 | 31 | 31 | 31 |
| 31 | 31 | 31 | 31 | 31 | 23 | 23 | 23 | 2A | 2A | 2A | 32 |
| 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 23 | 23 | 23 |
| 2A | 2A | 2A | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 |
| 33 | 23 | 23 | 23 | 2A | 2A | 2A | 34 | 34 | 34 | 34 | 34 |
| 34 | 34 | 34 | 34 | 34 | 23 | 23 | 23 | 2A | 2A | 2A | 35 |
| 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 23 | 23 | 23 |
| 2A | 2A | 2A | 36 | 36 | 36 | 36 | 36 | 36 | 36 | 36 | 36 |
| 36 | 23 | 23 | 23 | 2A | 2A | 2A | 37 | 37 | 37 | 37 | 37 |
| 37 | 37 | 37 | 37 | 37 | 23 | 23 | 23 | 2A | 2A | 2A | 38 |
| 38 | 38 | 38 | 38 | 38 | 38 | 38 | 38 | 38 | 23 | 23 | 23 |
| 2A | 2A | 2A | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 |
| 39 | 23 | 23 | 23 | 2A | 2A | 2A | 30 | 30 | 30 | 30 | 30 |
| 30 | 30 | 30 | 30 | 30 | 23 | 23 | 23 | 91 | 02 | A0 | A0 |

TERMINAL RESPONSE : GET INPUT 1.8.1

Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: unpacked, 8 bit data

Text: ****111111111##***222222222#****

333333333##***444444444##

555555555##6666666666##

777777777##8888888888##

999999999##000000000##"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 81 | A1 | 04 | 2A | 2A | 2A | 31 | 31 | 31 | 31 | 31 |
| | 31 | 31 | 31 | 31 | 31 | 23 | 23 | 23 | 2A | 2A | 2A | 32 |
| | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 23 | 23 | 23 |
| | 2A | 2A | 2A | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 |
| | 33 | 23 | 23 | 23 | 2A | 2A | 2A | 34 | 34 | 34 | 34 | 34 |
| | 34 | 34 | 34 | 34 | 34 | 23 | 23 | 23 | 2A | 2A | 2A | 35 |
| | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 23 | 23 | 23 |
| | 2A | 2A | 2A | 36 | 36 | 36 | 36 | 36 | 36 | 36 | 36 | 36 |
| | 36 | 23 | 23 | 23 | 2A | 2A | 2A | 37 | 37 | 37 | 37 | 37 |
| | 37 | 37 | 37 | 37 | 37 | 23 | 23 | 23 | 2A | 2A | 2A | 38 |
| | 38 | 38 | 38 | 38 | 38 | 38 | 38 | 38 | 38 | 23 | 23 | 23 |
| | 2A | 2A | 2A | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 |
| | 39 | 23 | 23 | 23 | 2A | 2A | 2A | 30 | 30 | 30 | 30 | 30 |
| | 30 | 30 | 30 | 30 | 30 | 23 | 23 | 23 | | | | |

Expected Sequence 1.9 (GET INPUT, digits only, SMS default alphabet, ME to echo text, ME supporting 8 bit data Message)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 1.9.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INPUT 1.9.1 | [digits only, SMS default alphabet, ME to echo text, packing not required, no help information available] |
| 4 | ME → USER | Display “<SEND>” | Range of expected length is 0-1 Text string coding in unpacked format |
| 5 | USER → ME | Completion | |
| 6 | ME → SIM | TERMINAL RESPONSE : GET INPUT 1.9.1 | [command performed successfully] |

PROACTIVE COMMAND : GET INPUT 1.9.1

Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available

Device identities

Source device: SIM

Destination device: ME

Text string

Data coding scheme: unpacked, 8 bit data

Text: "<SEND>"

Response length

Minimum length: 0

Maximum length: 1

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 16 | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 07 | 04 | 3C | 53 | 45 | 4E | 44 | 3E | 91 | 02 | 00 | 01 |

TERMINAL RESPONSE : GET INPUT 1.9.1

Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: unpacked, 8 bit data

Text: empty string

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 01 | 04 | | | | | | | | | |

Expected Sequence 1.10 (GET INPUT, null length for the text string, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 1.1.10 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INPUT 1.1.10 | [digits only, SMS default alphabet, ME to echo text, packing not required, no help info available] |
| 4 | ME → USER | Request for input | Range of expected length is 0-5 Null Text string |
| 5 | USER → ME | Enter the input “12345” and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE : GET INPUT 1.1.10 | [command performed successfully] |

PROACTIVE COMMAND : GET INPUT 1.1.10

Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available

Device identities

Source device: SIM

Destination device: ME

Text string

Text: length null (00).

Response length

Minimum length: 1

Maximum length: 5

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0F | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 00 | 91 | 02 | 01 | 05 | | | | | | | |

TERMINAL RESPONSE : GET INPUT 1.1.10

Logically:

Command details

Command number: 1

Command type: GET INPUT

Command qualifier: digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully

Text string

Data coding scheme: unpacked, 8 bit data

Text: "12345"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 80 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 06 | 04 | 31 | 32 | 33 | 34 | 35 | | | | |

27.22.4.3.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 9.

27.22.4.3.2 GET INPUT (No response from User)

27.22.4.3.2.1 Definition and applicability

See Section 3.2.2.

27.22.4.3.2.2 Conformance Requirement

The ME shall support the GET INPUT command as defined in the following technical specifications :

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.3 (Get Input), clause 6.6.3 (Get Input), clause 6.8 (Terminal Response), clause 6.11, clause 12.6 (Commands details), clause 12.15 (Text String), clause 12.15.1/2/3 (Data Coding Scheme), clause 12.13 (Default text).

27.22.4.3.2.3 Test Purpose

To verify that the ME displays the text contained in the GET INPUT proactive SIM command, and returns a “No response from user” result value in the TERMINAL RESPONSE command send to the SIM.

27.22.4.3.2.4 Method of Test

27.22.4.3.2.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default with the following exceptions.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

ME Manufacturers shall set the “no response from user” period of time.

The SIM simulator shall be set to that period of time.

27.22.4.3.2.4.2 Procedure

Expected Sequence 2.1 (GET INPUT, no response from the user)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 2.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INPUT 2.1 | [digits only, SMS default alphabet ME to echo text, packing not required, no help information available] |
| 4 | ME → USER | Display “<TIME-OUT>” | Range of expected length is 0-10 Text string coding in unpacked format |
| 5 | USER | Waiting and no completion | |
| 6 | ME → SIM | TERMINAL RESPONSE : GET INPUT 2.1.1 | [No response from user] within 5 seconds after the end of that defined period of time |

PROACTIVE COMMAND : GET INPUT 2.1.1

Logically:

Command details

| | |
|--------------------|---|
| Command number: | 1 |
| Command type: | GET INPUT |
| Command qualifier: | digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Text string

| | |
|---------------------|----------------------|
| Data coding scheme: | unpacked, 8 bit data |
| Text: | ”<TIME-OUT>” |

Response length

| | |
|-----------------|----|
| Minimum length: | 0 |
| Maximum length: | 10 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1A | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 0B | 04 | 3C | 54 | 49 | 4D | 45 | 2D | 4F | 55 | 54 | 3E |
| | 91 | 02 | 00 | 0A | | | | | | | | |

TERMINAL RESPONSE : GET INPUT 2.1.1

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | GET INPUT |
| Command qualifier: | digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | No response from user |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 12 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

27.22.4.3.2.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 1.

27.22.4.3.3 GET INPUT (UCS2 format display)

27.22.4.3.3.1 Definition and applicability

See Section 3.2.2.

27.22.4.3.3.2 Conformance Requirement

The ME shall support the GET INPUT command as defined in the following technical specifications :

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.3 (Get Input), clause 6.6.3 (Get Input), clause 6.8 (Terminal Response), clause 6.11, clause 12.6 (Commands details), clause 12.15 (Text String), clause 12.15.1/2/3 (Data Coding Scheme), clause 12.13 (Default text).

Additionally the ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in the following technical specifications: ISO/IEC 10646 [17], “Universal Multiple Octet Coded Character Set (UCS)”.

27.22.4.3.3.3 Test Purpose

To verify that the ME displays the text contained in the GET INPUT proactive SIM command, and returns the text string entered in the TERMINAL RESPONSE command sent to the SIM.

27.22.4.3.3.4 Method of Test

27.22.4.3.3.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default with the following exceptions.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.3.3.4.2 Procedure

Expected Sequence 3.1 (GET INPUT, text string coding in UCS2, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 3.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INPUT 3.1 | [digits only, SMS default alphabet, ME to echo text, packing not required, no help information available] |
| 4 | ME → USER | Display “ЗДРАВСТВУЙТЕ” | Range of expected length is 5-5 Text string “Hello” in Russian coding in 16 bits UCS2 alphabet format |
| 5 | USER → ME | Enter the input “HELLO” and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE : GET INPUT 3.1.1 | [command performed successfully] |

PROACTIVE COMMAND : GET INPUT 3.1.1

Logically:

Command details

| | |
|--------------------|---|
| Command number: | 1 |
| Command type: | GET INPUT |
| Command qualifier: | digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Text string

| | |
|---------------------|----------------------------------|
| Data coding scheme: | 16 bit data UCS2 alphabet format |
| Text: | “ЗДРАВСТВУЙТЕ” |

Response length

| | |
|-----------------|---|
| Minimum length: | 5 |
| Maximum length: | 5 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 28 | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 19 | 08 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 | 04 | 12 |
| | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 | 04 | 22 |
| | 04 | 15 | 91 | 02 | 05 | 05 | | | | | | |

TERMINAL RESPONSE : GET INPUT 3.1.1

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | GET INPUT |
| Command qualifier: | digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Text string | |
| Data coding scheme: | unpacked, 8 bit data |
| Text: | “HELLO” |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 06 | 04 | 48 | 45 | 4C | 4C | 4F | | | | |

Expected Sequence 3.2 (GET INPUT, max length for the text string coding in UCS2, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 3.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INPUT 3.2.1 | [digits only, SMS default alphabet, ME to echo text, packing not required, no help information available] |
| 4 | ME → USER | Display “ЗДРАВСТВУЙТЕ ЗДРАВСТВУЙТЕ ЗДРАВСТВУЙТЕ ЗДРАВСТВУЙТЕ ЗДРАВСТВУЙТЕ ЗДРАВСТВУЙ” | Range of expected length is 5-5 Text string length 70 characters, coding in 16 bits UCS2 alphabet format |
| 5 | USER → ME | Enter the input “Hello” and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE : GET INPUT 3.2.1 | [command performed successfully] |

PROACTIVE COMMAND : GET INPUT 3.2.1

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | GET INPUT |
| Command qualifier: | digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| Text string | |
| Data coding scheme: | 16 bit data UCS2 alphabet format |
| Text: | ”ЗДРАВСТВУЙТЕЗДРАВСТВУЙТЕ ЗДРАВСТВУЙТЕЗДРАВСТВУЙТЕ ЗДРАВСТВУЙТЕЗДРАВСТВУЙ” |
| Response length | |
| Minimum length: | 5 |
| Maximum length: | 5 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 81 | 99 | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 81 | 82 |
| | 8D | 81 | 8D | 08 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 |
| | 04 | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 |
| | 04 | 22 | 04 | 15 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 |
| | 04 | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 |
| | 04 | 22 | 04 | 15 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 |
| | 04 | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 |
| | 04 | 22 | 04 | 15 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 |
| | 04 | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 |
| | 04 | 22 | 04 | 15 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 |
| | 04 | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 |
| | 04 | 22 | 04 | 15 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 |
| | 04 | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 |
| | 04 | 22 | 04 | 15 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 |
| | 04 | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 |
| | 04 | 22 | 04 | 15 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 |
| | 04 | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 |
| | 04 | 22 | 04 | 15 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 |
| | 04 | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 |

TERMINAL RESPONSE : GET INPUT 3.2.1

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | GET INPUT |
| Command qualifier: | digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Text string | |
| Data coding scheme: | unpacked, 8 bit data |
| Text: | “HELLO” |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 06 | 04 | 48 | 45 | 4C | 4C | 4F | | | | |

27.22.4.3.3.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 1 to 2.

27.22.4.3.4 GET INPUT (UCS2 format of entry)

27.22.4.3.4.1 Definition and applicability

See Section 3.2.2.

27.22.4.3.4.2 Conformance Requirement

The ME shall support the GET INPUT command as defined in the following technical specifications :

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.3 (Get Input), clause 6.6.3 (Get Input), clause 6.8 (Terminal Response), clause 6.11, clause 12.6 (Commands details), clause 12.15 (Text String), clause 12.15.1/2/3 (Data Coding Scheme), clause 12.13 (Default text).

Additionally the ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in the following technical specifications:

ISO/IEC 10646 [17], “Universal Multiple Octet Coded Character Set (UCS)”.

27.22.4.3.4.3 Test Purpose

To verify that the ME displays the text contained in the GET INPUT proactive SIM command, and returns the text string entered in the TERMINAL RESPONSE command sent to the SIM.

27.22.4.3.4.4 Method of Test

27.22.4.3.4.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default with the following exceptions.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.3.4.4.2 Procedure

Expected Sequence 4.1 (GET INPUT, character set from UCS2 alphabet, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 4.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INPUT 4.1.1 | [character set, UCS2 alphabet, ME to echo text, packing not required, no help information available] |
| 4 | ME → USER | Display "enter Hello" | Range of expected length is 5-5 Text string coding in unpacked format |
| 5 | USER → ME | Enter the input "ЗДРАВСТВУЙТЕ" and completion | "Hello" in Russian, coding in UCS2 format |
| 6 | ME → SIM | TERMINAL RESPONSE : GET INPUT 4.1.1 | [command performed successfully] |

PROACTIVE COMMAND : GET INPUT 4.1.1

Logically:

Command details

Command number: 1
 Command type: GET INPUT
 Command qualifier: character set, UCS2 alphabet, input in unpacked format, ME to echo text, no help information available

Device identities

Source device: SIM
 Destination device: ME

Text string

Data coding scheme: unpacked, 8 bit data
 Text: "Enter Hello"

Response length

Minimum length: 5
 Maximum length: 5

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1B | 81 | 03 | 01 | 23 | 03 | 82 | 02 | 81 | 82 | 8D |
| | 0C | 04 | 45 | 6E | 74 | 65 | 72 | 20 | 48 | 65 | 6C | |
| | 6F | 91 | 02 | 05 | 05 | | | | | | | |

TERMINAL RESPONSE : GET INPUT 4.1.1

Logically:

| Command details | |
|---------------------|--|
| Command number: | 1 |
| Command type: | GET INPUT |
| Command qualifier: | character set, UCS2 alphabet, input in unpacked format, ME to echo text, no help information available |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Text string | |
| Data coding scheme: | UCS2 |
| Text: | "ЗДРАВСТВУЙТЕ" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 03 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 19 | 08 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 | 04 |
| | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 | 04 |
| | 22 | 04 | | | 15 | | | | | | | |

Expected Sequence 4.2 (GET INPUT, character set from UCS2 alphabet, Max length for the input, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 4.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INPUT 4.2.1 | [character set, UCS2 alphabet, ME to echo text, packing not required, no help information available] |
| 4 | ME → USER | Display "Enter Hello:" | Range of expected length is no limit |
| 5 | USER → ME | Enter the input "ЗДРАВСТВУЙТЕ" ЗДРАВСТВУЙТЕ ЗДРАВСТВУЙТЕ ЗДРАВСТВУЙТЕ ЗДРАВСТВУЙТЕ and completion | Text string coding in unpacked format Input length 70 characters, coding in UCS2 format |
| 6 | ME → SIM | TERMINAL RESPONSE : GET INPUT 4.2.1 | [command performed successfully] |

PROACTIVE COMMAND : GET INPUT 4.2.1

Logically:

| | | | | | | | | | | | |
|---------------------|--|--|--|--|--|--|--|--|--|--|--|
| Command details | | | | | | | | | | | |
| Command number: | | | | | | | | | | | 1 |
| Command type: | | | | | | | | | | | GET INPUT |
| Command qualifier: | | | | | | | | | | | character set, UCS2 alphabet, input in unpacked format, ME to echo text, no help information available |
| Device identities | | | | | | | | | | | |
| Source device: | | | | | | | | | | | SIM |
| Destination device: | | | | | | | | | | | ME |
| Text string | | | | | | | | | | | |
| Data coding scheme: | | | | | | | | | | | unpacked, 8 bit data |
| Text: | | | | | | | | | | | "Enter Hello" |
| Response length | | | | | | | | | | | |
| Minimum length: | | | | | | | | | | | 5 |
| Maximum length: | | | | | | | | | | | 5 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1B | 81 | 03 | 01 | 23 | 03 | 82 | 02 | 81 | 82 | 8D |
| | 0C | 04 | 45 | 6E | 74 | 65 | 72 | 20 | 48 | 65 | 6C | 6C |
| | 6F | 91 | 02 | 05 | 05 | | | | | | | |

TERMINAL RESPONSE : GET INPUT 4.2.1

Logically:

| | | | | | | | | | | | |
|---------------------|--|--|--|--|--|--|--|--|--|--|--|
| Command details | | | | | | | | | | | |
| Command number: | | | | | | | | | | | 1 |
| Command type: | | | | | | | | | | | GET INPUT |
| Command qualifier: | | | | | | | | | | | character set, UCS2 alphabet, input in unpacked format, ME to echo text, no help information available |
| Device identities | | | | | | | | | | | |
| Source device: | | | | | | | | | | | ME |
| Destination device: | | | | | | | | | | | SIM |
| Result | | | | | | | | | | | |
| General Result: | | | | | | | | | | | Command performed successfully |
| Data coding scheme: | | | | | | | | | | | UCS2 |
| Text: | | | | | | | | | | | "ЗДРАВСТВУЙТЕ...ЗДРАВСТВУЙ" (70 chars) |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 03 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 81 | 8D | 08 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 |
| | 04 | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 |
| | 04 | 22 | 04 | 15 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 |
| | 04 | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 |
| | 04 | 22 | 04 | 15 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 |
| | 04 | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 |
| | 04 | 22 | 04 | 15 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 |
| | 04 | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 |
| | 04 | 22 | 04 | 15 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 |
| | 04 | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 |
| | 04 | 22 | 04 | 15 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 |
| | 04 | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 |
| | 04 | 22 | 04 | 15 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 |
| | 04 | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 |

27.22.4.3.4.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 1 to 2.

27.22.4.3.5 GET INPUT (default text)

27.22.4.3.5.1 Definition and applicability

See Section 3.2.2.

27.22.4.3.5.2 Conformance Requirement

The ME shall support the GET INPUT command as defined in the following technical specifications :

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.3 (Get Input), clause 6.6.3 (Get Input), clause 6.8 (Terminal Response), clause 6.11, clause 12.6 (Commands details), clause 12.15 (Text String), clause 12.15.1/2/3 (Data Coding Scheme), clause 12.13 (Default text).

27.22.4.3.5.3 Test Purpose

To verify that the ME displays the text contained in the GET INPUT proactive SIM command, and returns the text string entered in the TERMINAL RESPONSE command sent to the SIM.

27.22.4.3.5.4 Method of Test

27.22.4.3.5.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default with the following exceptions.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.3.5.4.2 Procedure

Expected Sequence 5.1(GET INPUT, default text for the input, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 5.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INPUT 5.1.1 | [digits only, SMS default alphabet, ME to echo text, packing not required, no help information available] |
| 4 | ME → USER | Display "Enter 12345" Display "12345" | Range of expected length is 5-5 Text string coding in unpacked format Default text coding in unpacked format |
| 5 | USER → ME | Completion | |
| 6 | ME → SIM | TERMINAL RESPONSE : GET INPUT 5.1.1 | [command performed successfully] |

PROACTIVE COMMAND : GET INPUT 5.1.1

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | GET INPUT |
| Command qualifier: | digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| Text string | |
| Data coding scheme: | unpacked, 8 bit data |
| Text: | "Enter 12345" |
| Response length | |
| Minimum length: | 5 |
| Maximum length: | 5 |
| Default Text | |
| Data coding scheme: | unpacked, 8 bit data |
| Text: | "12345" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 23 | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 0C | 04 | 45 | 6E | 74 | 65 | 72 | 20 | 31 | 32 | 33 | 34 |
| | 35 | 91 | 02 | 05 | 05 | 17 | 05 | 04 | 31 | 32 | 33 | 34 |
| | | 35 | | | | | | | | | | |

TERMINAL RESPONSE : GET INPUT 5.1.1

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | GET INPUT |
| Command qualifier: | digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Text string | |
| Data coding scheme: | unpacked, 8 bit data |
| Text: | "12345" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 06 | 04 | 31 | 32 | 33 | 34 | 35 | | | | |

Expected Sequence 5.2 (GET INPUT, default text for the input with max length, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 5.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INPUT 5.2.1 | [digits only, SMS default alphabet, ME to echo text, packing not required, no help information available] |
| 4 | ME → USER | Display "Enter." Display default text input: "****1111111111#####22222222 22#####3333333333#####4444 444444#####5555555555##### 6666666666#####7777777777# #####8888888888#####99999999 999#####0000000000#####" Completion | Range of expected length is 5-5 Text string coding in unpacked format Default text length 160 bytes coding in unpacked format |
| 5 | USER → ME | TERMINAL RESPONSE : GET INPUT 5.2.1 | |
| 6 | ME → SIM | | [command performed successfully] |

PROACTIVE COMMAND : GET INPUT 5.2.1

Logically:

Command details

| | |
|--------------------|---|
| Command number: | 1 |
| Command type: | GET INPUT |
| Command qualifier: | digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Text string

| | |
|---------------------|----------------------|
| Data coding scheme: | unpacked, 8 bit data |
| Text: | "Enter." |

Response length

| | |
|-----------------|-----|
| Minimum length: | 160 |
| Maximum length: | 160 |

Default Text

| | |
|---------------------|---|
| Data coding scheme: | unpacked, 8 bit data |
| Text: | "****1111111111#####2222222222#####3333333333#####44444444 4#####5555555555#####6666666666#####7777777777#####888888 8888#####9999999999#####0000000000#####" |

Coding:

| BER-TLV: | D0 | 1B | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 81 | 82 | 8D |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| | 06 | 04 | 45 | 6E | 74 | 65 | 72 | 20 | 91 | 02 | A0 | A0 |
| | 17 | 81 | A0 | 04 | 2A | 2A | 31 | 31 | 31 | 31 | 31 | 31 |
| | 31 | 31 | 31 | 31 | 23 | 23 | 23 | 2A | 2A | 2A | 32 | 31 |
| | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 23 | 23 | 23 |
| | 2A | 2A | 2A | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 |
| | 33 | 23 | 23 | 23 | 2A | 2A | 34 | 34 | 34 | 34 | 34 | 34 |
| | 34 | 34 | 34 | 34 | 34 | 23 | 23 | 2A | 2A | 2A | 2A | 35 |
| | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 23 | 23 | 23 |
| | 2A | 2A | 2A | 36 | 36 | 36 | 36 | 36 | 36 | 36 | 36 | 36 |
| | 36 | 23 | 23 | 23 | 2A | 2A | 37 | 37 | 37 | 37 | 37 | 37 |
| | 37 | 37 | 37 | 37 | 37 | 23 | 23 | 2A | 2A | 2A | 2A | 38 |
| | 38 | 38 | 38 | 38 | 38 | 38 | 38 | 38 | 38 | 23 | 23 | 23 |
| | 2A | 2A | 2A | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 |
| | 39 | 23 | 23 | 23 | 2A | 2A | 30 | 30 | 30 | 30 | 30 | 30 |
| | 30 | 30 | 30 | 30 | 30 | 23 | 23 | 23 | | | | |

TERMINAL RESPONSE : GET INPUT 5.2.1

Logically:

| Command details | | | | | | | | | | | |
|---|--|--|--|--|--|--|--------------------------------|--|--|--|--|
| Command number: | | | | | | | 1 | | | | |
| Command type: | | | | | | | GET INPUT | | | | |
| Command qualifier: | | | | | | | | | | | |
| digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, no help information available | | | | | | | | | | | |
| Device identities | | | | | | | | | | | |
| Source device: | | | | | | | ME | | | | |
| Destination device: | | | | | | | SIM | | | | |
| Result | | | | | | | | | | | |
| General Result: | | | | | | | Command performed successfully | | | | |
| Data coding scheme: | | | | | | | unpacked, 8 bit data | | | | |
| Text: | | | | | | | | *****1111111111#####2222222222#####3333333333#####4444444444 4####5555555555#####6666666666#####7777777777#####88888888 8888#####9999999999#####0000000000#####" | | | |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 17 | 81 | A0 | 04 | 2A | 2A | 2A | 31 | 31 | 31 | 31 | 31 |
| | 31 | 31 | 31 | 31 | 23 | 23 | 23 | 23 | 2A | 2A | 2A | 32 |
| | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 23 | 23 | 23 |
| | 2A | 2A | 2A | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 | 33 |
| | 33 | 23 | 23 | 23 | 2A | 2A | 2A | 34 | 34 | 34 | 34 | 34 |
| | 34 | 34 | 34 | 34 | 23 | 23 | 23 | 23 | 2A | 2A | 2A | 35 |
| | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 35 | 23 | 23 | 23 |
| | 2A | 2A | 2A | 36 | 36 | 36 | 36 | 36 | 36 | 36 | 36 | 36 |
| | 36 | 23 | 23 | 23 | 2A | 2A | 2A | 37 | 37 | 37 | 37 | 37 |
| | 37 | 37 | 37 | 37 | 23 | 23 | 23 | 23 | 2A | 2A | 2A | 38 |
| | 38 | 38 | 38 | 38 | 38 | 38 | 38 | 38 | 38 | 23 | 23 | 23 |
| | 2A | 2A | 2A | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 | 39 |
| | 39 | 23 | 23 | 23 | 2A | 2A | 2A | 30 | 30 | 30 | 30 | 30 |
| | D0 | 1D | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 0A | 04 | 3C | 4E | 4F | 2D | 49 | 43 | 4F | 4E | 3E | 91 |
| | 02 | 00 | 0A | 1E | 02 | 00 | 01 | 30 | 30 | 30 | 30 | 30 |
| | 23 | 23 | 23 | | | | | | | | | |

27.22.4.3.5.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 1 to 2.

27.22.4.3.6 GET INPUT (display of Icon)

27.22.4.3.6.1 Definition and applicability

See Section 3.2.2.

27.22.4.3.6.2 Conformance Requirement

The ME shall support the GET INPUT command as defined in the following technical specifications :

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.3 (Get Input), clause 6.5.4 (Icon Identifier), clause 6.6.3 (Get Input), clause 6.8 (Terminal Response), clause 6.11, clause 12.6 (Commands details), clause 12.15 (Text String), clause 12.15.1/2/3 (Data Coding Scheme), clause 12.13 (Default text), clause 12.31 (Icon identifier).

27.22.4.3.6.3 Test Purpose

To verify that the ME displays the Icon contained in the GET INPUT proactive SIM command, and returns the text string entered in the TERMINAL RESPONSE command sent to the SIM.

27.22.4.3.6.4 Method of Test

27.22.4.3.6.4.1 Initial Conditions

27.22.4.3.6.4.2 See Annex C

27.22.4.3.6.4.3 Procedure

Expected Sequence 6.1A (GET INPUT, Basic icon, self-explanatory, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 6.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INPUT 6.1.1 | [BASIC-ICON self-explanatory for the Text string] |
| 4 | ME → USER | Display the BASIC-ICON for the prompt | |
| 5 | USER → ME | Enter “+” and completion | Text string coding in unpacked format |
| 6 | ME → SIM | TERMINAL RESPONSE : GET INPUT 6.1.1A | Command performed successfully] |

PROACTIVE COMMAND : GET INPUT 6.1.1

Logically:

Command details

Command number: 1
 Command type: GET INPUT
 Command qualifier: digits (0-9, *, # and +) only, no help information available

Device identities

Source device: SIM
 Destination device: ME

Text string

Data coding scheme: unpacked, 8 bit data
 Text: "<NO-ICON>"

Response length

Minimum length: 0
 Maximum length: 10Icon Identifier
 Icon qualifier: self-explanatory
 Icon identifier: 1 (number of record in EF_{Img})

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1D | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 0A | 04 | 3C | 4E | 4F | 2D | 49 | 43 | 4F | 4E | 3E | 91 |
| | 02 | 00 | 0A | 1E | 02 | 00 | 01 | | | | | |

TERMINAL RESPONSE : GET INPUT 6.1.1A

Logically:

| | |
|---------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | GET INPUT |
| Command qualifier: | digits (0-9, *, # and +) only, no help information available |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Text string | |
| Data coding scheme: | unpacked, 8 bit data |
| Text: | “+” |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 04 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 02 | 04 | 2B | | | | | | | | |

Expected Sequence 6.1B (GET INPUT, Basic icon, self-explanatory, requested icon could not be displayed)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 6.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INPUT 6.1.1 | [BASIC-ICON self-explanatory for the Text string] |
| 4 | ME → USER | Display "<NO-ICON>" for the prompt without the icon | Text string coding in unpacked format |
| 5 | USER → ME | Enter “+” and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE : GET INPUT 6.1.1B | [Command performed successfully, but requested icon could not be displayed] |

TERMINAL RESPONSE : GET INPUT 6.1.1B

Logically:

| | |
|---------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | GET INPUT |
| Command qualifier: | digits (0-9, *, # and +) only, no help information available |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully but requested icon could not be displayed |
| Text string | |
| Data coding scheme: | unpacked, 8 bit data |
| Text: | “+” |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 04 |
| | 8D | 02 | 04 | 2B | | | | | | | | |

Expected Sequence 6.2A (GET INPUT, Basic icon, non self-explanatory, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 6.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INPUT 6.2.1 | [BASIC-ICON non self-explanatory for the Text string] |
| 4 | ME → USER | Display “<BASIC-ICON>” and Display the BASIC-ICON for the prompt | Text string coding in unpacked format |
| 5 | USER → ME | Enter the input “+” and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE : GET INPUT 6.2.1A | [Command performed successfully] |

PROACTIVE COMMAND : : GET INPUT 6.2.1

Logically:

| | | | | | | | | | | | | |
|---------------------|----|----|----|----|----|----|----|----|----|----|----|--|
| Command details | | | | | | | | | | | | |
| Command number: | | | | | | | | | | | | 1 |
| Command type: | | | | | | | | | | | | GET INPUT |
| Command qualifier: | | | | | | | | | | | | digits (0-9, *, # and +) only, no help information available |
| Device identities | | | | | | | | | | | | |
| Source device: | | | | | | | | | | | | SIM |
| Destination device: | | | | | | | | | | | | ME |
| Text string | | | | | | | | | | | | |
| Data coding scheme: | | | | | | | | | | | | unpacked, 8 bit data |
| Text: | | | | | | | | | | | | "<BASIC-ICON>" |
| Response length | | | | | | | | | | | | |
| Minimum length: | | | | | | | | | | | | 0 |
| Maximum length: | | | | | | | | | | | | 10 |
| Icon Identifier | | | | | | | | | | | | |
| Icon qualifier: | | | | | | | | | | | | not self-explanatory |
| Icon identifier: | | | | | | | | | | | | 1 (number of record in EF _{Img}) |
| Coding:BE | D0 | 1C | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 81 | 82 | 8D |
| R-TLV: | | | | | | | | | | | | |
| | 8D | 0D | 04 | 3C | 42 | 41 | 53 | 49 | 43 | 2D | 49 | 43 |
| | 4F | 4E | 3E | 91 | 02 | 00 | 0A | 1E | 02 | 01 | 01 | |

TERMINAL RESPONSE : GET INPUT 6.2.1A

Logically:

| | | | | | | | | | | | | |
|---------------------|--|--|--|--|--|--|--|--|--|--|--|--|
| Command details | | | | | | | | | | | | |
| Command number: | | | | | | | | | | | | 1 |
| Command type: | | | | | | | | | | | | GET INPUT |
| Command qualifier: | | | | | | | | | | | | digits (0-9, *, # and +) only, no help information available |
| Device identities | | | | | | | | | | | | |
| Source device: | | | | | | | | | | | | ME |
| Destination device: | | | | | | | | | | | | SIM |
| Result | | | | | | | | | | | | |
| General Result: | | | | | | | | | | | | Command performed successfully |
| Text string | | | | | | | | | | | | |
| Data coding scheme: | | | | | | | | | | | | unpacked, 8 bit data |
| Text: | | | | | | | | | | | | "+" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 02 | 04 | 2B | | | | | | | | |

Expected Sequence 6.2B (GET INPUT, Basic icon, non self-explanatory, requested icon could not be displayed)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 6.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INPUT 6.2.1 | [BASIC-ICON non self-explanatory for the Text string] |
| 4 | ME → USER | Display "<BASIC-ICON>" for the prompt without the icon | Text string coding in unpacked format |
| 5 | USER → ME | Enter the input "+" and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE : GET INPUT 6.2.1B | [Command performed successfully, but requested icon could not be displayed] |

TERMINAL RESPONSE : GET INPUT 6.2.1B

Logically:

| | |
|---------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | GET INPUT |
| Command qualifier: | digits (0-9, *, # and +) only, no help information available |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully but requested icon could not be displayed |
| Text string | |
| Data coding scheme: | unpacked, 8 bit data |
| Text: | "+" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 04 |
| | 8D | 02 | 04 | 2B | | | | | | | | |

Expected Sequence 6.3A (GET INPUT, Colour icon, self-explanatory, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 6.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INPUT 6.3.1 | [COLOUR-ICON self-explanatory for the Text string] |
| 4 | ME → USER | Display the COLOUR-ICON for the prompt | Text string coding in unpacked format |
| 5 | USER → ME | Enter the input "+" and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE : GET INPUT 6.3.1A | [Command performed successfully] |

PROACTIVE COMMAND : GET INPUT 6.3.1

Logically:

Command details

| | |
|--------------------|--|
| Command number: | 1 |
| Command type: | GET INPUT |
| Command qualifier: | digits (0-9, *, # and +) only, no help information available |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Text string

| | |
|---------------------|----------------------|
| Data coding scheme: | unpacked, 8 bit data |
| Text: | "<NO-ICON>" |

Response length

| | |
|-----------------|----|
| Minimum length: | 0 |
| Maximum length: | 10 |

Icon Identifier

| | |
|------------------|--|
| Icon qualifier: | self-explanatory |
| Icon identifier: | 2 (number of record in EF _{Img}) |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1D | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 0A | 04 | 3C | 4E | 4F | 2D | 49 | 43 | 4F | 4E | 3E | 91 |
| | 02 | 00 | 0A | 1E | 02 | 00 | 02 | | | | | |

TERMINAL RESPONSE : GET INPUT 6.3.1A

Logically:

| | |
|---------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | GET INPUT |
| Command qualifier: | digits (0-9, *, # and +) only, no help information available |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Text string | |
| Data coding scheme: | unpacked, 8 bit data |
| Text: | “+” |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 02 | 04 | 2B | | | | | | | | |

Expected Sequence 6.3B (GET INPUT, Colour icon, self-explanatory, requested icon could not be displayed)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 6.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INPUT 6.3.1 | [COLOUR-ICON self-explanatory for the Text string] |
| 4 | ME → USER | Display the COLOUR-ICON for the prompt | Text string coding in unpacked format |
| 5 | USER → ME | Enter the input “+” and completion | |
| 6 | ME → SIM | TERMINAL RESPONSE : GET INPUT 6.3.1B | [Command performed successfully, but requested icon could not be displayed] |

TERMINAL RESPONSE : GET INPUT 6.3.1B

Logically:

| | |
|---------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | GET INPUT |
| Command qualifier: | digits (0-9, *, # and +) only, no help information available |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully but requested icon could not be displayed |
| Text string | |
| Data coding scheme: | unpacked, 8 bit data |
| Text: | “+” |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 04 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

8D 02 04 2B

Expected Sequence 6.4A (GET INPUT, Colour icon, non self-explanatory, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 6.4.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INPUT 6.4.1 | [COLOUR-ICON non self-explanatory for the Text string] |
| 4 | ME → USER | Display "<COLOUR-ICON>" and Display the COLOUR-ICON for the prompt | |
| 5 | USER → ME | Enter the input "+" and completion | Text string coding in unpacked format |
| 6 | ME → SIM | TERMINAL RESPONSE : GET INPUT 6.4.1A | [Command performed successfully] |

PROACTIVE COMMAND : GET INPUT 6.4.1

Logically:

Command details

| | |
|--------------------|--|
| Command number: | 1 |
| Command type: | GET INPUT |
| Command qualifier: | digits (0-9, *, # and +) only, no help information available |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Text string

| | |
|---------------------|----------------------|
| Data coding scheme: | unpacked, 8 bit data |
| Text: | "<COLOUR-ICON>" |

Response length

| | |
|-----------------|----|
| Minimum length: | 0 |
| Maximum length: | 10 |

Icon Identifier

| | |
|------------------|--|
| Icon qualifier: | not self-explanatory |
| Icon identifier: | 2 (number of record in EF _{Img}) |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1D | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 0A | 04 | 3C | 4E | 4F | 2D | 49 | 43 | 4F | 4E | 3E | 91 |
| | 02 | 00 | 0A | 1E | 02 | 01 | 02 | | | | | |

TERMINAL RESPONSE : GET INPUT 6.4.1A

Logically:

| | |
|---------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | GET INPUT |
| Command qualifier: | digits (0-9, *, # and +) only, no help information available |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Text string | |
| Data coding scheme: | unpacked, 8 bit data |
| Text: | “+” |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 8D | 02 | 04 | 2B | | | | | | | | |

Expected Sequence 6.4B (GET INPUT, Colour icon, non self-explanatory, requested icon could not be displayed)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 6.4.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INPUT 6.4.1 | [COLOUR-ICON non self-explanatory for the Text string] |
| 4 | ME → USER | Display “<COLOUR-ICON>” for the prompt without the icon | |
| 5 | USER → ME | Enter the input “+” and completion | Text string coding in unpacked format |
| 6 | ME → SIM | TERMINAL RESPONSE : GET INPUT 6.4.1B | [Command performed successfully, but requested icon could not be displayed] |

TERMINAL RESPONSE : GET INPUT 6.4.1B

Logically:

| | |
|---------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | GET INPUT |
| Command qualifier: | digits (0-9, *, # and +) only, no help information available |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully but requested icon could not be displayed |
| Text string | |
| Data coding scheme: | unpacked, 8 bit data |
| Text: | “+” |
| Coding: | |
| BER-TLV: | 81 03 01 23 00 82 02 82 81 83 01 04 8D 02 04 2B |

27.22.4.3.7 GET INPUT (Help Information)

27.22.4.3.7.1 Definition and applicability

See Section 3.2.2.

27.22.4.3.7.2 Conformance Requirement

The ME shall support the GET INPUT command as defined in the following technical specifications :

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.3 (Get Input), clause 6.6.3 (Get Input), clause 6.8 (Terminal Response), clause 6.11, clause 12.6 (Commands details), clause 12.15 (Text String), clause 12.15.1/2/3 (Data Coding Scheme), clause 12.13 (Default text).

27.22.4.3.7.3 Test Purpose

To verify that the ME displays the text contained in the GET INPUT proactive SIM command, and returns the text string entered in the TERMINAL RESPONSE command sent to the SIM.

27.22.4.3.7.4 Method of Test

27.22.4.3.7.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default with the following exceptions.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.3.7.4.2 Procedure

Expected Sequence 7.1 (GET INPUT, digits only, ME to echo text, ME supporting 8 bit data Message, help information available)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET INPUT 7.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET INPUT 7.1.1 | [digits only, SMS default alphabet, ME to echo text, packing not required, help information available] |
| 4 | ME → USER | Display "Enter 12345" | Range of expected length is 5-5 Text string coding in unpacked format |
| 5 | USER → ME | Press "help" | |
| 6 | ME->USER | Display <i>Help information</i> | |
| 6 | ME → SIM | TERMINAL RESPONSE : GET INPUT 7.1.1 | [command performed successfully] |

PROACTIVE COMMAND : GET INPUT 7.1.1

Logically:

Command details

| | |
|--------------------|--|
| Command number: | 1 |
| Command type: | GET INPUT |
| Command qualifier: | digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, help information available |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Text string

| | |
|---------------------|----------------------|
| Data coding scheme: | unpacked, 8 bit data |
| Text: | "Enter 12345" |

Response length

| | |
|-----------------|---|
| Minimum length: | 5 |
| Maximum length: | 5 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1B | 81 | 03 | 01 | 23 | 80 | 82 | 02 | 81 | 82 | 8D |
| | 0C | 04 | 45 | 6E | 74 | 65 | 72 | 20 | 31 | 32 | 33 | 34 |
| | 35 | 91 | 02 | 05 | 05 | | | | | | | |

TERMINAL RESPONSE : GET INPUT 7.1.1

Logically:

| | |
|---------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | GET INPUT |
| Command qualifier: | digits (0-9, *, # and +) only, SMS default alphabet, input in unpacked format, ME to echo text, help information available |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Help information required by the user |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 23 | 80 | 82 | 02 | 82 | 81 | 83 | 13 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

27.22.4.3.7.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 1.

27.22.4.4 MORE TIME

27.22.4.4.1 Definition and applicability

See Section 3.2.2.

27.22.4.4.2 Conformance Requirement

The ME shall support the MORE TIME command as defined in the following technical specifications :

3GPP TS 11.14 [15] clause 6.4.4 (More time), clause 6.6.4. (More time), clause 5.2 (Terminal profile), clause 12.6 (Command details), clause 12.7 (Device identities)

27.22.4.4.3 Test Purpose

To verify that the ME shall send a TERMINAL RESPONSE (OK) to the SIM after the ME receives the MORE TIME proactive SIM command.

27.22.4.4.4 Method of Test

27.22.4.4.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.4.2 Procedure

Expected Sequence 1.1 (MORE TIME)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: MORE TIME 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : MORE TIME 1.1.1 | |
| 4 | ME → SIM | TERMINAL RESPONSE : MORE TIME 1.1.1 | [Command performed successfully] |
| 5 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

PROACTIVE COMMAND : MORE TIME 1.1.1

Logically:

Command details

| | |
|--------------------|-----------|
| Command number: | 1 |
| Command type: | MORE TIME |
| Command qualifier: | "00" |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Coding:

BER-TLV: D0 09 81 03 01 02 00 82 02 81 82

TERMINAL RESPONSE : MORE TIME 1.1.1

Logically:

Command details

| | |
|--------------------|-----------|
| Command number: | 1 |
| Command type: | MORE TIME |
| Command qualifier: | "00" |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|--------------------------------|
| General Result: | Command performed successfully |
|-----------------|--------------------------------|

Coding:

BER-TLV: 81 03 01 02 00 82 02 82 81 83 01 00

27.22.4.4.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 1.

27.22.4.5 PLAY TONE

27.22.4.5.1 Definition and applicability

See Section 3.2.2.

27.22.4.5.2 Conformance Requirement

The ME shall support the PLAY TONE command as defined in the following technical specifications :

3GPP TS 11.14 [15] clause 6.1, clause 6.4.5 (Play Tone), clause 6.6.5. (Play Tone), clause 5.2 (Terminal Profile), clause 12.6 (Command details), clause 12.7 (Device identities), clause 12.2 (Alpha identifier), clause 12.16 (Tone), clause 12.8 (Duration)

27.22.4.5.3 Test Purpose

To verify that the ME plays an audio tone of a type and duration contained in the PLAY TONE proactive SIM command, and returns a successful response in the TERMINAL RESPONSE command sent to the SIM.

To verify that the ME plays the requested audio tone through the external ringer whilst not in call and shall superimpose the tone on top of the downlink audio whilst in call.

To verify that the ME displays the text contained in the PLAY TONE proactive SIM command.

27.22.4.5.4 Method of Test

27.22.4.5.4.1 Initial Conditions

The ME is connected to the SIM Simulator and to the System Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.5.4.2 Procedure

Expected Sequence 1.1 (PLAY TONE)

| Step | Direction | MESSAGE / Action | Comments |
|------|--------------|--|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: PLAY TONE 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : PLAY TONE 1.1.1 | |
| 4 | ME → USER | Display "Dial Tone" Play a standard supervisory dial tone through the external ringer for a duration of 5 seconds | |
| 5 | ME → SIM | TERMINAL RESPONSE : PLAY TONE 1.1.1 | [Command performed successfully] |
| 6 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

| | | | | |
|----|--------------|--|----------------------------------|--|
| 7 | SIM → ME | PROACTIVE COMMAND PENDING: PLAY TONE 1.1.2 | | |
| 8 | ME → SIM | FETCH | | |
| 9 | SIM → ME | PROACTIVE COMMAND : PLAY TONE 1.1.2 | | |
| 10 | ME → USER | Display "Sub. Busy" | | |
| | | Play a standard supervisory called subscriber busy tone for a duration of 5 seconds | | |
| 11 | ME → SIM | TERMINAL RESPONSE : PLAY TONE 1.1.2 | [Command performed successfully] | |
| 12 | SIM → ME | PROACTIVE SIM SESSION ENDED | | |
| 13 | SIM → ME | PROACTIVE COMMAND PENDING: PLAY TONE 1.1.3 | | |
| 14 | ME → SIM | FETCH | | |
| 15 | SIM → ME | PROACTIVE COMMAND : PLAY TONE 1.1.3 | | |
| 16 | ME → USER | Display "Congestion" | | |
| | | Play a standard supervisory congestion tone for a duration of 5 seconds | | |
| 17 | ME → SIM | TERMINAL RESPONSE : PLAY TONE 1.1.3 | [Command performed successfully] | |
| 18 | SIM → ME | PROACTIVE SIM SESSION ENDED | | |
| 19 | SIM → ME | PROACTIVE COMMAND PENDING: PLAY TONE 1.1.4 | | |
| 20 | ME → SIM | FETCH | | |
| 21 | SIM → ME | PROACTIVE COMMAND : PLAY TONE 1.1.4 | | |
| 22 | ME → USER | Display "RP Ack" | | |
| | | Play a standard supervisory radio path acknowledgement tone | | |
| 23 | ME → SIM | TERMINAL RESPONSE : PLAY TONE 1.1.4 | [Command performed successfully] | |
| 24 | SIM → ME | PROACTIVE SIM SESSION ENDED | | |
| 25 | SIM → ME | PROACTIVE COMMAND PENDING: PLAY TONE 1.1.5 | | |
| 26 | ME → SIM | FETCH | | |
| 27 | SIM → ME | PROACTIVE COMMAND : PLAY TONE 1.1.5 | | |
| 28 | ME → USER | Display "No RP" | | |
| | | Play a standard supervisory radio path not available / call dropped tone for a duration of 5 seconds | | |
| 29 | ME → SIM | TERMINAL RESPONSE : PLAY TONE 1.1.5 | [Command performed successfully] | |
| 30 | SIM → ME | PROACTIVE SIM SESSION ENDED | | |

| | | | |
|----|-----------------|---|---|
| 31 | SIM → ME | PROACTIVE COMMAND PENDING: PLAY TONE 1.1.6 | |
| 32 | ME → SIM | FETCH | |
| 33 | SIM → ME | PROACTIVE COMMAND : PLAY TONE 1.1.6 | |
| 34 | ME → USER | Display "Spec Info" | |
| | | Play a standard supervisory error / special information tone for a duration of 5 seconds | |
| 35 | ME → SIM | TERMINAL RESPONSE : PLAY TONE 1.1.6 | [Command performed successfully] |
| 36 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 37 | SIM → ME | PROACTIVE COMMAND PENDING: PLAY TONE 1.1.7 | |
| 38 | ME → SIM | FETCH | |
| 39 | SIM → ME | PROACTIVE COMMAND : PLAY TONE 1.1.7 | |
| 40 | ME → USER | Display "Call Wait" | |
| | | Play a standard supervisory call waiting tone for a duration of 5 seconds | |
| 41 | ME → SIM | TERMINAL RESPONSE : PLAY TONE 1.1.7 | [Command performed successfully] |
| 42 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 43 | SIM → ME | PROACTIVE COMMAND PENDING: PLAY TONE 1.1.8 | |
| 44 | ME → SIM | FETCH | |
| 45 | SIM → ME | PROACTIVE COMMAND : PLAY TONE 1.1.8 | |
| 46 | ME → USER | Display "Ring Tone" | |
| | | Play a standard supervisory ringing tone for duration of 5 seconds | |
| 47 | ME → SIM | TERMINAL RESPONSE : PLAY TONE 1.1.8 | [Command performed successfully] |
| 48 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 49 | USER → ME | Set up a voice call | [User dials 123456789 to connect to the network manually] |
| 50 | ME → Network | Establish voice call | [Voice call is established] |
| 51 | SIM → ME | PROACTIVE COMMAND PENDING: PLAY TONE 1.1.9 | |
| 52 | ME → SIM | FETCH | |
| 53 | SIM → ME | PROACTIVE COMMAND : PLAY TONE 1.1.9 | |
| 54 | ME → USER | Display "Dial Tone" | |
| | | Superimpose the standard supervisory dial tone on the audio downlink for the duration of 5 seconds | |
| 55 | ME → SIM | TERMINAL RESPONSE : PLAY TONE 1.1.9 | [Command performed successfully] |
| 56 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

| | | | | |
|----|--------------|--|--|--|
| 57 | SIM → ME | PROACTIVE COMMAND PENDING: PLAY TONE 1.1.10 | | |
| 58 | ME → SIM | FETCH | | |
| 59 | SIM → ME | PROACTIVE COMMAND : PLAY TONE 1.1.10 | | |
| 60 | ME → USER | Display "This command instructs the ME to play an audio tone. Upon receiving this command, the ME shall check if it is currently in, or in the process of setting up (SET-UP message sent to the network, see GSM"04.08"(8)), a speech call. - If the ME I" | | |
| 61 | ME → SIM | Play a general beep TERMINAL RESPONSE : PLAY TONE 1.1.10a or TERMINAL RESPONSE : PLAY TONE 1.1.10b | [Command performed successfully] or [Command beyond ME's capabilities] | |
| 62 | SIM → ME | PROACTIVE SIM SESSION ENDED | | |
| 63 | SIM → ME | PROACTIVE COMMAND PENDING: PLAY TONE 1.1.11 | | |
| 64 | ME → SIM | FETCH | | |
| 65 | SIM → ME | PROACTIVE COMMAND : PLAY TONE 1.1.11 | | |
| 66 | ME → USER | Display "Beep" | | |
| 67 | ME → SIM | Play a ME proprietary general beep TERMINAL RESPONSE : PLAY TONE 1.1.11a Or TERMINAL RESPONSE : PLAY TONE 1.1.11b | [Command performed successfully] or [Command beyond ME's capabilities] | |
| 68 | SIM → ME | PROACTIVE SIM SESSION ENDED | | |
| 69 | SIM → ME | PROACTIVE COMMAND PENDING: PLAY TONE 1.1.12 | | |
| 70 | ME → SIM | FETCH | | |
| 71 | SIM → ME | PROACTIVE COMMAND : PLAY TONE 1.1.12 | | |
| 72 | ME → USER | Display "Positive" | | |
| 73 | ME → SIM | Play a ME proprietary positive acknowledgement tone TERMINAL RESPONSE : PLAY TONE 1.1.12a or TERMINAL RESPONSE : PLAY TONE 1.1.12b | [Command performed successfully] or [Command beyond ME's capabilities] | |
| 74 | SIM → ME | PROACTIVE SIM SESSION ENDED | | |

| | | | |
|----|-----------|---|---|
| 75 | SIM → ME | PROACTIVE COMMAND PENDING: PLAY TONE 1.1.13 | |
| 76 | ME → SIM | FETCH | |
| 77 | SIM → ME | PROACTIVE COMMAND : PLAY TONE 1.1.13 | |
| 78 | ME → USER | Display "Negative" Play a ME proprietary negative acknowledgement tone | |
| 79 | ME → SIM | TERMINAL RESPONSE : PLAY TONE 1.1.13a or TERMINAL RESPONSE : PLAY TONE 1.1.13b | [Command performed successfully] or [Command beyond ME's capabilities] |
| 80 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 81 | SIM → ME | PROACTIVE COMMAND PENDING: PLAY TONE 1.1.14 | |
| 82 | ME → SIM | FETCH | |
| 83 | SIM → ME | PROACTIVE COMMAND : PLAY TONE 1.1.14 | |
| 84 | ME → USER | Display "Quick" Play a ME proprietary general beep | |
| 85 | ME → SIM | TERMINAL RESPONSE : PLAY TONE 1.1.14a or TERMINAL RESPONSE : PLAY TONE 1.1.14b | [Command performed successfully] or [Command beyond ME's capabilities] |
| 86 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 87 | SIM → ME | PROACTIVE COMMAND PENDING: PLAY TONE 1.1.15 | |
| 88 | ME → SIM | FETCH | |
| 89 | SIM → ME | PROACTIVE COMMAND : PLAY TONE 1.1.15 | |
| 90 | ME → USER | Display "<ABORT>" Play a ME Error / Special information tone for 1 minute until user aborts this command | |
| 91 | ME → SIM | TERMINAL RESPONSE : PLAY TONE 1.1.15 | [Proactive SIM session terminated by the user] |
| 92 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 93 | SIM → ME | PROACTIVE COMMAND PENDING: PLAY TONE 1.1.16 | |
| 94 | ME → SIM | FETCH | |
| 95 | SIM → ME | PROACTIVE COMMAND : PLAY TONE 1.1.16 | [No alpha identifier, no tone tag, no duration tag] |
| 96 | ME → User | ME plays general beep, or if not supported any (defined by ME-manufacturer) other supported tone | [ME uses default duration defined by ME-manufacturer] |
| 97 | ME → SIM | TERMINAL RESPONSE : PLAY TONE 1.1.16 | [Command performed successfully], [ME uses general beep, or if not supported any (defined by ME-manufacturer) other supported tone, uses default duration defined by ME-manufacturer] |
| 98 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

PROACTIVE COMMAND : PLAY TONE 1.1.1

Logically:

Command details

| | |
|--------------------|-----------|
| Command number: | 1 |
| Command type: | PLAY TONE |
| Command qualifier: | "00" |

Device identities

| | |
|---------------------|----------|
| Source device: | SIM |
| Destination device: | Earpiece |

Alpha identifier:

Tone: Standard supervisory tones: dial tone

Duration

| | |
|----------------|---------|
| Time unit: | Seconds |
| Time interval: | 5 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1B | 81 | 03 | 01 | 20 | 00 | 82 | 02 | 81 | 03 | 85 |
| | 09 | 44 | 69 | 61 | 6C | 20 | 54 | 6F | 6E | 65 | 8E | 01 |
| | 01 | 84 | 02 | 01 | 05 | | | | | | | |

PROACTIVE COMMAND : PLAY TONE 1.1.2

Logically:

Command details

| | |
|--------------------|-----------|
| Command number: | 1 |
| Command type: | PLAY TONE |
| Command qualifier: | "00" |

Device identities

| | |
|---------------------|----------|
| Source device: | SIM |
| Destination device: | Earpiece |

Alpha identifier:

Tone: Standard supervisory tones: called subscriber busy

Duration

| | |
|----------------|---------|
| Time unit: | Seconds |
| Time interval: | 5 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1B | 81 | 03 | 01 | 20 | 00 | 82 | 02 | 81 | 03 | 85 |
| | 09 | 53 | 75 | 62 | 2E | 20 | 42 | 75 | 73 | 79 | 8E | 01 |
| | 02 | 84 | 02 | 01 | 05 | | | | | | | |

PROACTIVE COMMAND : PLAY TONE 1.1.3

Logically:

| | |
|---------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | PLAY TONE |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | SIM |
| Destination device: | Earpiece |
| Alpha identifier: | "Congestion" |
| Tone: | Standard supervisory tones: congestion |
| Duration | |
| Time unit: | Seconds |
| Time interval: | 5 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1C | 81 | 03 | 01 | 20 | 00 | 82 | 02 | 81 | 03 | 85 |
| | 0A | 43 | 6F | 6E | 67 | 65 | 73 | 74 | 69 | 6F | 6E | 8E |
| | 01 | 03 | 84 | 02 | 01 | 05 | | | | | | |

PROACTIVE COMMAND : PLAY TONE 1.1.4

Logically:

| | |
|---------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | PLAY TONE |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | SIM |
| Destination device: | Earpiece |
| Alpha identifier: | "RP Ack" |
| Tone: | Standard supervisory tones: radio path acknowledge |
| Duration | |
| Time unit: | Seconds |
| Time interval: | 5 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 18 | 81 | 03 | 01 | 20 | 00 | 82 | 02 | 81 | 03 | 85 |
| | 06 | 52 | 50 | 20 | 41 | 63 | 6B | 8E | 01 | 04 | 84 | 02 |
| | 01 | 05 | | | | | | | | | | |

PROACTIVE COMMAND : PLAY TONE 1.1.5

Logically:

| | | | | | | | | | | | | |
|---------------------|--|--|--|--|--|--|--|--|--|--|--|--|
| Command details | | | | | | | | | | | | |
| Command number: | | | | | | | 1 | | | | | |
| Command type: | | | | | | | PLAY TONE | | | | | |
| Command qualifier: | | | | | | | "00" | | | | | |
| Device identities | | | | | | | | | | | | |
| Source device: | | | | | | | SIM | | | | | |
| Destination device: | | | | | | | Earpiece | | | | | |
| Alpha identifier: | | | | | | | "No RP" | | | | | |
| Tone: | | | | | | | Standard supervisory tones: radio path not available | | | | | |
| Duration | | | | | | | | | | | | |
| Time unit: | | | | | | | Seconds | | | | | |
| Time interval: | | | | | | | 5 | | | | | |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 17 | 81 | 03 | 01 | 20 | 00 | 82 | 02 | 81 | 03 | 85 |
| | 05 | 4E | 6F | 20 | 52 | 50 | 8E | 01 | 05 | 84 | 02 | 01 |
| | | | | | | | | | | | | |

PROACTIVE COMMAND : PLAY TONE 1.1.6

Logically:

| | | | | | | | | | | | | |
|---------------------|--|--|--|--|--|--|--|--|--|--|--|--|
| Command details | | | | | | | | | | | | |
| Command number: | | | | | | | 1 | | | | | |
| Command type: | | | | | | | PLAY TONE | | | | | |
| Command qualifier: | | | | | | | "00" | | | | | |
| Device identities | | | | | | | | | | | | |
| Source device: | | | | | | | SIM | | | | | |
| Destination device: | | | | | | | Earpiece | | | | | |
| Alpha identifier: | | | | | | | "Spec Info" | | | | | |
| Tone: | | | | | | | Standard supervisory tones: Error/ special information | | | | | |
| Duration | | | | | | | | | | | | |
| Time unit: | | | | | | | Seconds | | | | | |
| Time interval: | | | | | | | 5 | | | | | |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1B | 81 | 03 | 01 | 20 | 00 | 82 | 02 | 81 | 03 | 85 |
| | 09 | 53 | 70 | 65 | 63 | 20 | 49 | 6E | 66 | 6F | 8E | 01 |
| | | | | | | | | | | | | |

PROACTIVE COMMAND : PLAY TONE 1.1.7

Logically:

| | | | | | | | | | | | |
|---------------------|---|--|--|--|--|--|--|--|--|--|--|
| Command details | | | | | | | | | | | |
| Command number: | 1 | | | | | | | | | | |
| Command type: | PLAY TONE | | | | | | | | | | |
| Command qualifier: | "00" | | | | | | | | | | |
| Device identities | | | | | | | | | | | |
| Source device: | SIM | | | | | | | | | | |
| Destination device: | Earpiece | | | | | | | | | | |
| Alpha identifier: | "Call Wait" | | | | | | | | | | |
| Tone: | Standard supervisory tones: call waiting tone | | | | | | | | | | |
| Duration | | | | | | | | | | | |
| Time unit: | Seconds | | | | | | | | | | |
| Time interval: | 5 | | | | | | | | | | |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1B | 81 | 03 | 01 | 20 | 00 | 82 | 02 | 81 | 03 | 85 |
| | 09 | 43 | 61 | 6C | 6C | 20 | 57 | 71 | 69 | 74 | 8E | 01 |
| | 07 | 84 | 02 | 01 | 05 | | | | | | | |

PROACTIVE COMMAND : PLAY TONE 1.1.8

Logically:

| | | | | | | | | | | | |
|---------------------|--|--|--|--|--|--|--|--|--|--|--|
| Command details | | | | | | | | | | | |
| Command number: | 1 | | | | | | | | | | |
| Command type: | PLAY TONE | | | | | | | | | | |
| Command qualifier: | "00" | | | | | | | | | | |
| Device identities | | | | | | | | | | | |
| Source device: | SIM | | | | | | | | | | |
| Destination device: | Earpiece | | | | | | | | | | |
| Alpha identifier: | "Ring Tone" | | | | | | | | | | |
| Tone: | Standard supervisory tones: ringing tone | | | | | | | | | | |
| Duration | | | | | | | | | | | |
| Time unit: | Seconds | | | | | | | | | | |
| Time interval: | 5 | | | | | | | | | | |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1B | 81 | 03 | 01 | 20 | 00 | 82 | 02 | 81 | 03 | 85 |
| | 09 | 52 | 69 | 6E | 67 | 20 | 54 | 6F | 6E | 65 | 8E | 01 |
| | 08 | 84 | 02 | 01 | 05 | | | | | | | |

PROACTIVE COMMAND : PLAY TONE 1.1.9

Logically:

Command details

| | |
|--------------------|-----------|
| Command number: | 1 |
| Command type: | PLAY TONE |
| Command qualifier: | "00" |

Device identities

| | |
|---------------------|----------|
| Source device: | SIM |
| Destination device: | Earpiece |

Alpha identifier:

Tone: Standard supervisory tones: dial tone

Duration

| | |
|----------------|---------|
| Time unit: | Seconds |
| Time interval: | 5 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1B | 81 | 03 | 01 | 20 | 00 | 82 | 02 | 81 | 03 | 85 |
| | 09 | 44 | 69 | 61 | 6C | 20 | 54 | 6F | 6E | 65 | 8E | 01 |
| | 01 | 84 | 02 | 01 | 05 | | | | | | | |

PROACTIVE COMMAND : PLAY TONE 1.1.10

Logically:

Command details

| | |
|--------------------|-----------|
| Command number: | 1 |
| Command type: | PLAY TONE |
| Command qualifier: | "00" |

Device identities

| | |
|---------------------|----------|
| Source device: | SIM |
| Destination device: | Earpiece |

Alpha identifier:

"This command instructs the ME to play an audio tone. Upon receiving this command, the ME shall check if it is currently in, or in the process of setting up (SET-UP message sent to the network, see GSM'04.08"(8)), a speech call. - If the ME I"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 81 | FD | 81 | 03 | 01 | 20 | 00 | 82 | 02 | 81 | 03 |
| | 85 | 81 | F1 | 54 | 68 | 69 | 73 | 20 | 63 | 6F | 6D | 6D |
| | 61 | 6E | 64 | 20 | 69 | 6E | 73 | 74 | 72 | 75 | 63 | 74 |
| | 73 | 20 | 74 | 68 | 65 | 20 | 4D | 45 | 20 | 74 | 6F | 20 |
| | 70 | 6C | 61 | 79 | 20 | 61 | 6E | 20 | 61 | 75 | 64 | 69 |
| | 6F | 20 | 74 | 6F | 6E | 65 | 2E | 20 | 55 | 70 | 6F | 6E |
| | 20 | 72 | 65 | 63 | 65 | 69 | 76 | 69 | 6E | 67 | 20 | 74 |
| | 68 | 69 | 73 | 20 | 63 | 6F | 6D | 6D | 61 | 6E | 64 | 2C |
| | 20 | 74 | 68 | 65 | 20 | 4D | 45 | 20 | 73 | 68 | 61 | 6C |
| | 6C | 20 | 63 | 68 | 65 | 63 | 6B | 20 | 69 | 66 | 20 | 69 |
| | 74 | 20 | 69 | 73 | 20 | 63 | 75 | 72 | 72 | 65 | 6E | 74 |
| | 6C | 79 | 20 | 69 | 6E | 2C | 20 | 6F | 72 | 20 | 69 | 6E |
| | 20 | 74 | 68 | 65 | 20 | 70 | 72 | 6F | 63 | 65 | 73 | 73 |
| | 20 | 6F | 66 | 20 | 73 | 65 | 74 | 74 | 69 | 6E | 67 | 20 |
| | 75 | 70 | 20 | 28 | 53 | 45 | 54 | 2D | 55 | 50 | 20 | 6D |
| | 65 | 73 | 73 | 61 | 67 | 65 | 20 | 73 | 65 | 6E | 74 | 20 |
| | 74 | 6F | 20 | 74 | 68 | 65 | 20 | 6E | 65 | 74 | 77 | 6F |
| | 72 | 6B | 2C | 20 | 73 | 65 | 65 | 20 | 47 | 53 | 4D | 22 |
| | 30 | 34 | 2E | 30 | 38 | 22 | 28 | 38 | 29 | 29 | 2C | 20 |
| | 61 | 20 | 73 | 70 | 65 | 65 | 63 | 68 | 20 | 63 | 61 | 6C |
| | 6C | 2E | 20 | 2D | 20 | 49 | 66 | 20 | 74 | 68 | 65 | 20 |
| | 4D | 45 | 20 | 49 | | | | | | | | |

PROACTIVE COMMAND : PLAY TONE 1.1.11

Logically:

| | |
|---------------------|------------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | PLAY TONE |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | SIM |
| Destination device: | Earpiece |
| Alpha identifier: | "Beep" |
| Tone: | ME proprietary tones: general beep |
| Duration | |
| Time unit: | Seconds |
| Time interval: | 1 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 16 | 81 | 03 | 01 | 20 | 00 | 82 | 02 | 81 | 03 | 85 |
| | 04 | 42 | 65 | 65 | 70 | 8E | 01 | 10 | 84 | 02 | 01 | 01 |

PROACTIVE COMMAND : PLAY TONE 1.1.12

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | PLAY TONE |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | SIM |
| Destination device: | Earpiece |
| Alpha identifier: | "Positive" |
| Tone: | ME proprietary tones: positive acknowledgement tone |
| Duration | |
| Time unit: | Seconds |
| Time interval: | 1 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1A | 81 | 03 | 01 | 20 | 00 | 82 | 02 | 81 | 03 | 85 |
| | 08 | 50 | 6F | 73 | 69 | 74 | 69 | 76 | 65 | 8E | 01 | 11 |
| | 84 | 02 | 01 | 01 | | | | | | | | |

PROACTIVE COMMAND : PLAY TONE 1.1.13

Logically:

Command details

| | |
|--------------------|-----------|
| Command number: | 1 |
| Command type: | PLAY TONE |
| Command qualifier: | "00" |

Device identities

| | |
|---------------------|----------|
| Source device: | SIM |
| Destination device: | Earpiece |

Alpha identifier:

Tone:

ME proprietary tones: negative acknowledgement tone

Duration

| | |
|----------------|---------|
| Time unit: | Seconds |
| Time interval: | 1 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1A | 81 | 03 | 01 | 20 | 00 | 82 | 02 | 81 | 03 | 85 |
| | 08 | 4E | 65 | 67 | 61 | 74 | 69 | 76 | 65 | 8E | 01 | 12 |
| | 84 | 02 | 01 | 01 | | | | | | | | |

PROACTIVE COMMAND : PLAY TONE 1.1.14

Logically:

Command details

| | |
|--------------------|-----------|
| Command number: | 1 |
| Command type: | PLAY TONE |
| Command qualifier: | "00" |

Device identities

| | |
|---------------------|----------|
| Source device: | SIM |
| Destination device: | Earpiece |

Alpha identifier:

"Quick"

Tone:

ME proprietary tones: general beep

Duration

| | |
|----------------|-------------------|
| Time unit: | Tenths of seconds |
| Time interval: | 2 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 17 | 81 | 03 | 01 | 20 | 00 | 82 | 02 | 81 | 03 | 85 |
| | 05 | 51 | 75 | 69 | 63 | 6B | 8E | 01 | 10 | 84 | 02 | 02 |
| | | 02 | | | | | | | | | | |

PROACTIVE COMMAND : PLAY TONE 1.1.15

Logically:

Command details

| | |
|--------------------|-----------|
| Command number: | 1 |
| Command type: | PLAY TONE |
| Command qualifier: | "00" |

Device identities

| | |
|---------------------|----------|
| Source device: | SIM |
| Destination device: | Earpiece |

Alpha identifier:

Tone: Standard supervisory tones: Error / Special information

Duration

| | |
|----------------|---------|
| Time unit: | Minutes |
| Time interval: | 1 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 19 | 81 | 03 | 01 | 20 | 00 | 82 | 02 | 81 | 03 | 85 |
| | 07 | 3B | 41 | 42 | 4F | 52 | 54 | 3E | 8E | 01 | 06 | 84 |
| | 02 | 00 | 01 | | | | | | | | | |

PROACTIVE COMMAND : PLAY TONE 1.1.16

Logically:

Command details

| | |
|--------------------|-----------|
| Command number: | 1 |
| Command type: | PLAY TONE |
| Command qualifier: | "00" |

Device identities

| | |
|---------------------|----------|
| Source device: | SIM |
| Destination device: | Earpiece |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 09 | 81 | 03 | 01 | 20 | 00 | 82 | 02 | 81 | 03 |
|----------|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 1.2 (PLAY TONE, backwards move key not interacting with play tone)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: PLAY TONE 1.1.17 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : PLAY TONE 1.1.17 | |
| 4 | ME → USER | Display "<GO-BACKWARDS>" | |
| 5 | USER → ME | The user presses the key which normally corresponds to Backwards move MMI action | |
| 6 | ME → SIM | TERMINAL RESPONSE : PLAY TONE 1.1.17 | [Command performed successfully] |
| 7 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

PROACTIVE COMMAND : PLAY TONE 1.1.17

Logically:

| | |
|---------------------|---------------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | PLAY TONE |
| Device identities | |
| Source device: | SIM |
| Destination device: | Earpiece |
| Alpha identifier: | "<GO-BACKWARDS>" |
| Tone: | Standard supervisory tones: dial tone |
| Duration | |
| Time unit: | Seconds |
| Time interval: | 5 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 20 | 81 | 03 | 01 | 20 | 00 | 82 | 02 | 81 | 03 | 85 |
| | 0E | 3C | 47 | 4F | 2D | 42 | 41 | 43 | 4B | 57 | 41 | 52 |
| | 44 | 53 | 3E | 8E | 01 | 01 | 84 | 02 | 01 | 05 | | |

TERMINAL RESPONSE : PLAY TONE 1.1.17

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | PLAY TONE |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 20 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE : PLAY TONE 1.1.1 ... 1.1.9, 1.1.16

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | PLAY TONE |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 20 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE : PLAY TONE 1.1.10a ... 1.1.14a

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | PLAY TONE |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

BER-TLV: 81 03 01 20 00 82 02 82 81 83 01 00

TERMINAL RESPONSE : PLAY TONE 1.1.10b ..1.1.10b

Logically:

| | |
|---------------------|----------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | PLAY TONE |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command beyond ME's capabilities |

Coding:

BER-TLV: 81 03 01 20 00 82 02 82 81 83 01 30

TERMINAL RESPONSE : PLAY TONE 1.1.15

Logically:

| | |
|---------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | PLAY TONE |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Proactive SIM session terminated by user |

Coding:

BER-TLV: 81 03 01 20 00 82 02 82 81 83 01 10

27.22.4.5.5 Test Requirement

The ME shall operate in the manner defined in expected sequences

27.22.4.6 POLL INTERVAL

27.22.4.6.1 Definition and applicability

See Section 3.2.2.

27.22.4.6.2 Conformance Requirement

The ME shall support the POLL INTERVAL command as defined in the following technical specifications :

3GPP TS 11.14 [15] clause 6.1, clause 6.4.6 (Poll interval), 6.6.6. (Poll interval), clause 5.2 (Terminal profile), clause 12.6 (Command details), clause 12.7 (Device identities), clause 12.8 (Duration)

27.22.4.6.3 Test Purpose

To verify that the ME shall send a TERMINAL RESPONSE (OK) to the SIM after the ME receives the POLL INTERVAL proactive SIM command.

To verify that the ME gives a valid response to the polling interval requested by the SIM.

To verify that the ME sends STATUS commands to the SIM at an interval no longer than the interval negotiated by the SIM.

27.22.4.6.4 Method of Test

27.22.4.6.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.6.4.2 Procedure

Expected Sequence 1.1 (POLL INTERVAL, Seconds)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: POLL INTERVAL 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : POLL INTERVAL 1.1.1 | [Duration: 20 seconds] |
| 4 | ME → SIM | TERMINAL RESPONSE : POLL INTERVAL 1.1.1 | [Command performed successfully] |
| 5 | ME | ME polls in intervals of 20 seconds | |

PROACTIVE COMMAND : POLL INTERVAL 1.1.1

Logically:

| | |
|---------------------|---------------|
| Command details | |
| Command number: | 1 |
| Command type: | POLL INTERVAL |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| Duration | |
| Time unit: | Seconds |
| Time interval: | 20 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0D | 81 | 03 | 01 | 03 | 00 | 82 | 02 | 81 | 82 | 84 |
| | 02 | 01 | 14 | | | | | | | | | |

TERMINAL RESPONSE : POLL INTERVAL 1.1.1

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | POLL INTERVAL |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Duration | |
| Time unit: | Seconds |
| Time interval: | 20 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 02 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 82 | 02 | 01 | 14 | | | | | | | | |

27.22.4.6.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 1.

27.22.4.7 REFRESH**27.22.4.7.1 REFRESH (normal)****27.22.4.7.1.1 Definition and applicability**

See Section 3.2.2.

27.22.4.7.1.2 Conformance requirement

The ME shall support the REFRESH command as defined in the following technical specifications :

3GPP TS 11.14 [15] clause 6.1, clause 6.4.7 (Refresh), 6.6.13.(Refresh), clause 5.2 (Terminal profile), clause 12.6 (Command details), clause 12.7 (Device identities), clause 12.18 (File list)

27.22.4.7.1.3 Test Purpose

To verify that the ME performs the SIM initialisation and / or re-reads the contents and structure of the EFs on the SIM that have been changed and / or restarts the card session by resetting the ME, and successfully returns the result of the execution of the command in the TERMINAL RESPONSE command send to the SIM.

27.22.4.7.1.4 Method of test

27.22.4.7.1.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The elementary files for the second SIM Simulator are coded as SIM Application Toolkit default with the following exceptions.

EF_{FDN} (Fixed Dialling Numbers)

Logically:

At least 10 records

Record 1:

| | |
|-----------------------------|-----------------------|
| Length of alpha identifier: | 32 characters |
| Alpha identifier: | "ABC" |
| Length of BCD number: | "03" |
| TON and NPI: | Telephony and Unknown |
| Dialled number: | 123 |
| CCI: | None |
| Ext2: | None |

| Coding: | B1 | B2 | B3 | B4 | ... | B32 | B33 | B34 | B35 | B36 | B37 | ... | B46 |
|-----------|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Record 1: | 41 | 42 | 43 | FF | ... | FF | 03 | 81 | 21 | F3 | FF | ... | FF |

Record 2:

| | |
|-----------------------------|-----------------------|
| Length of alpha identifier: | 32 characters |
| Alpha identifier: | "DEF" |
| Length of BCD number: | "04" |
| TON and NPI: | Telephony and Unknown |
| Dialled number: | 9876 |
| CCI: | None |
| Ext2: | None |

| Coding: | B1 | B2 | B3 | B4 | ... | B32 | B33 | B34 | B35 | B36 | B37 | ... | B46 |
|-----------|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Record 1: | 44 | 45 | 46 | FF | ... | FF | 03 | 81 | 89 | 67 | FF | ... | FF |

27.22.4.7.1.4.2 Procedure

Expected Sequence 1.1 (REFRESH, SIM Initialisation)

| Step | Direction | MESSAGE / Action | Comments |
|------|--------------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: REFRESH 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: REFRESH 1.1.1 | |
| 4 | SIM | Invalidate EF IMSI, EF LOCI and EF ADN | [Restricted dialling feature is enabled] |
| 5 | ME → SIM | SIM Initialisation | [ME performs SIM initialisation] |
| 6 | ME → SIM | TERMINAL RESPONSE: REFRESH 1.1.1A Or TERMINAL RESPONSE: REFRESH 1.1.1B | |
| 7 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 8 | USER → ME | Call setup to "321" | |
| 9 | ME → USER | Call set up not allowed | |
| 10 | USER → ME | Call setup to "123" | |
| 11 | ME → SS | Setup | Called party BCD number shall be "123" |

PROACTIVE COMMAND : REFRESH 1.1.1

Logically:

Command details

| | |
|--------------------|--------------------|
| Command number: | 1 |
| Command type: | REFRESH |
| Command qualifier: | SIM Initialisation |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Coding:

BER-TLV: D0 09 81 03 01 01 03 82 02 81 82

TERMINAL RESPONSE : REFRESH 1.1.1A

Logically:

Command details

| | |
|--------------------|--------------------|
| Command number: | 1 |
| Command type: | REFRESH |
| Command qualifier: | SIM Initialisation |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|--------------------------------|
| General Result: | Command performed successfully |
|-----------------|--------------------------------|

Coding:

BER-TLV: 81 03 01 01 03 82 02 81 82 83 01 00

TERMINAL RESPONSE : REFRESH 1.1.1B

Logically:

| Command details | |
|---------------------|--|
| Command number: | 1 |
| Command type: | REFRESH |
| Command qualifier: | SIM Initialisation |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | REFRESH performed with additional EFs read |

Coding:

BER-TLV: 81 03 01 01 03 82 02 81 82 83 01 03

Expected Sequence 1.2 (REFRESH, File Change Notification)

| Step | Direction | MESSAGE / Action | Comments |
|------|--------------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: REFRESH 1.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: REFRESH 1.2.1 | |
| 4 | SIM | Invalidate EF IMSI, EF LOCI and EF ADN | [Restricted dialling feature is enabled] |
| 5 | SIM | Update EF FDN RECORD 1 | [EF FDN record 1 updated to contain the dialling string "0123456789"] |
| 6 | ME → SIM | READ RECORD: EF FDN | |
| 7 | ME → SIM | TERMINAL RESPONSE: REFRESH 1.2.1A Or TERMINAL RESPONSE: REFRESH 1.2.1B | [normal ending] [additional EFs read] |
| 8 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 9 | USER → ME | Call setup to "123" | |
| 10 | ME → USER | Call set up not allowed | |
| 11 | USER → ME | Call setup to "0123456789" | |
| 12 | ME → SS | Setup | Called party BCD number shall be "0123456789" |

PROACTIVE COMMAND : REFRESH 1.2.1

Logically:

| | |
|---------------------|--------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | REFRESH |
| Command qualifier: | File Change Notification |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| File List: | EF FDN |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 12 | 81 | 03 | 01 | 01 | 01 | 82 | 02 | 81 | 82 | 92 |
| | 07 | 01 | 3F | 00 | 7F | 10 | 6F | 3B | | | | |

TERMINAL RESPONSE : REFRESH 1.2.1A

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | REFRESH |
| Command qualifier: | File Change Notification |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 01 | 01 | 82 | 02 | 81 | 82 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE : REFRESH 1.2.1B

Logically:

| | |
|---------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | REFRESH |
| Command qualifier: | File Change Notification |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | REFRESH performed with additional EFs read |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 01 | 01 | 82 | 02 | 81 | 82 | 83 | 01 | 03 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence .13 (REFRESH, SIM Initialisation and File Change Notification)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: REFRESH 1.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: REFRESH 1.3.1 | |
| 4 | SIM | Update EF PLMN | [EF PLMN to contain the PLMN code "98798" as the first PLMN code] |
| 5 | ME → SIM | READ BINARY: EF PLMN | |
| 6 | ME → SIM | TERMINAL RESPONSE: REFRESH 1.3.1A Or TERMINAL RESPONSE: REFRESH 1.3.1B | [normal ending] |
| 7 | SIM → ME | PROACTIVE SIM SESSION ENDED | [additional EFs read] |

PROACTIVE COMMAND : REFRESH 1.3.1

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | REFRESH |
| Command qualifier: | SIM Initialisation and File Change Notification |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| File List: | EF PLMN |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 12 | 81 | 03 | 01 | 01 | 02 | 82 | 02 | 81 | 82 | 92 |
| | 07 | 01 | 3F | 00 | 7F | 20 | 6F | 30 | | | | |

TERMINAL RESPONSE : REFRESH 1.3.1A

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | REFRESH |
| Command qualifier: | SIM Initialisation and File Change Notification |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 01 | 02 | 82 | 02 | 81 | 82 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE : REFRESH 1.3.1B

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | REFRESH |
| Command qualifier: | SIM Initialisation and File Change Notification |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | REFRESH performed with additional EFs read |

Coding:

BER-TLV: 81 03 01 01 02 82 02 81 82 83 01 03

Expected Sequence 1.4 (REFRESH, SIM Initialisation and Full File Change Notification)

| Step | Direction | MESSAGE / Action | Comments |
|------|--------------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: REFRESH 1.4.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: REFRESH 1.4.1 | |
| 4 | SIM | Invalidate EF IMSI, EF LOCI and EF ADN | [Restricted dialling feature is enabled] |
| 5 | SIM | Update EF FDN | [EF FDN record 1 updated to contain the dialling string "0123456789"] |
| 6 | ME → SIM | SIM Initialisation | [ME performs SIM initialisation] |
| 7 | ME → SIM | TERMINAL RESPONSE: REFRESH 1.4.1A | |
| 8 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 9 | USER → ME | Call setup to "321" | |
| 10 | ME → USER | Call set up not allowed | |
| 11 | USER → ME | Call setup to "0123456789" | |
| 12 | ME → SS | Setup | Called party BCD number shall be "0123456789" |

PROACTIVE COMMAND : REFRESH 1.4.1A

Logically:

| | |
|---------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | REFRESH |
| Command qualifier: | SIM Initialisation and Full File Change Notification |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |

Coding:

BER-TLV: D0 09 81 03 01 01 00 82 02 81 82

TERMINAL RESPONSE : REFRESH 1.4.1A

Logically:

| Command details | |
|---------------------|--------------------------------|
| Command number: | 1 |
| Command type: | REFRESH |
| Command qualifier: | SIM Initialisation |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

BER-TLV: 81 03 01 01 02 82 02 81 82 83 01 00

Expected Sequence 1.5 (REFRESH, SIM Reset)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: REFRESH 1.5.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: REFRESH 1.5.1 | |
| 4 | ME → SIM | GSM Termination Procedure | |
| 5 | ME → SIM | GSM Activation Procedure | [At same voltage] |
| 6 | ME → SIM | SIM Initialisation | |
| 7 | ME → SIM | | [NO TERMINAL RESPONSE] |

PROACTIVE COMMAND : REFRESH 1.5.1

Logically:

| Command details | |
|---------------------|-----------|
| Command number: | 1 |
| Command type: | REFRESH |
| Command qualifier: | SIM Reset |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 09 | 81 | 03 | 01 | 01 | 04 | 82 | 02 | 81 | 82 |
|----------|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 1.6 (REFRESH, SIM Initialisation after SMS-PP data download)

| Step | Direction | MESSAGE / Action | Comments |
|-------------|------------------|---|--|
| 1 | ME | The ME shall be in its normal idle mode | [Start a sequence to verify that the ME returns the RP-ACK message back to the system Simulator, if the SIM responds with '90 00'] |
| 2 | SS → ME | SMS-PP Data Download Message 1.6.1 | |
| 3 | ME → USER | The ME shall not display the message or alert the user of a short message waiting | |
| 4 | ME → SIM | ENVELOPE: SMS-PP DOWNLOAD 1.6.1 | |
| 5 | SIM → ME | PROACTIVE COMMAND PENDING: REFRESH 1.1.1 | |
| 6 | ME → SS | RP-ACK | |
| 7 | ME → SIM | FETCH | |
| 8 | SIM → ME | PROACTIVE COMMAND: REFRESH 1.1.1 | |
| 9 | SIM | Invalidate EF IMSI, EF LOCI and EF ADN | [Restricted dialling feature is enabled] |
| 10 | ME → SIM | SIM Initialisation | [ME performs SIM initialisation] |
| 11 | ME → SIM | TERMINAL RESPONSE: REFRESH 1.1.1A Or TERMINAL RESPONSE: REFRESH 1.1.1B | |
| 12 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 13 | USER → ME | Call setup to "321" | |
| 14 | ME → USER | Call set up not allowed | |
| 15 | USER → ME | Call setup to "123" | |
| 16 | ME → SS | Setup | Called party BCD number shall be "123" |

SMS-PP (Data Download) Message 1.6.1

Logically:

| | |
|---------------|---|
| SMS TPDU | SMS-DELIVER |
| TP-MTI | No more messages waiting for the MS in this SC |
| TP-MMS | TP-Reply-Path is not set in this SMS-DELIVER |
| TP-RP | TP-UD field contains only the short message |
| TP-UDHI | A status report will not be returned to the SME |
| TP-SRI | |
| TP-OA | |
| TON | International number |
| NPI | "ISDN / telephone numbering plan" |
| Address value | "1234" |
| TP-PID | SIM Data download |
| TP-DCS | |
| Coding Group | General Data Coding |
| Compression | Text is uncompressed |
| Message Class | Class 2 SIM Specific Message |
| Alphabet | Default Alphabet |
| TP-SCTS: | 01/01/98 00:00:00 +0 |
| TP-UDL | 13 |
| TP-UD | "Short Message" |

Coding:

| | | | | | | | | | | | | |
|---------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV | 04 | 03 | 91 | 21 | 43 | 7F | 12 | 89 | 10 | 10 | 00 | 00 |
| | 00 | 00 | 0D | 53 | F4 | 5B | 4E | 07 | 35 | CB | F3 | 79 |
| | F8 | 5C | 06 | | | | | | | | | |

ENVELOPE: SMS-PP DOWNLOAD 1.6.1

Logically:

| | |
|------------------------|---|
| SMS-PP Download | |
| Device identities | |
| Source device: | Network |
| Destination device: | SIM |
| Address | |
| TON | International number |
| NPI | "ISDN / telephone numbering plan" |
| Dialling number string | "112233445566778" |
| SMS TPDU | |
| TP-MTI | SMS-DELIVER |
| TP-MMS | No more messages waiting for the MS in this SC |
| TP-RP | TP-Reply-Path is not set in this SMS-DELIVER |
| TP-UDHI | TP-UD field contains only the short message |
| TP-SRI | A status report will not be returned to the SME |
| TP-OA | |
| TON | International number |
| NPI | "ISDN / telephone numbering plan" |
| Address value | "1234" |
| TP-PID | SIM Data download |
| TP-DCS | |
| Coding Group | General Data Coding |
| Compression | Text is uncompressed |
| Message Class | Class 2 SIM Specific Message |
| Alphabet | Default Alphabet |
| TP-SCTS: | 01/01/98 00:00:00 +0 |
| TP-UDL | 13 |
| TP-UD | "Short Message" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D1 | 2C | 82 | 02 | 83 | 81 | 06 | 09 | 91 | 11 | 22 | 33 |
| | 44 | 55 | 66 | 77 | F8 | 8B | 1B | 04 | 04 | 91 | 21 | 43 |
| | 7F | 12 | 89 | 10 | 10 | 00 | 00 | 00 | 00 | 0D | 53 | F4 |
| | 5B | 4E | 07 | 35 | CB | F3 | 79 | F8 | 5C | 06 | | |

27.22.4.7.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 1, 2, 3, 4 and 5.

27.22.4.7.2 REFRESH (IMSI changing procedure)

27.22.4.7.2.1 Definition and applicability

See Section 3.2.2.

27.22.4.7.2.2 Conformance requirement

The ME shall support the REFRESH command as defined in the following technical specifications :

3GPP TS 11.14 [15] clause 6.1, clause 6.4.7 (Refresh), 6.6.13.(Refresh), clause 5.2 (Terminal profile), clause 12.6 (Command details), clause 12.7 (Device identities), clause 12.18 (File list)

Additionally the ME shall support the SIM Initialisation procedure as defined in the following technical specifications:

3GPP TS 11.11 [13] clause 12.2.1

27.22.4.7.2.3 Test Purpose

To verify that the ME performs the SIM initialisation and / or re-reads the contents and structure of the EFs on the SIM that have been changed and / or restarts the card session by resetting the ME, and successfully returns the result of the execution of the command in the TERMINAL RESPONSE command send to the SIM.

27.22.4.7.2.4 Method of test

27.22.4.7.2.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default with the following exceptions.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The elementary files for the second SIM Simulator are coded as SIM Application Toolkit default with the following exceptions.

27.22.4.7.2.4.2 Procedure

Expected Sequence 2.1 (REFRESH, SIM Initialisation and File Change Notification)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: REFRESH 2.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: REFRESH 2.1.1 | |
| 4 | SIM | Update EF IMSI, EF LOCI and EF KC | [Update the contents of EF IMSI to "001010123456788", EF LOCI to not updated and EF KC to not valid] |
| 5 | ME | Invoke MM Restart Procedure | |
| 6 | ME → SIM | SIM INITIALISATION | [ME performs SIM initialisation; including reading EF IMSI, EF LOCI and EF KC] |
| 7 | ME → SIM | TERMINAL RESPONSE: REFRESH 2.1.1A Or TERMINAL RESPONSE: REFRESH 2.1.1B | [normal] |
| 8 | SIM → ME | PROACTIVE SIM SESSION ENDED | [additional EFs read] |
| 9 | ME → SS | Location updating request (type "normal location updating") | [Send IMSI of "001010123456788" to System Simulator] |

PROACTIVE COMMAND : REFRESH 2.1.1

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | REFRESH |
| Command qualifier: | SIM Initialisation and File Change Notification |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| File List | |
| File 1: | EF IMSI |
| File 2: | EF LOCI |
| File 3: | EF KC |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 20 | 81 | 03 | 01 | 01 | 02 | 82 | 02 | 81 | 82 | 92 |
| | 13 | 03 | 3F | 00 | 7F | 20 | 6F | 07 | 3F | 00 | 7F | 20 |
| | 6F | 7E | 3F | 00 | 7F | 20 | 6F | 20 | | | | |

TERMINAL RESPONSE : REFRESH 2.1.1A

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | REFRESH |
| Command qualifier: | SIM Initialisation and File Change Notification |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 01 | 02 | 82 | 02 | 81 | 82 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE : REFRESH 2.1.1B

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | REFRESH |
| Command qualifier: | SIM Initialisation and File Change Notification |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | REFRESH performed with additional EFs read |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 01 | 02 | 82 | 02 | 81 | 82 | 83 | 01 | 03 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 2.2 (REFRESH, SIM Initialisation and Full File Change Notification)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: REFRESH 2.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: REFRESH 2.2.1 | |
| 4 | SIM | Update EF IMSI | [Update the contents of EF IMSI to "001010123456787", -] |
| 5 | ME | Invoke MM Restart Procedure | |
| 6 | ME → SIM | SIM INITIALISATION | [ME performs SIM initialisation; including reading EF IMSI, EF LOCI and EF KC] |
| 7 | ME → SIM | TERMINAL RESPONSE: REFRESH 2.2.1 | [normal] |
| 8 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 9 | ME → SS | IMSI ATTATCH | [Send IMSI of "001010123456787" to System Simulator] |

PROACTIVE COMMAND : REFRESH 2.2.1

Logically:

Command details

| | |
|--------------------|--|
| Command number: | 1 |
| Command type: | REFRESH |
| Command qualifier: | SIM Initialisation and Full File Change Notification |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 09 | 81 | 03 | 01 | 01 | 00 | 82 | 02 | 81 | 82 |
|----------|----|----|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE : REFRESH 2.2.1

Logically:

Command details

| | |
|--------------------|---|
| Command number: | 1 |
| Command type: | REFRESH |
| Command qualifier: | SIM Initialisation and File Change Notification |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|--------------------------------|
| General Result: | Command performed successfully |
|-----------------|--------------------------------|

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 01 | 00 | 82 | 02 | 81 | 82 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 2.3 (REFRESH, SIM Reset)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: REFRESH 2.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: REFRESH 2.3.1 | |
| 4 | SIM | Update EF IMSI | [Update the contents of EF IMSI to "001010123456786"] |
| 5 | ME → SIM | GSM Termination Procedure | |
| 6 | ME → SIM | GSM Activation Procedure | [At same voltage] |
| 7 | ME → SIM | SIM Initialisation | [ME performs SIM initialisation; including reading EF IMSI, EF LOCI and EF KC] |
| 8 | ME → SS | IMSI ATTATCH | [Send IMSI of "001010123456786" to System Simulator] |

PROACTIVE COMMAND : REFRESH 2.3.1

Logically:

| | |
|---------------------|-----------|
| Command details | |
| Command number: | 1 |
| Command type: | REFRESH |
| Command qualifier: | SIM Reset |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 09 | 81 | 03 | 01 | 01 | 04 | 82 | 02 | 81 | 82 |
|----------|----|----|----|----|----|----|----|----|----|----|----|

27.22.4.7.2.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 1, 2 and 3.

27.22.4.8 SET UP MENU and ENVELOPE MENU SELECTION

27.22.4.8.1 SET UP MENU and ENVELOPE MENU SELECTION (normal)

27.22.4.8.1.1 Definition and applicability

See Section 3.2.2.

27.22.4.8.1.2 Conformance Requirement

The ME shall support the SET UP MENU command as defined in the following technical specifications:

3GPP TS 11.14 clause 5 (Profile download), 6.4.8 (SET UP MENU), 6.6.7 (SET UP MENU), 6.8 (Structure of TERMINAL RESPONSE), 6.11 (Proactive commands versus possible Terminal response), 12.6 (Command details), 12.9 (Item), 13.4 (Type of Command and Next Action Indicator).

The ME shall support MENU SELECTION as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 4.4 (Menu Selection mechanism), 5.2 (Terminal Profile), clause 6.4.8 (Set Up Menu), clause 6.9, clause 8 (Menu Selection), clause 12.7 (Device Identities), clause 12.10 (Item Identifier).

27.22.4.8.1.3 Test Purpose

To verify that the ME correctly integrates the menu items contained in the SET UP MENU proactive SIM command, and returns a successful response in the TERMINAL RESPONSE command sent to the SIM.

To verify that the ME replaces the current list of menu items with the list of menu items contained in the SET UP MENU command.

To verify that the ME removes the current list of menu items following receipt of a SET UP MENU command with no items.

To verify that the ME correctly passes the identifier of the selected menu item to the SIM using the ENVELOPE (MENU SELECTION) command.

To verify that when the help is available for the command and the user has indicated the need to get help information on one of the items, the ME informs properly the SIM about an HELP REQUEST, using the MENU SELECTION mechanism.

27.22.4.8.1.4 Method of Test

27.22.4.8.1.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

The ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display

27.22.4.8.1.4.2 Procedure

Expected Sequence 1.1 (SET UP MENU and MENU SELECTION, without Help Request, Replace and Remove a Toolkit Menu)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SS → ME | PROACTIVE COMMAND PENDING: SET UP MENU 1.1.1 | [First Set Up Menu] |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND SET UP MENU 1.1.1 | |
| 4 | ME → USER | Integrate the menu header of "Toolkit Menu" into its menu system and have the menu items of "Item 1", "Item 2", "Item 3" and "Item 4" under this header. | |
| 5 | ME → SIM | TERMINAL RESPONSE: SET UP MENU 1.1.1 | [Command Performed Successfully] |
| 6 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 7 | USER → ME | Select the Toolkit Menu "Toolkit Menu" | |
| 8 | ME → USER | Display "Item 1", "Item 2", "Item 3", "Item 4" | |
| 9 | USER → ME | Select the "Item 2" Menu entry | |
| 10 | ME → SIM | Send the ENVELOPE 1.1.1 : MENU SELECTION (Identifier of item: 2) | |
| 11 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP MENU 1.1.2 | [Second Set Up Menu, REPLACE Old Menu] |
| 12 | ME → SIM | FETCH | |
| 13 | SIM → ME | PROACTIVE COMMAND SET UP MENU 1.1.2 | |
| 14 | ME → USER | Integrate the new menu header of "Toolkit Menu" into its menu system and have the menu items of "One" and "Two" under this header. | |
| 15 | ME → SIM | TERMINAL RESPONSE: SET UP MENU 1.1.2 | [Command Performed Successfully] |
| 16 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 17 | USER → ME | Select the Toolkit Menu "Toolkit Menu" | |
| 18 | ME → USER | Display "One", "Two" | |
| 19 | USER → ME | Select the "Two" menu entry | |
| 20 | ME → SIM | Send the ENVELOPE 1.1.2 : MENU SELECTION (Identifier of item: 12) | |
| 21 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP MENU 1.1.3 with SW1 / SW2 of '91 0F'. | [Third Set Up Menu, REMOVE Toolkit Menu] |
| 22 | ME → SIM | FETCH | |
| 23 | SIM → ME | PROACTIVE COMMAND SET UP MENU 1.1.3 | |
| 24 | ME → USER | Remove the menu "Toolkit Menu" from its menu system. | |
| 25 | ME → SIM | TERMINAL RESPONSE: SET UP MENU 1.1.3 | [Command Performed Successfully] |
| 26 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

| | | | |
|----|------------|--|--|
| 27 | USER ME | → Has to unsuccessfully find the Toolkit Menu | |
|----|------------|--|--|

PROACTIVE COMMAND : SET UP MENU 1.1.1

Logically:

| | |
|----------------------|----------------|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP MENU |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| Alpha identifier: | "Toolkit Menu" |
| Item | |
| Identifier of item: | 1 |
| Text string of item: | "Item 1" |
| Item | |
| Identifier of item: | 2 |
| Text string of item: | "Item 2" |
| Item | |
| Identifier of item: | 3 |
| Text string of item: | "Item 3" |
| Item | |
| Identifier of item: | 4 |
| Text string of item: | "Item 4" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 3B | 81 | 03 | 01 | 25 | 00 | 82 | 02 | 81 | 82 | 85 |
| | 0C | 54 | 6F | 6F | 6C | 6B | 69 | 74 | 20 | 4D | 65 | 6E |
| | 75 | 8F | 07 | 01 | 49 | 74 | 65 | 6D | 20 | 31 | 8F | 07 |
| | 02 | 49 | 74 | 65 | 6D | 20 | 32 | 8F | 07 | 03 | 49 | 74 |
| | 65 | 6D | 20 | 33 | 8F | 07 | 04 | 49 | 74 | 65 | 6D | 20 |
| | 34 | | | | | | | | | | | |

PROACTIVE COMMAND : SET UP MENU 1.1.2

Logically:

| | |
|----------------------|----------------|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP MENU |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| Alpha identifier: | "Toolkit Menu" |
| Item | |
| Identifier of item: | "11" |
| Text string of item: | "One" |
| Item | |
| Identifier of item: | "12" |
| Text string of item: | "Two" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 23 | 81 | 03 | 01 | 25 | 00 | 82 | 02 | 81 | 82 | 85 |
| | 0C | 54 | 6F | 6F | 6C | 6B | 69 | 74 | 20 | 4D | 65 | 6E |
| | 75 | 8F | 04 | 11 | 4F | 6E | 65 | 8F | 04 | 12 | 54 | 77 |
| | 6F | | | | | | | | | | | |

PROACTIVE COMMAND : SET UP MENU 1.1.3

Logically:

| | |
|---------------------|-------------|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP MENU |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| Item: | Empty |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0D | 81 | 03 | 01 | 25 | 00 | 82 | 02 | 81 | 82 | 85 |
| | 00 | 8F | | 00 | | | | | | | | |

TERMINAL RESPONSE : SET UP MENU 1.1.1, 1.1.2 and 1.1.3

Logically:

| | |
|---------------------|---------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP MENU |
| Command qualifier: | "no help information available" |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 25 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

ENVELOPE 1.1.1 : MENU SELECTION

Logically:

Menu selection
Device identities
 Source device: Keypad
 Destination device: SIM
 Item identifier 02

Coding:

BER-TLV: D3 07 81 02 01 81 90 01 02

ENVELOPE 1.2 : MENU SELECTION

Logically:

Menu selection
Device identities
 Source device: Keypad
 Destination device: SIM
 Item identifier 12

Coding:

BER-TLV: D3 07 81 02 01 81 90 01 12

Expected Sequence 1.2 (SET UP MENU, Large Menu with many items or with large items or with Large Alpha Identifier)

| | | | |
|----|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP MENU 1.2.1 | [First Large Menu with many items, Fetch of FF bytes] |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND SET UP MENU 1.2.1 | |
| 4 | ME → USER | Integrate the new menu header of "LargeMenu1" into its menu system and have the menu items of "Zero", "One", "Two", "Three", "Four", "Five", "Six", "Seven", "Eight", "Nine", "Alpha", "Bravo", "Charlie", "Delta", "Echo", "Fox-trot", "Black", "Brown", "Red", "Orange", "Yellow", "Green", "Blue", "Violet", "Grey", "White", "milli", "micro", "nano" and "pico" under this header. | |
| 5 | ME → SIM | TERMINAL RESPONSE: SET UP MENU 1.2.1 | [Command Performed Successfully] |
| 6 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 7 | USER → ME | Select the Toolkit "LargeMenu1" | |
| 8 | ME → USER | Display "Zero", "One", "Two" ... "pico" | |
| 9 | USER → ME | Select the "Orange" menu entry | |
| 10 | ME → SIM | Send the ENVELOPE 1.2.1 : MENU SELECTION (Identifier of item: 0x3D) | |
| 11 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP MENU 1.2.2 | [Second Large Menu with large items, Fetch of F6 bytes] |
| 12 | ME → SIM | FETCH | |
| 13 | SIM → ME | PROACTIVE COMMAND SET UP MENU 1.2.2 | |
| 14 | ME → USER | Integrate the new menu header of "LargeMenu2" into its menu system and have the menu items of "1 Call Forward Unconditional", "2 Call Forward On User Busy", "3 Call Forward On No Reply", "4 Call Forward On User Not Reachable", "5 Barring Of All Outgoing Calls", "6 Barring Of All Outgoing Int Calls" and "7 CLI Presentation" under this header. | |
| 15 | ME → SIM | TERMINAL RESPONSE: SET UP MENU 1.2.2 | [Command Performed Successfully] |
| 16 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 17 | USER → ME | Select the Toolkit Menu "LargeMenu2" | |
| 18 | ME → USER | Display "1 Call Forward Unconditional", "2 Call Forward On User Busy", "3 Call Forward On No Reply", "4 Call Forward On User Not Reachable", "5 Barring Of All Outgoing Calls", "6 Barring Of All Outgoing Int Calls", "7 CLI Presentation" | |

| | | | |
|----|-----------|---|---|
| 19 | USER → ME | Select the "5 Barring Of All Outgoing Calls" menu entry | |
| 20 | ME → SIM | Send the ENVELOPE 1.2.2 : MENU SELECTION (Identifier of item: 0xFB) | |
| 21 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP MENU 1.2.3 | [Third Large Menu with a Large Alpha Identifier and only one Short Item, Fetch of FF bytes] |
| 22 | ME → SIM | FETCH | |
| 23 | SIM → ME | PROACTIVE COMMAND SET UP MENU 1.2.3 | |
| 24 | ME → USER | Integrate the new menu header of " The SIM shall supply a set of menu items, which shall be integrated with the menu system (or other MMI facility) in order to give the user the opportunity to choose one of these menu items at his own discretion. Each item comprises a sh" into it's menu system and have a menu item of "Y" under this header. | |
| 25 | ME → SIM | TERMINAL RESPONSE: SET UP MENU 1.2.3 | [Command Performed Successfully] |
| 26 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 5 | USER → ME | Select the Toolkit Menu "The SIM shall supply a set of menu items, which shall be integrated with the menu system (or other MMI facility) in order to give the user the opportunity to choose one of these menu items at his own discretion. Each item comprises a sh". | |
| 6 | ME → USER | Display "Y" | |
| 7 | USER → ME | Select the item "Y" | |
| 8 | ME → SIM | Send the ENVELOPE 1.1.6 : MENU SELECTION (Identifier of item: 1) | |

PROACTIVE COMMAND : SET UP MENU 1.2.1

Logically:

| | |
|----------------------|--------------|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP MENU |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| Alpha Identifier: | "LargeMenu1" |
| Item | |
| Identifier of item: | "50" |
| Text string of item: | "Zero" |
| Item | |
| Identifier of item: | "4F" |
| Text string of item: | "One" |
| Item | |
| Identifier of item: | "4E" |
| Text string of item: | "Two" |
| Item | |
| Identifier of item: | "4D" |
| Text string of item: | "Three" |
| Item | |
| Identifier of item: | "4C" |
| Text string of item: | "Four" |
| Item | |
| Identifier of item: | "4B" |
| Text string of item: | "Five" |
| Item | |
| Identifier of item: | "4A" |
| Text string of item: | "Six" |
| Item | |
| Identifier of item: | "49" |
| Text string of item: | "Seven" |
| Item | |
| Identifier of item: | "48" |
| Text string of item: | "Eight" |
| Item | |
| Identifier of item: | "47" |
| Text string of item: | "Nine" |

| | |
|----------------------|------------|
| Item | |
| Identifier of item: | "46" |
| Text string of item: | "Alpha" |
| Item | |
| Identifier of item: | "45" |
| Text string of item: | "Bravo" |
| Item | |
| Identifier of item: | "44" |
| Text string of item: | "Charlie" |
| Item | |
| Identifier of item: | "43" |
| Text string of item: | "Delta" |
| Item | |
| Identifier of item: | "42" |
| Text string of item: | "Echo" |
| Item | |
| Identifier of item: | "41" |
| Text string of item: | "Fox-trot" |
| Item | |
| Identifier of item: | "40" |
| Text string of item: | "Black" |
| Item | |
| Identifier of item: | "3F" |
| Text string of item: | "Brown" |
| Item | |
| Identifier of item: | "3E" |
| Text string of item: | "Red" |
| Item | |
| Identifier of item: | "3D" |
| Text string of item: | "Orange" |
| Item | |
| Identifier of item: | "3C" |
| Text string of item: | "Yellow" |
| Item | |
| Identifier of item: | "3B" |
| Text string of item: | "Green" |
| Item | |
| Identifier of item: | "3A" |
| Text string of item: | "Blue" |
| Item | |
| Identifier of item: | "39" |
| Text string of item: | "Violet" |
| Item | |
| Identifier of item: | "38" |
| Text string of item: | "Grey" |
| Item | |
| Identifier of item: | "37" |
| Text string of item: | "White" |
| Item | |
| Identifier of item: | "36" |
| Text string of item: | "milli" |
| Item | |
| Identifier of item: | "35" |
| Text string of item: | "micro" |
| Item | |
| Identifier of item: | "34" |
| Text string of item: | "nano" |
| Item | |
| Identifier of item: | "33" |
| Text string of item: | "pico" |

Coding:

| BER-TLV: | D0 | 81 | FC | 81 | 03 | 01 | 25 | 00 | 82 | 02 | 81 | 82 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| | 85 | 0A | 4C | 61 | 72 | 67 | 65 | 4D | 65 | 6E | 75 | 31 |
| | 8F | 05 | 50 | 5A | 65 | 72 | 6F | 8F | 04 | 4F | 4F | 6E |
| | 65 | 8F | 04 | 4E | 54 | 77 | 6F | 8F | 06 | 4D | 54 | 68 |
| | 72 | 65 | 65 | 8F | 05 | 4C | 46 | 6F | 75 | 72 | 8F | 05 |
| | 4B | 46 | 69 | 76 | 65 | 8F | 04 | 4A | 53 | 69 | 78 | 8F |
| | 06 | 49 | 53 | 65 | 76 | 65 | 6E | 8F | 06 | 48 | 45 | 69 |
| | 67 | 68 | 74 | 8F | 05 | 47 | 4E | 69 | 6E | 65 | 8F | 06 |
| | 46 | 41 | 6C | 70 | 68 | 61 | 8F | 06 | 45 | 42 | 72 | 61 |
| | 76 | 6F | 8F | 08 | 44 | 43 | 68 | 61 | 72 | 6C | 69 | 65 |
| | 8F | 06 | 43 | 44 | 65 | 6C | 74 | 61 | 8F | 05 | 42 | 45 |
| | 63 | 68 | 6F | 8F | 09 | 41 | 46 | 6F | 78 | 2D | 74 | 72 |
| | 6F | 74 | 8F | 06 | 40 | 42 | 6C | 61 | 63 | 6B | 8F | 06 |
| | 3F | 42 | 72 | 6F | 77 | 6E | 8F | 04 | 3E | 52 | 65 | 64 |
| | 8F | 07 | 3D | 4F | 72 | 61 | 6E | 67 | 65 | 8F | 07 | 3C |
| | 59 | 65 | 6C | 6C | 6F | 77 | 8F | 06 | 3B | 47 | 72 | 65 |
| | 65 | 6E | 8F | 05 | 3A | 42 | 6C | 75 | 65 | 8F | 07 | 39 |
| | 56 | 69 | 6F | 6C | 65 | 74 | 8F | 05 | 38 | 47 | 72 | 65 |
| | 79 | 8F | 06 | 37 | 57 | 68 | 69 | 74 | 65 | 8F | 06 | 36 |
| | 6D | 69 | 6C | 6C | 69 | 8F | 06 | 35 | 6D | 69 | 63 | 72 |
| | 6F | 8F | 05 | 34 | 6E | 61 | 6E | 6F | 8F | 05 | 33 | 70 |
| | 69 | 63 | 6F | | | | | | | | | |

PROACTIVE COMMAND : SET UP MENU 1.2.2

Logically:

| | |
|----------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP MENU |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| Alpha Identifier: | "LargeMenu2" |
| Item | |
| Identifier of item: | "FF" |
| Text string of item: | "1 Call Forward Unconditional" |
| Item | |
| Identifier of item: | "FE" |
| Text string of item: | "2 Call Forward On User Busy" |
| Item | |
| Identifier of item: | "FD" |
| Text string of item: | "3 Call Forward On No Reply" |
| Item | |
| Identifier of item: | "FC" |
| Text string of item: | "4 Call Forward On User Not Reachable" |
| Item | |
| Identifier of item: | "FB" |
| Text string of item: | "5 Barring Of All Outgoing Calls" |
| Item | |
| Identifier of item: | "FA" |
| Text string of item: | "6 Barring Of All Outgoing Int Calls" |
| Item | |
| Identifier of item: | "F9" |
| Text string of item: | "7 CLI Presentation" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 81 | F3 | 81 | 03 | 01 | 25 | 00 | 82 | 02 | 81 | 82 |
| | 85 | 0A | 4C | 61 | 72 | 67 | 65 | 4D | 65 | 6E | 75 | 32 |
| | 8F | 1D | FF | 31 | 20 | 43 | 61 | 6C | 6C | 20 | 46 | 6F |
| | 72 | 77 | 61 | 72 | 64 | 20 | 55 | 6E | 63 | 6F | 6E | 64 |
| | 69 | 74 | 69 | 6F | 6E | 61 | 6C | 8F | 1C | FE | 32 | 20 |
| | 43 | 61 | 6C | 6C | 20 | 46 | 6F | 72 | 77 | 61 | 72 | 64 |
| | 20 | 4F | 6E | 20 | 55 | 73 | 65 | 72 | 20 | 42 | 75 | 73 |
| | 79 | 8F | 1B | FD | 33 | 20 | 43 | 61 | 6C | 6C | 20 | 46 |
| | 6F | 72 | 77 | 61 | 72 | 64 | 20 | 4F | 6E | 20 | 4E | 6F |
| | 20 | 52 | 65 | 70 | 6C | 79 | 8F | 25 | FC | 34 | 20 | 43 |
| | 61 | 6C | 6C | 20 | 46 | 6F | 72 | 77 | 61 | 72 | 64 | 20 |
| | 4F | 6E | 20 | 55 | 73 | 65 | 72 | 20 | 4E | 6F | 74 | 20 |
| | 52 | 65 | 61 | 63 | 68 | 61 | 62 | 6C | 65 | 8F | 20 | FB |
| | 35 | 20 | 42 | 61 | 72 | 72 | 69 | 6E | 67 | 20 | 4F | 66 |
| | 20 | 41 | 6C | 6C | 20 | 4F | 75 | 74 | 67 | 6F | 69 | 6E |
| | 67 | 20 | 43 | 61 | 6C | 6C | 73 | 8F | 24 | FA | 36 | 20 |
| | 42 | 61 | 72 | 72 | 69 | 6E | 67 | 20 | 4F | 66 | 20 | 41 |
| | 6C | 6C | 20 | 4F | 75 | 74 | 67 | 6F | 69 | 6E | 67 | 20 |
| | 49 | 6E | 74 | 20 | 43 | 61 | 6C | 6C | 73 | 8F | 13 | F9 |
| | 37 | 20 | 43 | 4C | 49 | 20 | 50 | 72 | 65 | 73 | 65 | 6E |
| | 74 | 61 | 74 | 69 | 6F | 6E | | | | | | |

PROACTIVE COMMAND : SET UP MENU 1.2.3

Logically:

| | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|--|--|-------------|
| Command details | | | | | | | | | | | |
| Command number: | | | | | | | | | | | 1 |
| Command type: | | | | | | | | | | | SET UP MENU |
| Command qualifier: | | | | | | | | | | | "00" |
| Device identities | | | | | | | | | | | |
| Source device: | | | | | | | | | | | SIM |
| Destination device: | | | | | | | | | | | ME |
| Alpha Identifier: | | | | | | | | | | | |
| "The SIM shall supply a set of menu items, which shall be integrated with the menu system (or other MMI facility) in order to give the user the opportunity to choose one of these menu items at his own discretion. Each item comprises a sh" | | | | | | | | | | | |
| Item | | | | | | | | | | | |
| Identifier of item: | | | | | | | | | | | "01" |
| Text string of item: | | | | | | | | | | | "Y" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 81 | FC | 81 | 03 | 01 | 25 | 00 | 82 | 02 | 81 | 82 |
| | 85 | 81 | EC | 54 | 68 | 65 | 20 | 53 | 49 | 4D | 20 | 73 |
| | 68 | 61 | 6C | 6C | 20 | 73 | 75 | 70 | 70 | 6C | 79 | 20 |
| | 61 | 20 | 73 | 65 | 74 | 20 | 6F | 66 | 20 | 6D | 65 | 6E |
| | 75 | 20 | 69 | 74 | 65 | 6D | 73 | 2C | 20 | 77 | 68 | 69 |
| | 63 | 68 | 20 | 73 | 68 | 61 | 6C | 6C | 20 | 62 | 65 | 20 |
| | 69 | 6E | 74 | 65 | 67 | 72 | 61 | 74 | 65 | 64 | 20 | 77 |
| | 69 | 74 | 68 | 20 | 74 | 68 | 65 | 20 | 6D | 65 | 6E | 75 |
| | 20 | 73 | 79 | 73 | 74 | 65 | 6D | 20 | 28 | 6F | 72 | 20 |
| | 6F | 74 | 68 | 65 | 72 | 20 | 4D | 4D | 49 | 20 | 66 | 61 |
| | 63 | 69 | 6C | 69 | 74 | 79 | 29 | 20 | 69 | 6E | 20 | 6F |
| | 72 | 64 | 65 | 72 | 20 | 74 | 6F | 20 | 67 | 69 | 76 | 65 |
| | 20 | 74 | 68 | 65 | 20 | 75 | 73 | 65 | 72 | 20 | 74 | 68 |
| | 65 | 20 | 6F | 70 | 70 | 6F | 72 | 74 | 75 | 6E | 69 | 74 |
| | 79 | 20 | 74 | 6F | 20 | 63 | 68 | 6F | 6F | 73 | 65 | 20 |
| | 6F | 6E | 65 | 20 | 6F | 66 | 20 | 74 | 68 | 65 | 73 | 65 |
| | 20 | 6D | 65 | 6E | 75 | 20 | 69 | 74 | 65 | 6D | 73 | 20 |
| | 61 | 74 | 20 | 68 | 69 | 73 | 20 | 6F | 77 | 6E | 20 | 64 |
| | 69 | 73 | 63 | 72 | 65 | 74 | 69 | 6F | 6E | 2E | 20 | 45 |
| | 61 | 63 | 68 | 20 | 69 | 74 | 65 | 6D | 20 | 63 | 6F | 6D |
| | 70 | 72 | 69 | 73 | 65 | 73 | 20 | 61 | 20 | 73 | 68 | 8F |
| | 02 | 01 | 59 | | | | | | | | | |

TERMINAL RESPONSE : SET UP MENU 1.2.1, 1.2.2 and 1.2.3

Logically:

| | |
|---------------------|---------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP MENU |
| Command qualifier: | “no help information available” |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 25 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

ENVELOPE 1.2.1 : MENU SELECTION

Logically:

| | |
|---------------------|--------|
| Menu selection | |
| Device identities | |
| Source device: | Keypad |
| Destination device: | SIM |
| Item identifier | 3D |

Coding:

| | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D3 | 07 | 81 | 02 | 01 | 81 | 90 | 01 | 3D |
|----------|----|----|----|----|----|----|----|----|----|

ENVELOPE 1.2.2 : MENU SELECTION

Logically:

| | |
|---------------------|--------|
| Menu selection | |
| Device identities | |
| Source device: | Keypad |
| Destination device: | SIM |
| Item identifier | FB |

Coding:

| | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D3 | 07 | 81 | 02 | 01 | 81 | 90 | 01 | FB |
|----------|----|----|----|----|----|----|----|----|----|

ENVELOPE 1.2.3 : MENU SELECTION

Logically:

Menu selection
 Device identities
 Source device: Keypad
 Destination device: SIM
 Item identifier 01
 Coding:
 BER-TLV: D3 07 81 02 01 81 90 01 01

The following table details the test requirements with relation to the tested features:

| Proactive SIM Command Facilities | | | |
|---|-------------------------|-----------------|------------------------|
| Proactive SIM Command Number | Alpha Identifier Length | Number of items | Maximum length of item |
| 1.1.1 | 12 | 4 | 6 |
| 1.1.2 | 12 | 2 | 3 |
| 1.1.3 | 10 | 0 | - |
| 1.2.1 | 10 | 30 | 8 |
| 1.2.2 | 10 | 7 | 37 |
| 1.2.3 | 235 | 1 | 1 |

27.22.4.8.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 1 and in expected sequence 2.

27.22.4.8.2 SET UP MENU (help request support)

27.22.4.8.2.1 Definition and applicability

See Section 3.2.2.

27.22.4.8.2.2 Conformance Requirement

Requirements are the same as in 27.22.4.8.1.1, with an additional one: GSM 11.14 clause 12.21 (Help Request).

27.22.4.8.2.3 Test Purpose

To verify that when the help is available for the command and the user gas indicated the need to get help information on one of the items, the ME informs properly the SIM about an HELP REQUEST, using the MENU SELECTION mechanism.

27.22.4.8.2.4 Method of Test

27.22.4.8.2.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

The ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display

27.22.4.8.2.4.2 Procedure

Expected Sequence 2.1 (SET UP MENU and MENU SELECTION, with Help Request, Replace and Remove a Toolkit Menu)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|----------------------------------|
| 1 | SS → ME | PROACTIVE COMMAND PENDING: SET UP MENU 2.1.1 | [First Set Up Menu] |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND SET UP MENU 2.1.1 | |
| 4 | ME → USER | Integrate the menu header of "Toolkit Menu" into its menu system and have the menu items of "Item 1", "Item 2", "Item 3" and "Item 4" under this header. | |
| 5 | ME → SIM | TERMINAL RESPONSE: SET UP MENU 2.1.1 | [Command Performed Successfully] |
| 6 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 7 | USER → ME | Select the Toolkit Menu "Toolkit Menu" | |
| 8 | USER → ME | Display "Item 1", "Item 2", "Item 3", "Item 4" | |
| 9 | USER → ME | Select the Help Request on "Item 2" Menu entry | |
| 10 | ME → SIM | Send the ENVELOPE 2.1.1 : MENU SELECTION (Identifier of item: 2) | |

PROACTIVE COMMAND : SET UP MENU 2.1.1

Logically:

Command details

| | |
|--------------------|-------------|
| Command number: | 1 |
| Command type: | SET UP MENU |
| Command qualifier: | "80" |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Alpha identifier:

| | |
|-------------------|----------------|
| Alpha identifier: | "Toolkit Menu" |
|-------------------|----------------|

Item

| | |
|----------------------|----------|
| Identifier of item: | 1 |
| Text string of item: | "Item 1" |

Item

| | |
|----------------------|----------|
| Identifier of item: | 2 |
| Text string of item: | "Item 2" |

Item

| | |
|----------------------|----------|
| Identifier of item: | 3 |
| Text string of item: | "Item 3" |

Item

| | |
|----------------------|----------|
| Identifier of item: | 4 |
| Text string of item: | "Item 4" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 3B | 81 | 03 | 01 | 25 | 80 | 82 | 02 | 81 | 82 | 85 |
| | 0C | 54 | 6F | 6F | 6C | 6B | 69 | 74 | 20 | 4D | 65 | 6E |
| | 75 | 8F | 07 | 01 | 49 | 74 | 65 | 6D | 20 | 31 | 8F | 07 |
| | 02 | 49 | 74 | 65 | 6D | 20 | 32 | 8F | 07 | 03 | 49 | 74 |
| | 65 | 6D | 20 | 33 | 8F | 07 | 04 | 49 | 74 | 65 | 6D | 20 |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

TERMINAL RESPONSE : SET UP MENU 2.1.1

Logically:

Command details

Command number: 1

Command type: SET UP MENU

Command qualifier: « help information available »

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully

Coding:

| | | | | | | | | | | | | |
|------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER- | 81 | 03 | 01 | 25 | 80 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| TLV: | | | | | | | | | | | | |

ENVELOPE 2.1.1 : MENU SELECTION

Logically:

Menu selection

Device identities

Source device: Keypad

Destination device: SIM

Item identifier 02

Help request tag

Coding:

| | | | | | | | | | | | |
|------|----|----|----|----|----|----|----|----|----|----|----|
| BER- | D3 | 09 | 81 | 02 | 01 | 81 | 90 | 01 | 02 | 15 | 00 |
| TLV: | | | | | | | | | | | |

27.22.4.8.3 SET UP MENU (next action support)**27.22.4.8.3.1 Definition and applicability**

See Section 3.2.2.

If the SIM provides an Items Next Action Indicator data object, the comprehension required flag shall be set to '0'.

27.22.4.8.3.2 Conformance Requirement

Requirements are the same as in 27.22.4.8.1.1, with an additional one: GSM 11.14 clause 12.24 (Items Next Action Indicator).

27.22.4.8.3.3 Test Purpose

To verify that when the next action indicator is supported.

27.22.4.8.3.4 Method of Test

27.22.4.8.3.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

The ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display

27.22.4.8.3.4.2 Procedure

Expected Sequence 3.1 (SET UP MENU, next action indicator “Send SM”, “Set Up Call”, “Launch Browser”, “Provide Local Information”, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SS → ME | PROACTIVE COMMAND PENDING: SET UP MENU 3.1.1 | [First Set Up Menu] |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND SET UP MENU 3.1.1 | |
| 4 | ME → USER | Integrate the menu header of "Toolkit Menu" into its menu system and have the menu items of "Item 1", "Item 2", "Item 3" and "Item 4" under this header. | |
| 5 | ME → SIM | TERMINAL RESPONSE: SET UP MENU 3.1.1 | [Command Performed Successfully] |
| 6 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 7 | USER → ME | Select the Toolkit Menu "Toolkit Menu" | |
| 8 | ME → USER | Display "Item 1", "Item 2", "Item 3", "Item 4" | |
| 9 | USER → ME | Navigate in the items, then select "Item 2". | Check that next action indicators should appear. |

PROACTIVE COMMAND : SET UP MENU 3.1.1

Logically:

Command details

Command number: 1
 Command type: SET UP MENU
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: ME
 Alpha identifier: "Toolkit Menu"

Item

Identifier of item: 1
 Text string of item: "Item 1"

Item

Identifier of item: 2
 Text string of item: "Item 2"

Item

Identifier of item: 3
 Text string of item: "Item 3"

Item

Identifier of item: 4
 Text string of item: "Item 4"

Items next action indicator list

List: "Send SM", "Set Up Call", "Launch Browser", "Provide Local
Information"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 41 | 81 | 03 | 01 | 25 | 00 | 82 | 02 | 81 | 82 | 85 |
| | 0C | 54 | 6F | 6F | 6C | 6B | 69 | 74 | 20 | 4D | 65 | 6E |
| | 75 | 8F | 07 | 01 | 49 | 74 | 65 | 6D | 20 | 31 | 8F | 07 |
| | 02 | 49 | 74 | 65 | 6D | 20 | 32 | 8F | 07 | 03 | 49 | 74 |
| | 65 | 6D | 20 | 33 | 8F | 07 | 04 | 49 | 74 | 65 | 6D | 20 |
| | 34 | 18 | 04 | 13 | 10 | 15 | 26 | | | | | |

TERMINAL RESPONSE : SET UP MENU 3.1.1

Logically:

Command details

Command number: 1

Command type: SET UP MENU

Command qualifier: « no help information available »

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully

Coding:

| | | | | | | | | | | | | |
|------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER- | 81 | 03 | 01 | 25 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| TLV: | | | | | | | | | | | | |

27.22.4.8.4 SET UP MENU (display of icons)

27.22.4.8.4.1 Definition and applicability

See Section 3.2.2.

27.22.4.8.4.2 Conformance Requirement

Requirements are the same as in 27.22.4.8.1.1, with an additional one: GSM 11.14 clause 6.5.4, 12.31 and 12.32.

27.22.4.8.4.3 Test Purpose

To verify that icons are displayed with the command Set Up Menu in the Alpha Identifier and Items Data Objects.

27.22.4.8.4.4 Method of Test

27.22.4.8.4.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

The ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display

27.22.4.8.4.4.2 Procedure

Expected Sequence 4.1A (SET UP MENU, BASIC ICON NOT SELF EXPLANATORY in ALPHA ID and ITEMS DATA OBJECTS, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SS → ME | PROACTIVE COMMAND PENDING: SET UP MENU 4.1.1 | [First Set Up Menu] |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND SET UP MENU 4.1.1 | |
| 4 | ME → USER | Integrate the menu header of "Toolkit Menu" into its menu system and have the menu items of "Item 1", "Item 2", "Item 3" under this header. | |
| 5 | ME → SIM | TERMINAL RESPONSE: SET UP MENU 4.1.1A | [Command Performed Successfully] |
| 6 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 7 | USER → ME | Select the Toolkit Menu "Toolkit Menu" | Verify the icon is displayed with alpha id. |
| 8 | ME → USER | Display "Item 1", "Item 2", "Item 3". | |
| 9 | USER → ME | Navigate in the items, then select "Item 2". | Verify icons are displayed for each item. |

PROACTIVE COMMAND : SET UP MENU 4.1.1

Logically:

Command details

Command number: 1
 Command type: SET UP MENU
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: ME
 Alpha identifier: "Toolkit Menu"

Item

Identifier of item: 1
 Text string of item: "Item 1"

Item

Identifier of item: 2
 Text string of item: "Item 2"

Item

Identifier of item: 3
 Text string of item: "Item 3"

Icon identifier

Icon qualifier: icon is not self explanatory
 Icon identifier: record 1 EF (IMG)

Item icon identifier list

Icon qualifier: icon is not self explanatory
 Icon identifier list: record 5 EF (IMG), record 5 EF (IMG), record 5 EF (IMG)

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 3C | 81 | 03 | 01 | 25 | 00 | 82 | 02 | 81 | 82 | 85 |
| | 0C | 54 | 6F | 6F | 6C | 6B | 69 | 74 | 20 | 4D | 65 | 6E |
| | 75 | 8F | 07 | 01 | 49 | 74 | 65 | 6D | 20 | 31 | 8F | 07 |
| | 02 | 49 | 74 | 65 | 6D | 20 | 32 | 8F | 07 | 03 | 49 | 74 |
| | 65 | 6D | 20 | 33 | 9E | 02 | 01 | 01 | 9F | 04 | 01 | 05 |
| | 05 | 05 | | | | | | | | | | |

TERMINAL RESPONSE : SET UP MENU 4.1.1A

Logically:

Command details

Command number: 1

Command type: SET UP MENU

Command qualifier: « no help information available »

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 25 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 4.1B (SET UP MENU, BASIC ICON NOT SELF EXPLANATORY in ALPHA ID and ITEMS DATA OBJECTS, requested icon could not be displayed)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SS → ME | PROACTIVE COMMAND PENDING: SET UP MENU 4.1.1 | [First Set Up Menu] |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND SET UP MENU 4.1.1 | |
| 4 | ME → USER | Integrate the menu header of "Toolkit Menu" into its menu system and have the menu items of "Item 1", "Item 2", "Item 3" under this header. | |
| 5 | ME → SIM | TERMINAL RESPONSE: SET UP MENU 4.1.1B | [Command performed successfully, but requested icon could not be displayed] |
| 6 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 7 | USER → ME | Select the Toolkit Menu "Toolkit Menu" | No icon is displayed with alpha id. |
| 8 | ME → USER | Display "Item 1", "Item 2", "Item 3". | |

| | | | |
|---|--------------|---|-------------------------------------|
| 9 | USER → ME | Navigate in the items, then select “Item 2”. | no icon is displayed for each item. |
|---|--------------|---|-------------------------------------|

TERMINAL RESPONSE : SET UP MENU 4.1.1B

Logically:

Command details

Command number: 1

Command type: SET UP MENU

Command qualifier: « no help information available »

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully but requested icon could not be displayed

Coding:

| | | | | | | | | | | | | |
|------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER- | 81 | 03 | 01 | 25 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 04 |
| TLV: | | | | | | | | | | | | |

Expected Sequence 4.2A (SET UP MENU, BASIC ICON SELF EXPLANATORY in ALPHA ID and ITEMS DATA OBJECTS, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|----------------------------------|
| 1 | SS → ME | PROACTIVE COMMAND PENDING: SET UP MENU 4.2.1 | [First Set Up Menu] |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND SET UP MENU 4.2.1 | |
| 4 | ME → USER | Integrate the menu header of "Toolkit Menu" into its menu system and have the menu items of "Item 1", "Item 2", "Item 3" under this header. | |
| 5 | ME → SIM | TERMINAL RESPONSE: SET UP MENU 4.2.1A | [Command Performed Successfully] |

| | | | |
|---|-----------|--|---|
| 6 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 7 | USER → ME | Select the Toolkit Menu "Toolkit Menu" | Verify the icon is displayed in alpha id. |
| 8 | ME → USER | Display "Item 1", "Item 2", "Item 3". | |
| 9 | USER → ME | Navigate in the items, then select "Item 2". | Verify icons are displayed for each item. |

PROACTIVE COMMAND : SET UP MENU 4.2.1

Logically:

Command details

Command number: 1

Command type: SET UP MENU

Command qualifier: "00"

Device identities

Source device: SIM

Destination device: ME

Alpha identifier: "Toolkit Menu"

Item

Identifier of item: 1

Text string of item: "Item 1"

Item

Identifier of item: 2

Text string of item: "Item 2"

Item

Identifier of item: 3

Text string of item: "Item 3"

Icon identifier

Icon qualifier: icon is self explanatory

Icon identifier: record 1 EF (IMG)

Item icon identifier list

Icon qualifier: icon is self explanatory

Icon identifier list: record 5 EF (IMG), record 5 EF (IMG), record 5 EF (IMG)

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 3C | 81 | 03 | 01 | 25 | 00 | 82 | 02 | 81 | 82 | 85 |
| | 0C | 54 | 6F | 6F | 6C | 6B | 69 | 74 | 20 | 4D | 65 | 6E |
| | 75 | 8F | 07 | 01 | 49 | 74 | 65 | 6D | 20 | 31 | 8F | 07 |
| | 02 | 49 | 74 | 65 | 6D | 20 | 32 | 8F | 07 | 03 | 49 | 74 |
| | 65 | 6D | 20 | 33 | 9E | 02 | 00 | 01 | 9F | 04 | 00 | 05 |
| | 05 | 05 | | | | | | | | | | |

TERMINAL RESPONSE : SET UP MENU 4.2.1A

Logically:

Command details

Command number: 1

Command type: SET UP MENU

Command qualifier: « no help information available »

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 25 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 4.2B (SET UP MENU, BASIC ICON SELF EXPLANATORY in ALPHA ID and ITEMS DATA OBJECTS, requested icon could not be displayed)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---------------------|
| 1 | SS → ME | PROACTIVE COMMAND PENDING: SET UP MENU 4.2.1 | [First Set Up Menu] |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND SET UP MENU 4.2.1 | |
| 4 | ME → USER | Integrate the menu header of "Toolkit Menu" into its menu system and have the menu items of "Item 1", "Item 2", "Item 3" under this header. | |

| | | | |
|---|-----------|--|-------------------------------------|
| 5 | ME → SIM | TERMINAL RESPONSE: SET UP MENU 4.2.1B | [Command Performed Successfully] |
| 6 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 7 | USER → ME | Select the Toolkit Menu “Toolkit Menu” | No icon is displayed in alpha id. |
| 8 | ME → USER | Display “Item 1”, “Item 2”, “Item 3”. | |
| 9 | USER → ME | Navigate in the items, then select “Item 2”. | no icon is displayed for each item. |

TERMINAL RESPONSE : SET UP MENU 4.2.1B

Logically:

Command details

Command number: 1

Command type: SET UP MENU

Command qualifier: « no help information available »

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully but requested icon could not be displayed

Coding:

| | | | | | | | | | | | | |
|------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER- | 81 | 03 | 01 | 25 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 04 |
| TLV: | | | | | | | | | | | | |

27.22.4.8.5 SET UP MENU (soft keys support)**27.22.4.8.5.1 Definition and applicability**

See Section 3.2.2.

27.22.4.8.5.2 Conformance Requirement

Requirements are the same as in 27.22.4.8.1.1.

27.22.4.8.5.3 Test Purpose

To verify that if soft key preferred is indicated in the command details and soft key for SET UP MENU is supported by the ME and the number of icon items does not exceed the number of soft keys available, then the ME displays those icons as soft key.

27.22.4.8.5.4 Method of Test**27.22.4.8.5.4.1 Initial Conditions**

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

The ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display

27.22.4.8.5.4.2 Procedure

Expected Sequence 5.1 (SET UP MENU, SOFT KEY PREFERRED, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SS → ME | PROACTIVE COMMAND PENDING: SET UP MENU 5.1.1 | [First Set Up Menu] |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND SET UP MENU 5.1.1 | |
| 4 | ME → USER | Integrate the menu header of "Toolkit Menu" into its menu system and have the menu items of "Item 1", "Item 2" under this header. | |
| 5 | ME → SIM | TERMINAL RESPONSE: SET UP MENU 5.1.1 | [Command Performed Successfully] |
| 6 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 7 | USER → ME | Select the Toolkit Menu "Toolkit Menu" | |
| 8 | ME → USER | Display "Item 1", "Item 2" | |
| 9 | USER → ME | Navigate in the items, then select "Item 2". | Verify we can select items through soft keys |

PROACTIVE COMMAND : SET UP MENU 5.1.1

Logically:

Command details

| | |
|--------------------|---|
| Command number: | 1 |
| Command type: | SET UP MENU |
| Command qualifier: | "01" (selection using soft key preferred) |

Device identities

| | |
|---------------------|----------------|
| Source device: | SIM |
| Destination device: | ME |
| Alpha identifier: | "Toolkit Menu" |

Item

| | |
|----------------------|----------|
| Identifier of item: | 1 |
| Text string of item: | "Item 1" |

Item

| | |
|----------------------|----------|
| Identifier of item: | 2 |
| Text string of item: | "Item 2" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 29 | 81 | 03 | 01 | 25 | 01 | 82 | 02 | 81 | 82 | 85 |
| | 0C | 54 | 6F | 6F | 6C | 6B | 69 | 74 | 20 | 4D | 65 | 6E |
| | 75 | 8F | 07 | 01 | 49 | 74 | 65 | 6D | 20 | 31 | 8F | 07 |
| | 02 | 49 | 74 | 65 | 6D | 20 | 32 | | | | | |

TERMINAL RESPONSE : SET UP MENU 5.1.1

Logically:

Command details

Command number: 1

Command type: SET UP MENU

Command qualifier: « no help information available »

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully

Coding:

| | | | | | | | | | | | | |
|------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER- | 81 | 03 | 01 | 25 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| TLV: | | | | | | | | | | | | |

27.22.4.9 SELECT ITEM

27.22.4.9.1 SELECT ITEM (mandatory features for ME supporting SELECT ITEM)

27.22.4.9.1.1 Definition and applicability

See Section 3.2.2.

27.22.4.9.1.2 Conformance Requirement

The ME shall support the Proactive SIM: Select Item facility as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 5 (Profile Download), 6.4.9 (Proactive SIM commands and procedures, SELECT ITEM), 6.6.8 (Structure of proactive SIM commands, SELECT ITEM), 6.8 (Structure of TERMINAL RESPONSE), 12.6 (Command details), 13.4 (Type of Command and Next Action Indicator), 14 (Allowed Type of command and Device identity combinations).

27.22.4.9.1.3 Test Purpose

To verify that the ME correctly presents the set of items contained in the SELECT ITEM proactive SIM command, and returns a TERMINAL RESPONSE command to the SIM with the identifier of the item chosen.

To verify that the ME allows a SELECT ITEM proactive SIM command within the maximum 255 byte BER-TLV boundary.

To verify that the ME returns a TERMINAL RESPONSE with "Proactive SIM application session terminated by the user", if the user has indicated the need to end the proactive SIM session.

To verify that the ME returns a TERMINAL RESPONSE with "Backwards move in the proactive SIM application session requested by the user", if the user has indicated the need to go backwards in the proactive SIM application session.

The ability of the ME to send the TERMINAL RESPONSE with "No response from user" result value cannot be tested as the length of time to wait is undefined in GSM 11.14 [15].

27.22.4.9.1.4 Method of Test

27.22.4.9.1.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.9.1.4.2 Procedure

Expected Sequence 1.1 (SELECT ITEM, mandatory features, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SELECT ITEM 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SELECT ITEM 1.1.1 | |
| 4 | ME → USER | Display items of "Item 1", "Item 2", "Item 3" and "Item 4" under the header of "Toolkit Select". | |
| 5 | USER → ME | Select "Item 2". | |
| 6 | ME → SIM | TERMINAL RESPONSE: SELECT ITEM 1.1.1 | Command performed successfully |

PROACTIVE COMMAND : SELECT ITEM 1.1.1

Logically:

Command details

Command number: 1
Command type: SELECT ITEM
Command qualifier: "00"

Device identities

Source device: SIM
Destination device: ME
Alpha identifier: "Toolkit Select"

Item

Identifier of item: 1
Text string of item: "Item 1"

Item

Identifier of item: 2
Text string of item: "Item 2"

Item

Identifier of item: 3
Text string of item: "Item 3"

Item

Identifier of item: 4
Text string of item: "Item 4"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 3D | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 81 | 82 | 85 |
| | 0E | 54 | 6F | 6F | 6C | 6B | 69 | 74 | 20 | 53 | 65 | 6C |
| | 65 | 63 | 74 | 8F | 07 | 01 | 49 | 74 | 65 | 6D | 20 | 31 |
| | 8F | 07 | 02 | 49 | 74 | 65 | 6D | 20 | 32 | 8F | 07 | 03 |
| | 49 | 74 | 65 | 6D | 20 | 33 | 8F | 07 | 04 | 49 | 74 | 65 |
| | 6D | 20 | 34 | | | | | | | | | |

TERMINAL RESPONSE : SELECT ITEM 1.1.1

Logically:

Command details
Command number: 1
Command type: SELECT ITEM
Command qualifier: "00"
Device identities
Source device: ME
Destination device: SIM
Result
General Result: Command performed successfully
Item identifier
Identifier of item chosen: 02

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 90 | | 01 | | 02 | | | | | | | |

Expected Sequence 1.2 (SELECT ITEM, large menu, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--------------------------------|
| 7 | SIM → ME | PROACTIVE COMMAND PENDING: SELECT ITEM 1.2.1 | |
| 8 | ME → SIM | FETCH | |
| 9 | SIM → ME | PROACTIVE COMMAND: SELECT ITEM 1.2.1 | |
| 10 | ME → USER | Present the items of "Zero", "One", "Two", "Three", "Four", "Five", "Six", "Seven", "Eight", "Nine", "Alpha", "Bravo", "Charlie", "Delta", "Echo", "Fox-trot", "Black", "Brown", "Red", "Orange", "Yellow", "Green", "Blue", "Violet", "Grey", "White", "milli", "micro", "nano" and "pico" under the header of "LargeMenu1" | |
| 11 | USER → ME | Select item "Orange". | |
| 12 | ME → SIM | TERMINAL RESPONSE: SELECT ITEM 1.2.1 | Command performed successfully |

PROACTIVE COMMAND : SELECT ITEM 1.2.1

Logically:

Command details

| | |
|--------------------|-------------|
| Command number: | 1 |
| Command type: | SELECT ITEM |
| Command qualifier: | "00" |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Alpha Identifier: "LargeMenu1"

Item

| | |
|----------------------|--------|
| Identifier of item: | "50" |
| Text string of item: | "Zero" |

Item

| | |
|----------------------|-------|
| Identifier of item: | "4F" |
| Text string of item: | "One" |

Item

| | |
|----------------------|-------|
| Identifier of item: | "4E" |
| Text string of item: | "Two" |

Item

| | |
|----------------------|---------|
| Identifier of item: | "4D" |
| Text string of item: | "Three" |

Item

| | |
|----------------------|--------|
| Identifier of item: | "4C" |
| Text string of item: | "Four" |

Item

| | |
|----------------------|--------|
| Identifier of item: | "4B" |
| Text string of item: | "Five" |

Item

| | |
|----------------------|-------|
| Identifier of item: | "4A" |
| Text string of item: | "Six" |

Item

| | |
|----------------------|---------|
| Identifier of item: | "49" |
| Text string of item: | "Seven" |

Item

| | |
|----------------------|---------|
| Identifier of item: | "48" |
| Text string of item: | "Eight" |

Item

| | |
|----------------------|--------|
| Identifier of item: | "47" |
| Text string of item: | "Nine" |

Item

| | |
|---------------------|------|
| Identifier of item: | "46" |
|---------------------|------|

| | |
|----------------------|------------|
| Text string of item: | "Alpha" |
| Item | |
| Identifier of item: | "45" |
| Text string of item: | "Bravo" |
| Item | |
| Identifier of item: | "44" |
| Text string of item: | "Charlie" |
| Item | |
| Identifier of item: | "43" |
| Text string of item: | "Delta" |
| Item | |
| Identifier of item: | "42" |
| Text string of item: | "Echo" |
| Item | |
| Identifier of item: | "41" |
| Text string of item: | "Fox-trot" |
| Item | |
| Identifier of item: | "40" |
| Text string of item: | "Black" |
| Item | |
| Identifier of item: | "3F" |
| Text string of item: | "Brown" |
| Item | |
| Identifier of item: | "3E" |
| Text string of item: | "Red" |
| Item | |
| Identifier of item: | "3D" |
| Text string of item: | "Orange" |
| Item | |
| Identifier of item: | "3C" |
| Text string of item: | "Yellow" |
| Item | |
| Identifier of item: | "3B" |
| Text string of item: | "Green" |
| Item | |
| Identifier of item: | "3A" |
| Text string of item: | "Blue" |
| Item | |
| Identifier of item: | "39" |
| Text string of item: | "Violet" |
| Item | |
| Identifier of item: | "38" |
| Text string of item: | "Grey" |
| Item | |
| Identifier of item: | "37" |
| Text string of item: | "White" |
| Item | |
| Identifier of item: | "36" |
| Text string of item: | "milli" |
| Item | |
| Identifier of item: | "35" |
| Text string of item: | "micro" |
| Item | |
| Identifier of item: | "34" |
| Text string of item: | "nano" |
| Item | |
| Identifier of item: | "33" |
| Text string of item: | "pico" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 81 | FC | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 81 | 82 |
| | 85 | 0A | 4C | 61 | 72 | 67 | 65 | 4D | 65 | 6E | 75 | 31 |
| | 8F | 05 | 50 | 5A | 65 | 72 | 6F | 8F | 04 | 4F | 4F | 6E |
| | 65 | 8F | 04 | 4E | 54 | 77 | 6F | 8F | 06 | 4D | 54 | 68 |
| | 72 | 65 | 65 | 8F | 05 | 4C | 46 | 6F | 75 | 72 | 8F | 05 |
| | 4B | 46 | 69 | 76 | 65 | 8F | 04 | 4A | 53 | 69 | 78 | 8F |
| | 06 | 49 | 53 | 65 | 76 | 65 | 6E | 8F | 06 | 48 | 45 | 69 |
| | 67 | 68 | 74 | 8F | 05 | 47 | 4E | 69 | 6E | 65 | 8F | 06 |
| | 46 | 41 | 6C | 70 | 68 | 61 | 8F | 06 | 45 | 42 | 72 | 61 |
| | 76 | 6F | 8F | 08 | 44 | 43 | 68 | 61 | 72 | 6C | 69 | 65 |
| | 8F | 06 | 43 | 44 | 65 | 6C | 74 | 61 | 8F | 05 | 42 | 45 |
| | 63 | 68 | 6F | 8F | 09 | 41 | 46 | 6F | 78 | 2D | 74 | 72 |
| | 6F | 74 | 8F | 06 | 40 | 42 | 6C | 61 | 63 | 6B | 8F | 06 |
| | 3F | 42 | 72 | 6F | 77 | 6E | 8F | 04 | 3E | 52 | 65 | 64 |
| | 8F | 07 | 3D | 4F | 72 | 61 | 6E | 67 | 65 | 8F | 07 | 3C |
| | 59 | 65 | 6C | 6C | 6F | 77 | 8F | 06 | 3B | 47 | 72 | 65 |
| | 65 | 6E | 8F | 05 | 3A | 42 | 6C | 75 | 65 | 8F | 07 | 39 |
| | 56 | 69 | 6F | 6C | 65 | 74 | 8F | 05 | 38 | 47 | 72 | 65 |
| | 79 | 8F | 06 | 37 | 57 | 68 | 69 | 74 | 65 | 8F | 06 | 36 |
| | 6D | 69 | 6C | 6C | 69 | 8F | 06 | 35 | 6D | 69 | 63 | 72 |
| | 6F | 8F | 05 | 34 | 6E | 61 | 6E | 6F | 8F | 05 | 33 | 70 |
| | 69 | 63 | 6F | | | | | | | | | |

TERMINAL RESPONSE : SELECT ITEM 1.2.1

Logically:

| | |
|----------------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SELECT ITEM |
| Command qualifier: | “00” |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Item identifier | |
| Identifier of item chosen: | 3D |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 90 | 01 | 3D | | | | | | | | | |

Expected Sequence 1.3 (SELECT ITEM, call options, successful)

| Step | Direction | MESSAGE / Action | Comments |
|-------------|------------------|---|--------------------------------|
| 13 | SIM → ME | PROACTIVE COMMAND PENDING: SELECT ITEM 1.3.1 | |
| 14 | ME → SIM | FETCH | |
| 15 | SIM → ME | PROACTIVE COMMAND: SELECT ITEM 1.3.1 | |
| 16 | ME → USER | Present the items of " Call Forwarding Unconditional", "Call Forward On User Busy", "Call Forward On No Reply", "Call Forward On User Not Reachable", "Barring Of All Outgoing Calls", "Barring Of All Outgoing International Calls" and "CLI Presentation" under the header of " LargeMenu2 | |
| 17 | USER → ME | Select item "Barring Of All Outgoing Calls". | |
| 18 | ME → SIM | TERMINAL RESPONSE: SELECT ITEM 1.3.1 | Command performed successfully |
| 19 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

PROACTIVE COMMAND : SELECT ITEM 1.3.1

Logically:

| | |
|----------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | SELECT ITEM |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| Alpha Identifier: | "LargeMenu2" |
| Item | |
| Identifier of item: | "FF" |
| Text string of item: | "Call Forwarding Unconditional" |
| Item | |
| Identifier of item: | "FE" |
| Text string of item: | "Call Forwarding On User Busy" |
| Item | |
| Identifier of item: | "FD" |
| Text string of item: | "Call Forwarding On No Reply" |
| Item | |
| Identifier of item: | "FC" |
| Text string of item: | "Call Forwarding On User Not Reachable" |
| Item | |
| Identifier of item: | "FB" |
| Text string of item: | "Barring Of All Outgoing Calls" |
| Item | |
| Identifier of item: | "FA" |
| Text string of item: | "Barring Of All Outgoing International Calls" |
| Item | |
| Identifier of item: | "F9" |
| Text string of item: | "CLI Presentation" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 81 | FB | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 81 | 82 |
| | 85 | 0A | 4C | 61 | 72 | 67 | 65 | 4D | 65 | 6E | 75 | 32 |
| | 8F | 1E | FF | 43 | 61 | 6C | 6C | 20 | 46 | 6F | 72 | 77 |
| | 61 | 72 | 64 | 69 | 6E | 67 | 20 | 55 | 6E | 63 | 6F | 6E |
| | 64 | 69 | 74 | 69 | 6F | 6E | 61 | 6C | 8F | 1D | FE | 43 |
| | 61 | 6C | 6C | 20 | 46 | 6F | 72 | 77 | 61 | 72 | 64 | 69 |
| | 6E | 67 | 20 | 4F | 6E | 20 | 55 | 73 | 65 | 72 | 20 | 42 |
| | 75 | 73 | 79 | 8F | 1C | FD | 43 | 61 | 6C | 6C | 20 | 46 |
| | 6F | 72 | 77 | 61 | 72 | 64 | 69 | 6E | 67 | 20 | 4F | 6E |
| | 20 | 4E | 6F | 20 | 52 | 65 | 70 | 6C | 79 | 8F | 26 | FC |
| | 43 | 61 | 6C | 6C | 20 | 46 | 6F | 72 | 77 | 61 | 72 | 64 |
| | 69 | 6E | 67 | 20 | 4F | 6E | 20 | 55 | 73 | 65 | 72 | 20 |
| | 4E | 6F | 74 | 20 | 52 | 65 | 61 | 63 | 68 | 61 | 62 | 6C |
| | 65 | 8F | 1E | FB | 42 | 61 | 72 | 72 | 69 | 6E | 67 | 20 |
| | 4F | 66 | 20 | 41 | 6C | 6C | 20 | 4F | 75 | 74 | 67 | 6F |
| | 69 | 6E | 67 | 20 | 43 | 61 | 6C | 6C | 73 | 8F | 2C | FA |
| | 42 | 61 | 72 | 72 | 69 | 6E | 67 | 20 | 4F | 66 | 20 | 41 |
| | 6C | 6C | 20 | 4F | 75 | 74 | 67 | 6F | 69 | 6E | 67 | 20 |
| | 49 | 6E | 74 | 65 | 72 | 6E | 61 | 74 | 69 | 6F | 6E | 61 |
| | 6C | 20 | 43 | 61 | 6C | 6C | 73 | 8F | 11 | F9 | 43 | 4C |
| | 49 | 20 | 50 | 72 | 65 | 73 | 65 | 6E | 74 | 61 | 74 | 69 |
| | 6F | 6E | | | | | | | | | | |

TERMINAL RESPONSE : SELECT ITEM 1.3.1

Logically:

Command details
Command number: 1
Command type: SELECT ITEM
Command qualifier: "00"
Device identities
Source device: ME
Destination device: SIM
Result
General Result: Command performed successfully
Item identifier
Identifier of item chosen: FB

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 90 | | 01 | | | | | | | | | |

Expected Sequence 1.4 (SELECT ITEM, backward move by user, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 20 | SIM → ME | PROACTIVE COMMAND PENDING: SELECT ITEM 1.4.1 | [|
| 21 | ME → SIM | FETCH | |
| 22 | SIM → ME | PROACTIVE COMMAND: SELECT ITEM 1.4.1 | |
| 23 | ME → USER | Present the items of "One" and "Two" under the header of "Select Item". | |
| 24 | USER → ME | Indicate to go backwards in the proactive SIM application session. | |
| 25 | ME → SIM | TERMINAL RESPONSE: SELECT ITEM 1.4.1 | Backward move in the proactive SIM application session requested by user |
| 26 | SIM → ME | PROACTIVE COMMAND PENDING: SELECT ITEM 1.4.2 | |
| 27 | ME → SIM | FETCH | |
| 28 | SIM → ME | PROACTIVE COMMAND: SELECT ITEM 1.4.2 | |
| 29 | ME → USER | Present the items of "One" and "Two" under the header of "Select Item". | |
| 30 | USER → ME | Indicate to end the proactive SIM application and return the ME to normal operation. | |
| 31 | ME → SIM | TERMINAL RESPONSE: SELECT ITEM 1.4.2 | Proactive SIM application terminated by the user |
| 32 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

PROACTIVE COMMAND : SELECT ITEM 1.4.1 and 1.4.2

Logically:

Command details

| | |
|--------------------|-------------|
| Command number: | 1 |
| Command type: | SELECT ITEM |
| Command qualifier: | "00" |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Alpha identifier:

| | |
|-------------------|---------------|
| Alpha identifier: | "Select Item" |
|-------------------|---------------|

Item

| | |
|----------------------|-------|
| Identifier of item: | "11" |
| Text string of item: | "One" |

Item

| | |
|----------------------|-------|
| Identifier of item: | "12" |
| Text string of item: | "Two" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 22 | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 81 | 82 | 85 |
| | 0B | 53 | 65 | 6C | 65 | 63 | 74 | 20 | 49 | 74 | 65 | 6D |
| | 8F | 04 | 11 | 4F | 6E | 65 | 8F | 04 | 12 | 54 | 77 | 6F |

TERMINAL RESPONSE : SELECT ITEM 1.4.1

Logically:

| | |
|---------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | SELECT ITEM |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | backward move in the proactive SIM session requested by the user |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 11 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE : SELECT ITEM 1.4.2

Logically:

| | |
|---------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | SELECT ITEM |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | proactive SIM session terminated by the user |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 10 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 1.5 (SELECT ITEM, "Y", successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--------------------------------|
| 33 | SIM → ME | PROACTIVE COMMAND PENDING: SELECT ITEM 1.5.1 | |
| 34 | ME → SIM | FETCH | |
| 35 | SIM → ME | PROACTIVE COMMAND: SELECT ITEM 1.5.1 | |
| 36 | ME → USER | Present the items of "Y" under the header of "The SIM shall supply a set of items from which the user may choose one. Each item comprises a short identifier (used to indicate the selection) and a text string. Optionally the SIM may include an alpha identifier. The alpha identifier i". Select item "Y" | |
| 37 | USER → ME | | |
| 38 | ME → SIM | TERMINAL RESPONSE: SELECT ITEM 1.5.1 | Command performed successfully |
| 39 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

PROACTIVE COMMAND : SELECT ITEM 1.5.1

Logically:

Command details

Command number: 1
 Command type: SELECT ITEM
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: ME

Alpha Identifier:

"The SIM shall supply a set of items from which the user may choose one. Each item comprises a short identifier (used to indicate the selection) and a text string. Optionally the SIM may include an alpha identifier. The alpha identifier i"

Item

Identifier of item: "01"
 Text string of item: "Y"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 81 | FD | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 81 | 82 |
| | 85 | 81 | ED | 54 | 68 | 65 | 20 | 53 | 49 | 4D | 20 | 73 |
| | 68 | 61 | 6C | 6C | 20 | 73 | 75 | 70 | 70 | 6C | 79 | 20 |
| | 61 | 20 | 73 | 65 | 74 | 20 | 6F | 66 | 20 | 69 | 74 | 65 |
| | 6D | 73 | 20 | 66 | 72 | 6F | 6D | 20 | 77 | 68 | 69 | 63 |
| | 68 | 20 | 74 | 68 | 65 | 20 | 75 | 73 | 65 | 72 | 20 | 6D |
| | 61 | 79 | 20 | 63 | 68 | 6F | 6F | 73 | 65 | 20 | 6F | 6E |
| | 65 | 2E | 20 | 45 | 61 | 63 | 68 | 20 | 69 | 74 | 65 | 6D |
| | 20 | 63 | 6F | 6D | 70 | 72 | 69 | 73 | 65 | 73 | 20 | 61 |
| | 20 | 73 | 68 | 6F | 72 | 74 | 20 | 69 | 64 | 65 | 6E | 74 |
| | 69 | 66 | 69 | 65 | 72 | 20 | 28 | 75 | 73 | 65 | 64 | 20 |
| | 74 | 6F | 20 | 69 | 6E | 64 | 69 | 63 | 61 | 74 | 65 | 20 |
| | 74 | 68 | 65 | 20 | 73 | 65 | 6C | 65 | 63 | 74 | 69 | 6F |
| | 6E | 29 | 20 | 61 | 6E | 64 | 20 | 61 | 20 | 74 | 65 | 78 |
| | 74 | 20 | 73 | 74 | 72 | 69 | 6E | 67 | 2E | 20 | 4F | 70 |
| | 74 | 69 | 6F | 6E | 61 | 6C | 6C | 79 | 20 | 74 | 68 | 65 |
| | 20 | 53 | 49 | 4D | 20 | 6D | 61 | 79 | 20 | 69 | 6E | 63 |
| | 6C | 75 | 64 | 65 | 20 | 61 | 6E | 20 | 61 | 6C | 70 | 68 |
| | 61 | 20 | 69 | 64 | 65 | 6E | 74 | 69 | 66 | 69 | 65 | 72 |
| | 2E | 20 | 54 | 68 | 65 | 20 | 61 | 6C | 70 | 68 | 61 | 20 |
| | 69 | 64 | 65 | 6E | 74 | 69 | 66 | 69 | 65 | 72 | 20 | |
| | 69 | 8F | 02 | 01 | 59 | | | | | | | |

TERMINAL RESPONSE : SELECT ITEM 1.5.1

Logically:

| | |
|----------------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SELECT ITEM |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Item identifier | |
| Identifier of item chosen: | 01 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 90 | | 01 | | 01 | | | | | | | |

Expected Sequence 1.6 (SELECT ITEM, Large menu, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--------------------------------|
| 40 | SIM → ME | PROACTIVE COMMAND PENDING: SELECT ITEM 1.6.1 | |
| 41 | ME → SIM | FETCH | |
| 42 | SIM → ME | PROACTIVE COMMAND: SELECT ITEM 1.6.1 | |
| 43 | ME → USER | Present the items of "1 Call Forward Unconditional", "2 Call Forward On User Busy", "3 Call Forward On No Reply", "4 Call Forward On User Not Reachable", "5 Barring Of All Outgoing Calls", "6 Barring Of All Outgoing Int Calls" and "7 CLI Presentation" under the header of "0LargeMenu". | |
| 44 | USER → ME | Select item "5 Barring Of All Outgoing Calls". | |
| 45 | ME → SIM | TERMINAL RESPONSE: SELECT ITEM 1.6.1 | Command performed successfully |

PROACTIVE COMMAND : SELECT ITEM 1.6.1

Logically:

| | |
|----------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | SELECT ITEM |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| Alpha Identifier: | "0LargeMenu" |
| Item | |
| Identifier of item: | "FF" |
| Text string of item: | "1 Call Forward Unconditional" |
| Item | |
| Identifier of item: | "FE" |
| Text string of item: | "2 Call Forward On User Busy" |
| Item | |
| Identifier of item: | "FD" |
| Text string of item: | "3 Call Forward On No Reply" |
| Item | |
| Identifier of item: | "FC" |
| Text string of item: | "4 Call Forward On User Not Reachable" |
| Item | |
| Identifier of item: | "FB" |
| Text string of item: | "5 Barring Of All Outgoing Calls" |
| Item | |
| Identifier of item: | "FA" |
| Text string of item: | "6 Barring Of All Outgoing Int Calls" |
| Item | |
| Identifier of item: | "F9" |
| Text string of item: | "7 CLI Presentation" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 81 | F3 | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 81 | 82 |
| | 85 | 0A | 30 | 4C | 61 | 72 | 67 | 65 | 4D | 65 | 6E | 75 |
| | 8F | 1D | FF | 31 | 20 | 43 | 61 | 6C | 6C | 20 | 46 | 6F |
| | 72 | 77 | 61 | 72 | 64 | 20 | 55 | 6E | 63 | 6F | 6E | 64 |
| | 69 | 74 | 69 | 6F | 6E | 61 | 6C | 8F | 1C | FE | 32 | 20 |
| | 43 | 61 | 6C | 6C | 20 | 46 | 6F | 72 | 77 | 61 | 72 | 64 |
| | 20 | 4F | 6E | 20 | 55 | 73 | 65 | 72 | 20 | 42 | 75 | 73 |
| | 79 | 8F | 1B | FD | 33 | 20 | 43 | 61 | 6C | 6C | 20 | 46 |
| | 6F | 72 | 77 | 61 | 72 | 64 | 20 | 4F | 6E | 20 | 4E | 6F |
| | 20 | 52 | 65 | 70 | 6C | 79 | 8F | 25 | FC | 34 | 20 | 43 |
| | 61 | 6C | 6C | 20 | 46 | 6F | 72 | 77 | 61 | 72 | 64 | 20 |
| | 4F | 6E | 20 | 55 | 73 | 65 | 72 | 20 | 4E | 6F | 74 | 20 |
| | 52 | 65 | 61 | 63 | 68 | 61 | 62 | 6C | 65 | 8F | 20 | FB |
| | 35 | 20 | 42 | 61 | 72 | 72 | 69 | 6E | 67 | 20 | 4F | 66 |
| | 20 | 41 | 6C | 6C | 20 | 4F | 75 | 74 | 67 | 6F | 69 | 6E |
| | 67 | 20 | 43 | 61 | 6C | 6C | 73 | 8F | 24 | FA | 36 | 20 |
| | 42 | 61 | 72 | 72 | 69 | 6E | 67 | 20 | 4F | 66 | 20 | 41 |
| | 6C | 6C | 20 | 4F | 75 | 74 | 67 | 6F | 69 | 6E | 67 | 20 |
| | 49 | 6E | 74 | 20 | 43 | 61 | 6C | 6C | 73 | 8F | 13 | F9 |
| | 37 | 20 | 43 | 4C | 49 | 20 | 50 | 72 | 65 | 73 | 65 | 6E |
| | 74 | 61 | 74 | 69 | 6F | 6E | | | | | | |

TERMINAL RESPONSE : SELECT ITEM 1.5

Logically:

| | |
|-----------------|-------------|
| Command details | |
| Command number: | 1 |
| Command type: | SELECT ITEM |

Command qualifier: "00"
 Device identities
 Source device: ME
 Destination device: SIM
 Result
 General Result: Command performed successfully
 Item identifier
 Identifier of item chosen: FB

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 90 | | 01 | | | | | | | | | |

The following table details the test commands with relation to the tested features:

| Proactive SIM Command Facilities | | | |
|--|-------------------------|-----------------|------------------------|
| Proactive SIM Command SELECT ITEM Number | Alpha Identifier Length | Number of items | Maximum length of item |
| 1.1 | 14 | 4 | 6 |
| 1.2 | 10 | 30 | 8 |
| 1.3 | 10 | 7 | 43 |
| 1.4 | 11 | 2 | 3 |
| 1.5 | 236 | 1 | 1 |
| 1.6 | 10 | 7 | 37 |

27.22.4.9.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 1.1, 1.2, 1.3, 1.4, 1.5 and 1.6 (SELECT ITEM, mandatory features).

27.22.4.9.2 SELECT ITEM (next action support)

27.22.4.9.2.1 Definition and applicability

See Section 3.2.2.

27.22.4.9.2.2 Conformance Requirement

Same as 27.22.4.9.1.2

27.22.4.9.2.3 Test Purpose

To verify that the mobile supports next action indicator mode.

27.22.4.9.2.4 Method of Test

27.22.4.9.2.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.9.2.4.2 Procedure

Expected Sequence 2.1 (SELECT ITEM, next action indicator, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SELECT ITEM 2.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SELECT ITEM 2.1.1 | |
| 4 | ME → USER | Display items of "Item 1", "Item 2" and "Item 3" under the header of "Toolkit Select". It presents also the following next action indicators: Send SM, Set Up Call, Provide Local Info. | |
| 5 | USER → ME | Navigate in the items, then select "Item 2". Check that next action indicators appear. | |
| 6 | ME → SIM | TERMINAL RESPONSE: SELECT ITEM 2.1.1 | Command performed successfully |

PROACTIVE COMMAND : SELECT ITEM 2.1.1

Logically:

| | |
|-----------------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | SELECT ITEM |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| Alpha identifier: | "Toolkit Select" |
| Item | |
| Identifier of item: | 1 |
| Text string of item: | "Item 1" |
| Item | |
| Identifier of item: | 2 |
| Text string of item: | "Item 2" |
| Item | |
| Identifier of item: | 3 |
| Text string of item: | "Item 3" |
| Items next action indicator | |
| Items list | "Send SM", "Set Up Call", "Provide Local Info." |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 39 | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 81 | 82 | 85 |
| | 0E | 54 | 6F | 6F | 6C | 6B | 69 | 74 | 20 | 53 | 65 | 6C |
| | 65 | 63 | 74 | 8F | 07 | 01 | 49 | 74 | 65 | 6D | 20 | 31 |
| | 8F | 07 | 02 | 49 | 74 | 65 | 6D | 20 | 32 | 8F | 07 | 03 |
| | 49 | 74 | 65 | 6D | 20 | 33 | 18 | 03 | 13 | 10 | 26 | |

TERMINAL RESPONSE : SELECT ITEM 2.1.1

Logically:

| | |
|----------------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SELECT ITEM |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Item identifier | |
| Identifier of item chosen: | 02 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 90 | 01 | 02 | | | | | | | | | |

27.22.4.9.3 SELECT ITEM (default item support)**27.22.4.9.3.1 Definition and applicability**

See Section 3.2.2.

27.22.4.9.3.2 Conformance Requirement

Same as 27.22.4.9.1.2

27.22.4.9.3.3 Test Purpose

To verify that the mobile supports "default item" mode.

27.22.4.9.3.4 Method of Test**27.22.4.9.3.4.1 Initial Conditions**

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.9.3.4.2 Procedure

Expected Sequence 3.1 (SELECT ITEM, default item, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SELECT ITEM 3.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SELECT ITEM 3.1.1 | |
| 4 | ME → USER | Display items of "Item 1", "Item 2" and "Item 3" under the header of "Toolkit Select". | Check that "Item 2" is selected by default. |
| 5 | USER → ME | Navigate in the items, then select "Item 3". | |
| 6 | ME → SIM | TERMINAL RESPONSE: SELECT ITEM 3.1.1 | Command performed successfully |

PROACTIVE COMMAND : SELECT ITEM 3.1.1

Logically:

Command details

| | |
|--------------------|-------------|
| Command number: | 1 |
| Command type: | SELECT ITEM |
| Command qualifier: | "00" |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Alpha identifier:

| | |
|--|------------------|
| | "Toolkit Select" |
|--|------------------|

Item

| | |
|----------------------|----------|
| Identifier of item: | 01 |
| Text string of item: | "Item 1" |

Item

| | |
|----------------------|----------|
| Identifier of item: | 02 |
| Text string of item: | "Item 2" |

Item

| | |
|----------------------|----------|
| Identifier of item: | 03 |
| Text string of item: | "Item 3" |

Item identifier

| | |
|---------------------------|----|
| Identifier of item chosen | 02 |
|---------------------------|----|

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 37 | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 81 | 82 | 85 |
| | 0E | 54 | 6F | 6F | 6C | 6B | 69 | 74 | 20 | 53 | 65 | 6C |
| | 65 | 63 | 74 | 8F | 07 | 01 | 49 | 74 | 65 | 6D | 20 | 31 |
| | 8F | 07 | 02 | 49 | 74 | 65 | 6D | 20 | 32 | 8F | 07 | 03 |
| | 49 | 74 | 65 | 6D | 20 | 33 | 90 | 01 | 02 | | | |

TERMINAL RESPONSE : SELECT ITEM 3.1.1

Logically:

| | |
|----------------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SELECT ITEM |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Item identifier | |
| Identifier of item chosen: | 03 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 90 | 01 | 03 | | | | | | | | | |

27.22.4.9.4 SELECT ITEM (help request support)**27.22.4.9.4.1 Definition and applicability**

See Section 3.2.2.

27.22.4.9.4.2 Conformance Requirement

Same as 27.22.4.9.1.2

27.22.4.9.4.3 Test Purpose

To verify that the mobile supports "help request" for the command Select Item.

27.22.4.9.4.4 Method of Test**27.22.4.9.4.4.1 Initial Conditions**

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.9.4.4.2 Procedure

Expected Sequence 4.1 (SELECT ITEM, help request, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SELECT ITEM 4.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SELECT ITEM 4.1.1 | [Help information available] |
| 4 | ME → USER | Display items of "Item 1", "Item 2" and "Item 3" under the header of "Toolkit Select". | |
| 5 | USER → ME | Navigate in the items until "Item 1". | |
| 6 | USER → ME | Select the Help Request on "Item 1" Menu entry | |
| 7 | ME → SIM | TERMINAL RESPONSE: SELECT ITEM 4.1.1 | [Help information required by the user] |

PROACTIVE COMMAND : SELECT ITEM 4.1.1

Logically:

Command details

Command number: 1
 Command type: SELECT ITEM
 Command qualifier: "80" help information available

Device identities

Source device: SIM
 Destination device: ME

Alpha identifier: "Toolkit Select"

Item

Identifier of item: 01
 Text string of item: "Item 1"

Item

Identifier of item: 02
 Text string of item: "Item 2"

Item

Identifier of item: 03
 Text string of item: "Item 3"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 34 | 81 | 03 | 01 | 24 | 80 | 82 | 02 | 81 | 82 | 85 |
| | 0E | 54 | 6F | 6F | 6C | 6B | 69 | 74 | 20 | 53 | 65 | 6C |
| | 65 | 63 | 74 | 8F | 07 | 01 | 49 | 74 | 65 | 6D | 20 | 31 |
| | 8F | 07 | 02 | 49 | 74 | 65 | 6D | 20 | 32 | 8F | 07 | 03 |
| | 49 | 74 | 65 | 6D | 20 | 33 | | | | | | |

TERMINAL RESPONSE : SELECT ITEM 4.1.1

Logically:

| | |
|----------------------------|---------------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SELECT ITEM |
| Command qualifier: | "80" |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Help information required by the user |
| Item identifier | |
| Identifier of item chosen: | 01 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 24 | 80 | 82 | 02 | 82 | 81 | 83 | 01 | 13 |
| | 90 | | 01 | | | | | | | | | |

27.22.4.9.5 SELECT ITEM (icons support)**27.22.4.9.5.1 Definition and applicability**

See Section 3.2.2.

27.22.4.9.5.2 Conformance Requirement

Same as 27.22.4.9.1.2, and GSM 11.14 clause 12.31, and clause 12.32.

27.22.4.9.5.3 Test Purpose

To verify that the mobile displays icons with the command Select Item.

27.22.4.9.5.4 Method of Test**27.22.4.9.5.4.1 Initial Conditions**

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.9.5.4.2 Procedure

Expected Sequence 5.1A (SELECT ITEM, BASIC ICON NOT SELF EXPLANATORY, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SELECT ITEM 5.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SELECT ITEM 5.1.1 | |
| 4 | ME → USER | Display items of "Item 1", "Item 2" and "Item 3" under the header of "Toolkit Select". | Verify icons are displayed in the alpha identifier and in the 3 items. |
| 5 | USER → ME | Navigate in the items, then select "Item 1". | |
| 6 | ME → SIM | TERMINAL RESPONSE: SELECT ITEM 5.1.1 A | [command performed successfully] |

PROACTIVE COMMAND: SELECT ITEM 5.1.1

Logically:

Command details

| | |
|--------------------|-------------|
| Command number: | 1 |
| Command type: | SELECT ITEM |
| Command qualifier: | "00" |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Alpha identifier:

| | |
|--|------------------|
| | "Toolkit Select" |
|--|------------------|

Item

| | |
|----------------------|----------|
| Identifier of item: | 01 |
| Text string of item: | "Item 1" |

Item

| | |
|----------------------|----------|
| Identifier of item: | 02 |
| Text string of item: | "Item 2" |

Item

| | |
|----------------------|----------|
| Identifier of item: | 03 |
| Text string of item: | "Item 3" |

Icon Identifier:

| | |
|------------------|-------------------------------------|
| Icon qualifier: | "01" (icon is not self-explanatory) |
| Icon Identifier: | record 1 in EF _(IMG) |

Item icon identifier list:

| | |
|------------------|---|
| Icon qualifier: | "01" (icon is not self-explanatory) |
| Icon Identifier: | record 5 in EF _(IMG) , record 5 in EF _(IMG) , record 5 in EF _(IMG) |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 3E | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 81 | 82 | 85 |
| | 0E | 54 | 6F | 6F | 6C | 6B | 69 | 74 | 20 | 53 | 65 | 6C |
| | 65 | 63 | 74 | 8F | 07 | 01 | 49 | 74 | 65 | 6D | 20 | 31 |
| | 8F | 07 | 02 | 49 | 74 | 65 | 6D | 20 | 32 | 8F | 07 | 03 |
| | 49 | 74 | 65 | 6D | 20 | 33 | 9E | 02 | 01 | 01 | 9F | 04 |
| | 01 | 05 | 05 | 05 | | | | | | | | |

TERMINAL RESPONSE: SELECT ITEM 5.1.1A

Logically:

| | |
|----------------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SELECT ITEM |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Item identifier | |
| Identifier of item chosen: | 01 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 90 | | 01 | | | | | | | | | |

Expected Sequence 5.1B (SELECT ITEM, BASIC ICON NOT SELF EXPLANATORY, requested icon could not be displayed)

| Step | Direction | MESSAGE / Action | Comments |
|-------------|------------------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SELECT ITEM 5.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SELECT ITEM 5.1.1 | |
| 4 | ME → USER | Display items of "Item 1", "Item 2" and "Item 3" under the header of "Toolkit Select". | no icon is displayed in the alpha identifier nor in the 3 items. |
| 5 | USER → ME | Navigate in the items, then select "Item 1". | |
| 6 | ME → SIM | TERMINAL RESPONSE: SELECT ITEM 5.1.1 B | [Command performed successfully, but requested icon could not be displayed] |

TERMINAL RESPONSE : SELECT ITEM 5.1.1B

Logically:

| | |
|----------------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | SELECT ITEM |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully but requested icon could not be displayed |
| Item identifier | |
| Identifier of item chosen: | 01 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 04 |
| | 90 | | 01 | | | | | | | | | |

Expected Sequence 5.2A (SELECT ITEM, BASIC ICON SELF EXPLANATORY, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SELECT ITEM 5.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SELECT ITEM 5.2.1 | |
| 4 | ME → USER | Display items of "Item 1", "Item 2" and "Item 3" under the header of "Toolkit Select". | Verify icons are displayed without text as alpha id and for the all 3 items. |
| 5 | USER → ME | Navigate in the items, then select "Item 1". | |
| 6 | ME → SIM | TERMINAL RESPONSE: SELECT ITEM 5.2.1 A | [command performed successfully] |

PROACTIVE COMMAND : SELECT ITEM 5.2.1

Logically:

Command details

Command number: 1
 Command type: SELECT ITEM
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: ME
 Alpha identifier: "Toolkit Select"

Item

Identifier of item: 01
 Text string of item: "Item 1"

Item

Identifier of item: 02
 Text string of item: "Item 2"

Item

Identifier of item: 03
 Text string of item: "Item 3"

Icon Identifier:

Icon qualifier: "00" (icon is self-explanatory)
 Icon Identifier: record 1 in EF_(IMG)

Item icon identifier list:

Icon qualifier: "00" (icon is self-explanatory)
 Icon Identifier: record 5 in EF_(IMG), record 5 in EF_(IMG), record 5 in EF_(IMG)

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 3E | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 81 | 82 | 85 |
| | 0E | 54 | 6F | 6F | 6C | 6B | 69 | 74 | 20 | 53 | 65 | 6C |
| | 65 | 63 | 74 | 8F | 07 | 01 | 49 | 74 | 65 | 6D | 20 | 31 |
| | 8F | 07 | 02 | 49 | 74 | 65 | 6D | 20 | 32 | 8F | 07 | 03 |
| | 49 | 74 | 65 | 6D | 20 | 33 | 9E | 02 | 00 | 01 | 9F | 04 |
| | 00 | 05 | 05 | 05 | | | | | | | | |

TERMINAL RESPONSE : SELECT ITEM 5.2.1A

Logically:

| | |
|----------------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SELECT ITEM |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Item identifier | |
| Identifier of item chosen: | 01 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 90 | | 01 | | | | | | | | | |

Expected Sequence 5.2B (SELECT ITEM, BASIC ICON SELF EXPLANATORY, requested icon could not be displayed)

| Step | Direction | MESSAGE / Action | Comments |
|-------------|------------------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SELECT ITEM 5.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SELECT ITEM 5.2.1 | |
| 4 | ME → USER | Display items of "Item 1", "Item 2" and "Item 3" under the header of "Toolkit Select". | no icon is displayed with text as alpha id nor for the all 3 items. |
| 5 | USER → ME | Navigate in the items, then select "Item 1". | |
| 6 | ME → SIM | TERMINAL RESPONSE: SELECT ITEM 5.2.1B | [command performed successfully but requested icon could not be displayed] |

TERMINAL RESPONSE : SELECT ITEM 5.2.1B

Logically:

| | |
|----------------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | SELECT ITEM |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully but requested icon could not be displayed |
| Item identifier | |
| Identifier of item chosen: | 01 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 24 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 04 |
| | 90 | | 01 | | | | | | | | | |

27.22.4.9.6 SELECT ITEM (presentation style)**27.22.4.9.6.1 Definition and applicability**

See Section 3.2.2.

27.22.4.9.6.2 Conformance Requirement

Same as 27.22.4.9.1.2.

27.22.4.9.6.3 Test Purpose

To verify that the mobile supports the "presentation style" with the command Select Item.

27.22.4.9.6.4 Method of Test**27.22.4.9.6.4.1 Initial Conditions**

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.9.6.4.2 Procedure

Expected Sequence 6.1 (SELECT ITEM, PRESENTATION AS A CHOICE OF NAVIGATION OPTIONS, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SELECT ITEM 6.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SELECT ITEM 6.1.1 | |
| 4 | ME → USER | Display items of "Item 1", "Item 2" and "Item 3" under the header of "Toolkit Select". | Verify if presentation style appears. |
| 5 | USER → ME | Navigate in the items, then select "Item 1". | |
| 6 | ME → SIM | TERMINAL RESPONSE: SELECT ITEM 6.1.1 | [command performed successfully] |

PROACTIVE COMMAND : SELECT ITEM 6.1.1

Logically:

Command details

| | |
|--------------------|---|
| Command number: | 1 |
| Command type: | SELECT ITEM |
| Command qualifier: | "03" (presentation as a choice of navigation options) |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Alpha identifier:

| | |
|--|------------------|
| | "Toolkit Select" |
|--|------------------|

Item

| | |
|----------------------|----------|
| Identifier of item: | 01 |
| Text string of item: | "Item 1" |

Item

| | |
|----------------------|----------|
| Identifier of item: | 02 |
| Text string of item: | "Item 2" |

Item

| | |
|----------------------|----------|
| Identifier of item: | 03 |
| Text string of item: | "Item 3" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 34 | 81 | 03 | 01 | 24 | 03 | 82 | 02 | 81 | 82 | 85 |
| | 0E | 54 | 6F | 6F | 6C | 6B | 69 | 74 | 20 | 53 | 65 | 6C |
| | 65 | 63 | 74 | 8F | 07 | 01 | 49 | 74 | 65 | 6D | 20 | 31 |
| | 8F | 07 | 02 | 49 | 74 | 65 | 6D | 20 | 32 | 8F | 07 | 03 |
| | 49 | 74 | 65 | 6D | 20 | 33 | | | | | | |

TERMINAL RESPONSE : SELECT ITEM 6.1.1

Logically:

Command details
Command number: 1
Command type: SELECT ITEM
Command qualifier: "03" (presentation as a choice of navigation options)
Device identities
Source device: ME
Destination device: SIM
Result
General Result: Command performed successfully
Item identifier
Identifier of item chosen: 01

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 24 | 03 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 90 | | 01 | | | | | | | | | |

Expected Sequence 6.2 (SELECT ITEM, PRESENTATION AS A CHOICE OF DATA VALUES, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SELECT ITEM 6.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SELECT ITEM 6.2.1 | |
| 4 | ME → USER | Display items of "Item 1", "Item 2" and "Item 3" under the header of "Toolkit Select". | Verify if presentation style appears |
| 5 | USER → ME | Navigate in the items, then select "Item 1". | |
| 6 | ME → SIM | TERMINAL RESPONSE: SELECT ITEM 6.2.1 | [command performed successfully] |

PROACTIVE COMMAND: SELECT ITEM 6.2.1

Logically:

Command details

| | |
|--------------------|--|
| Command number: | 1 |
| Command type: | SELECT ITEM |
| Command qualifier: | "01" (presentation as a choice of data values) |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Alpha identifier: "Toolkit Select"

Item

| | |
|----------------------|----------|
| Identifier of item: | 01 |
| Text string of item: | "Item 1" |

Item

| | |
|----------------------|----------|
| Identifier of item: | 02 |
| Text string of item: | "Item 2" |

Item

| | |
|----------------------|----------|
| Identifier of item: | 03 |
| Text string of item: | "Item 3" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 34 | 81 | 03 | 01 | 24 | 01 | 82 | 02 | 81 | 82 | 85 |
| | 0E | 54 | 6F | 6F | 6C | 6B | 69 | 74 | 20 | 53 | 65 | 6C |
| | 65 | 63 | 74 | 8F | 07 | 01 | 49 | 74 | 65 | 6D | 20 | 31 |
| | 8F | 07 | 02 | 49 | 74 | 65 | 6D | 20 | 32 | 8F | 07 | 03 |
| | 49 | 74 | 65 | 6D | 20 | 33 | | | | | | |

TERMINAL RESPONSE: SELECT ITEM 6.2.1

Logically:

| | |
|----------------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | SELECT ITEM |
| Command qualifier: | “01”(presentation as a choice of data values) |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Item identifier | |
| Identifier of item chosen: | 01 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 24 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 90 | | 01 | | | | | | | | | |

27.22.4.9.7 SELECT ITEM (soft keys support)**27.22.4.9.7.1 Definition and applicability**

See Section 3.2.2.

27.22.4.9.7.2 Conformance Requirement

Same as 27.22.4.9.1.2.

27.22.4.9.7.3 Test Purpose

To verify that the mobile supports the “soft keys” with the command Select Item.

27.22.4.9.7.4 Method of Test**27.22.4.9.7.4.1 Initial Conditions**

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.9.7.4.2 Procedure

Expected Sequence 7.1 (SELECT ITEM, SELECTING USING SOFT KEYS PREFERRED, successful, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SELECT ITEM 7.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SELECT ITEM 7.1.1 | |
| 4 | ME → USER | Display items of "Item 1", "Item 2" under the header of "Toolkit Select". | |
| 5 | USER → ME | Navigate in the items, then select "Item 1". | Verify that we can choose an item through soft keys |
| 6 | ME → SIM | TERMINAL RESPONSE: SELECT ITEM 7.1.1 | [command performed successfully] |

PROACTIVE COMMAND : SELECT ITEM 7.1.1

Logically:

Command details

| | |
|--------------------|--|
| Command number: | 1 |
| Command type: | SELECT ITEM |
| Command qualifier: | "04" (selection using soft keys preferred) |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Alpha identifier:

| | |
|--|------------------|
| | "Toolkit Select" |
|--|------------------|

Item

| | |
|----------------------|----------|
| Identifier of item: | 01 |
| Text string of item: | "Item 1" |

Item

| | |
|----------------------|----------|
| Identifier of item: | 02 |
| Text string of item: | "Item 2" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 2B | 81 | 03 | 01 | 24 | 04 | 82 | 02 | 81 | 82 | 85 |
| | 0E | 54 | 6F | 6F | 6C | 6B | 69 | 74 | 20 | 53 | 65 | 6C |
| | 65 | 63 | 74 | 8F | 07 | 01 | 49 | 74 | 65 | 6D | 20 | 31 |
| | 8F | 07 | 02 | 49 | 74 | 65 | 6D | 20 | 32 | | | |

TERMINAL RESPONSE : SELECT ITEM 7.1.1

Logically:

| | |
|----------------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | SELECT ITEM |
| Command qualifier: | “04” (selection using soft keys preferred) |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Item identifier | |
| Identifier of item chosen: | 01 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 24 | 04 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 90 | | 01 | | | | | | | | | |

27.22.4.10 SEND SHORT MESSAGE**27.22.4.10.1 SEND SHORT MESSAGE (normal)****27.22.4.10.1.1 Definition and applicability**

See Section 3.2.2.

27.22.4.10.1.2 Conformance requirement

The ME shall support the Proactive SIM: SEND SHORT MESSAGE facility as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 6.1, clause 6.4.10 (Send Short Message), clause 6.6.9 (Send Short Message), clause 12.6 (Command Details), clause 12.7 (Device Identities), clause 12.2 (Alpha Identifier), clause 12.1 (Address), clause 12.13 (SMS-TPDU), clause 12.31 (Icon Identifier), clause 5.2 (Terminal Profile) 27.22.4.10.1.3 Test Purpose

To verify that the ME correctly formats and sends a short message to the network (System Simulator) as indicated in the SEND SHORT MESSAGE proactive SIM command, and returns a TERMINAL RESPONSE command to the SIM indicating the status of the transmission of the Short Message.

27.22.4.10.1.4 Method of test**27.22.4.10.1.4.1 Initial Conditions**

The ME is connected to the system Simulator and the SIM Simulator.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.10.1.4.2 Procedure

Expected Sequence 1.1(SEND SHORT MESSAGE, packing not required, 8-bit data, successful)

| Step | Direction | MESSAGE / Action | Comments |
|-------------|------------------|---|------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND SHORT MESSAGE 1.1.1 | [packing not required, 8-bit data] |
| 4 | ME → USER | Display "Send SM" | [Alpha Identifier] |
| 5 | ME → SS | Send SMS-PP "Test Message" | |
| 6 | SS → ME | SMS RP-ACK | |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND SHORT MESSAGE 1.1.1 | [Command performed successfully] |

PROACTIVE COMMAND : SEND SHORT MESSAGE 1.1.1

Logically:

| | |
|------------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | SEND SHORT MESSAGE |
| Command qualifier: | packing not required |
| Device identities | |
| Source device: | SIM |
| Destination device: | Network |
| Alpha identifier: | "Send SM" |
| Address | |
| TON: | International number |
| NPI: | "ISDN / telephone numbering plan" |
| Dialling number string | "112233445566778" |
| SMS TPDU | |
| TP-MTI | SMS-SUBMIT |
| TP-RD | Instruct the SC to accept an SMS-SUBMIT for a SM |
| TP-VPF | TP-VP field not present |
| TP-RP | TP-Reply-Path is not set in this SMS-SUBMIT |
| TP-UDHI | The TP-UD field contains only the short message |
| TP-SRR | A status report is not requested |
| TP-MR | "00" |
| TP-DA | |
| TON | International number |
| NPI | "ISDN / telephone numbering plan" |
| Address value | "012345678" |
| TP-PID | Short message type 0 |
| TP-DCS | |
| Message coding | 8-bit data |
| Message class | class 0 |
| TP-UDL | 12 |
| TP-UD | "Test Message" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 37 | 81 | 03 | 01 | 13 | 00 | 82 | 02 | 81 | 83 | 85 |
| | 07 | 53 | 65 | 6E | 64 | 20 | 53 | 4D | 86 | 09 | 91 | 11 |
| | 22 | 33 | 44 | 55 | 66 | 77 | F8 | 8B | 18 | 01 | 00 | 09 |
| | 91 | 10 | 32 | 54 | 76 | F8 | 40 | F4 | 0C | 54 | 65 | 73 |
| | 74 | 20 | 4D | 65 | 73 | 73 | 61 | 67 | 65 | | | |

SMS-PP (SEND SHORT MESSAGE) Message 1.1

Logically:

| | |
|----------------|--|
| SMS TPDU | |
| TP-MTI | SMS-SUBMIT |
| TP-RD | Instruct the SC to accept an SMS-SUBMIT for a SM |
| TP-VPF | TP-VP field not present |
| TP-RP | TP-Reply-Path is not set in this SMS-SUBMIT |
| TP-UDHI | The TP-UD field contains only the short message |
| TP-SRR | A status report is not requested |
| TP-MR | "00" |
| TP-DA | |
| TON | International number |
| NPI | "ISDN / telephone numbering plan" |
| Address value | "012345678" |
| TP-PID | Short message type 0 |
| TP-DCS | |
| Message coding | 8-bit data |
| Message class | class 0 |

| | |
|---------|-------------------------------------|
| TP-UDL | 12 |
| TP-UD | "Test Message" |
| Coding: | 01 00 09 91 10 32 54 76 F8 40 F4 0C |
| | 54 65 73 74 20 4D 65 73 73 61 67 65 |

TERMINAL RESPONSE : SEND SHORT MESSAGE 1.1.1

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SEND SHORT MESSAGE |
| Command qualifier: | packing not required |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | |
|----------|-------------------------------------|
| BER-TLV: | 81 03 01 13 00 82 02 82 81 83 01 00 |
|----------|-------------------------------------|

Expected Sequence 1.2 (SEND SHORT MESSAGE, packing required, 8-bit data, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND SHORT MESSAGE 1.2.1 | [packing required, 8-bit data] |
| 4 | ME → USER | Display "Send SM" | [Alpha Identifier] |
| 5 | ME → SS | Send SMS-PP "Send SM" | |
| 6 | SS → ME | SMS RP-ACK | |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND SHORT MESSAGE 1.2.1 | [Command performed successfully] |

PROACTIVE COMMAND : SEND SHORT MESSAGE 1.2.1

Logically:

| Command details | |
|------------------------|--|
| Command number: | 1 |
| Command type: | SEND SHORT MESSAGE |
| Command qualifier: | packing required |
| Device identities | |
| Source device: | SIM |
| Destination device: | Network |
| Alpha identifier: | "Send SM" |
| Address | |
| TON: | International number |
| NPI: | "ISDN / telephone numbering plan" |
| Dialling number string | "112233445566778" |
| SMS TPDU | |
| TP-MTI | SMS-SUBMIT |
| TP-RD | Instruct the SC to accept an SMS-SUBMIT for a SM |
| TP-VPF | TP-VP field not present |
| TP-RP | TP-Reply-Path is not set in this SMS-SUBMIT |
| TP-UDHI | The TP-UD field contains only the short message |
| TP-SRR | A status report is not requested |
| TP-MR | "00" |
| TP-DA | |
| TON | International number |
| NPI | "ISDN / telephone numbering plan" |
| Address value | "012345678" |
| TP-PID | Short message type 0 |
| TP-DCS | |
| Message coding | 8-bit data |
| Message class | class 0 |
| TP-UDL | 7 |
| TP-UD | "Send SM" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 32 | 81 | 03 | 01 | 13 | 01 | 82 | 02 | 81 | 83 | 85 |
| | 07 | 53 | 65 | 6E | 64 | 20 | 53 | 4D | 86 | 09 | 91 | 11 |
| | 22 | 33 | 44 | 55 | 66 | 77 | F8 | 8B | 13 | 01 | 00 | 09 |
| | 91 | 10 | 32 | 54 | 76 | F8 | 40 | F4 | 07 | 53 | 65 | 6E |
| | 64 | 20 | 53 | 4D | | | | | | | | |

SMS-PP (SEND SHORT MESSAGE) Message 1.2

Logically:

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------|--|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--|--|--|--|--|
| SMS TPDU | | | | | | | | | | | | | | | | | | | | | | | | | |
| TP-MTI | SMS-SUBMIT | | | | | | | | | | | | | | | | | | | | | | | | |
| TP-RD | Instruct the SC to accept an SMS-SUBMIT for a SM | | | | | | | | | | | | | | | | | | | | | | | | |
| TP-VPF | TP-VP field not present | | | | | | | | | | | | | | | | | | | | | | | | |
| TP-RP | TP-Reply-Path is not set in this SMS-SUBMIT | | | | | | | | | | | | | | | | | | | | | | | | |
| TP-UDHI | The TP-UD field contains only the short message | | | | | | | | | | | | | | | | | | | | | | | | |
| TP-SRR | A status report is not requested | | | | | | | | | | | | | | | | | | | | | | | | |
| TP-MR | "00" | | | | | | | | | | | | | | | | | | | | | | | | |
| TP-DA | | | | | | | | | | | | | | | | | | | | | | | | | |
| TON | International number | | | | | | | | | | | | | | | | | | | | | | | | |
| NPI | "ISDN / telephone numbering plan" | | | | | | | | | | | | | | | | | | | | | | | | |
| Address value | "012345678" | | | | | | | | | | | | | | | | | | | | | | | | |
| TP-PID | Short message type 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| TP-DCS | | | | | | | | | | | | | | | | | | | | | | | | | |
| Message coding | SMS default alphabet | | | | | | | | | | | | | | | | | | | | | | | | |
| Message class | class 0 | | | | | | | | | | | | | | | | | | | | | | | | |
| TP-UDL | 7 | | | | | | | | | | | | | | | | | | | | | | | | |
| TP-UD | "Send SM" | | | | | | | | | | | | | | | | | | | | | | | | |
| Coding: | <table border="0"> <tr> <td>01</td><td>00</td><td>09</td><td>91</td><td>10</td><td>32</td><td>54</td><td>76</td><td>F8</td><td>40</td><td>F4</td><td>07</td> </tr> <tr> <td>D3</td><td>B2</td><td>9B</td><td>0C</td><td>9A</td><td>36</td><td>01</td><td></td><td></td><td></td><td></td><td></td></tr> </table> | 01 | 00 | 09 | 91 | 10 | 32 | 54 | 76 | F8 | 40 | F4 | 07 | D3 | B2 | 9B | 0C | 9A | 36 | 01 | | | | | |
| 01 | 00 | 09 | 91 | 10 | 32 | 54 | 76 | F8 | 40 | F4 | 07 | | | | | | | | | | | | | | |
| D3 | B2 | 9B | 0C | 9A | 36 | 01 | | | | | | | | | | | | | | | | | | | |

TERMINAL RESPONSE : SEND SHORT MESSAGE 1.2.1

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SEND SHORT MESSAGE |
| Command qualifier: | packing required |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

BER-TLV: 81 03 01 13 01 82 02 82 81 83 01 00

Expected Sequence 1.3 (SEND SHORT MESSAGE, packing not required, SMS default alphabet, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND SHORT MESSAGE 1.3.1 | [packing not required, SMS default alphabet] |
| 4 | ME → USER | Display "Short Message" | [Alpha Identifier] |
| 5 | ME → SS | Send SMS-PP "Short Message" | |
| 6 | SS → ME | SMS RP-ACK | |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND SHORT MESSAGE 1.3.1 | [Command performed successfully] |

PROACTIVE COMMAND : SEND SHORT MESSAGE 1.3.1

Logically:

Command details

Command number: 1
Command type: SEND SHORT MESSAGE
Command qualifier: packing not required

Device identities

Source device: SIM
Destination device: Network
Alpha identifier: "Short Message"

Address

TON: International number
NPI: "ISDN / telephone numbering plan"
Dialling number string: "112233445566778"

SMS TPDU

TP-MTI: SMS-SUBMIT
TP-RD: Instruct the SC to accept an SMS-SUBMIT for a SM
TP-VPF: TP-VP field not present
TP-RP: TP-Reply-Path is not set in this SMS-SUBMIT
TP-UDHI: The TP-UD field contains only the short message
TP-SRR: A status report is not requested
TP-MR: "00"

TP-DA

TON: International number
NPI: "ISDN / telephone numbering plan"
Address value: "012345678"

TP-PID

Short message type 0

TP-DCS

Message coding

SMS default alphabet

Message class

class 0

TP-UDL

13

TP-UD

"Short Message"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 3D | 81 | 03 | 01 | 13 | 00 | 82 | 02 | 81 | 83 | 85 |
| | 0D | 53 | 68 | 6F | 72 | 74 | 20 | 4D | 65 | 73 | 73 | 61 |
| | 67 | 65 | 86 | 09 | 91 | 11 | 22 | 33 | 44 | 55 | 66 | 77 |
| | F8 | 8B | 18 | 01 | 00 | 09 | 91 | 10 | 32 | 54 | 76 | F8 |
| | 40 | F0 | 0D | 53 | F4 | 5B | 4E | 07 | 35 | CB | F3 | 79 |
| | F8 | 5C | 06 | | | | | | | | | |

SMS-PP (SEND SHORT MESSAGE) Message 1.3

Logically:

| | |
|----------------|--|
| SMS TPDU | |
| TP-MTI | SMS-SUBMIT |
| TP-RD | Instruct the SC to accept an SMS-SUBMIT for a SM |
| TP-VPF | TP-VP field not present |
| TP-RP | TP-Reply-Path is not set in this SMS-SUBMIT |
| TP-UDHI | The TP-UD field contains only the short message |
| TP-SRR | A status report is not requested |
| TP-MR | "00" |
| TP-DA | |
| TON | International number |
| NPI | "ISDN / telephone numbering plan" |
| Address value | "012345678" |
| TP-PID | Short message type 0 |
| TP-DCS | |
| Message coding | SMS default alphabet |
| Message class | class 0 |
| TP-UDL | 13 |
| TP-UD | "Short Message" |

| | | | | | | | | | | | | |
|---------|----|----|----|----|----|----|----|----|----|----|----|----|
| Coding: | 01 | 00 | 09 | 91 | 10 | 32 | 54 | 76 | F8 | 40 | F0 | 0D |
| | 53 | F4 | 5B | 4E | 07 | 35 | CB | F3 | 79 | F8 | 5C | 06 |

TERMINAL RESPONSE : SEND SHORT MESSAGE 1.3.1

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SEND SHORT MESSAGE |
| Command qualifier: | packing not required |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 13 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 1.4 (SEND SHORT MESSAGE, packing required, SMS default alphabet, message of 160 bytes, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|--------------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.4. 1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND SHORT MESSAGE 1.4.1 | [packing required, SMS default alphabet] |
| 4 | ME → USER | Display " The address data object holds the RP_Destination_Address " | [Alpha Identifier] |
| 5 | ME → SS | Send SMS-PP "Two types are defined: - A short message to be sent to the network in an SMS- SUBMIT message, or an SMS- COMMAND message, where the user data can be passed transp" | [message of 160 bytes] |
| 6 | SS → ME | SMS RP-ACK | |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND SHORT MESSAGE 1.4.1 | [Command performed successfully] |

PROACTIVE COMMAND : SEND SHORT MESSAGE 1.4.1

Logically:

| | |
|------------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | SEND SHORT MESSAGE |
| Command qualifier: | packing required |
| Device identities | |
| Source device: | SIM |
| Destination device: | Network |
| Alpha identifier: | "The address data object holds the RP_Destination_Address" |
| Address | |
| TON: | International number |
| NPI: | "ISDN / telephone numbering plan" |
| Dialling number string | "112233445566778" |
| SMS TPDU | |
| TP-MTI | SMS-SUBMIT |
| TP-RD | Instruct the SC to accept an SMS-SUBMIT for a SM |
| TP-VPF | TP-VP field not present |
| TP-RP | TP-Reply-Path is not set in this SMS-SUBMIT |
| TP-UDHI | The TP-UD field contains only the short message |
| TP-SRR | A status report is not requested |
| TP-MR | "00" |
| TP-DA | |
| TON | International number |
| NPI | "ISDN / telephone numbering plan" |
| Address value | "012345678" |
| TP-PID | Short message type 0 |
| TP-DCS | |
| Message coding | SMS default alphabet |
| Message class | class 0 |
| TP-UDL | 160 |
| TP-UD | "Two types are defined: - A short message to be sent to the network in an SMS-SUBMIT message, or an SMS-COMMAND message, where the user data can be passed transp" |
| Coding: | |

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 81 | FD | 81 | 03 | 01 | 13 | 00 | 82 | 02 | 81 | 83 |
| | 85 | 38 | 54 | 68 | 65 | 20 | 61 | 64 | 64 | 72 | 65 | 73 |

| | | | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|----|----|----|
| 73 | 20 | 64 | 61 | 74 | 61 | 20 | 6F | 62 | 6A | 65 | 63 |
| 74 | 20 | 68 | 6F | 6C | 64 | 73 | 20 | 74 | 68 | 65 | 20 |
| 52 | 50 | 11 | 44 | 65 | 73 | 74 | 69 | 6E | 61 | 74 | 69 |
| 6F | 6E | 11 | 41 | 64 | 64 | 72 | 65 | 73 | 73 | 86 | 09 |
| 91 | 11 | 22 | 33 | 44 | 55 | 66 | 77 | F8 | 8B | 81 | AC |
| 01 | 00 | 09 | 91 | 10 | 32 | 54 | 76 | F8 | 40 | F4 | A0 |
| 54 | 77 | 6F | 20 | 74 | 79 | 70 | 65 | 73 | 20 | 61 | 72 |
| 65 | 20 | 64 | 65 | 66 | 69 | 6E | 65 | 64 | 3A | 20 | 2D |
| 20 | 41 | 20 | 73 | 68 | 6F | 72 | 74 | 20 | 6D | 65 | 73 |
| 73 | 61 | 67 | 65 | 20 | 74 | 6F | 20 | 62 | 65 | 20 | 73 |
| 65 | 6E | 74 | 20 | 74 | 6F | 20 | 74 | 68 | 65 | 20 | 6E |
| 65 | 74 | 77 | 6F | 72 | 6B | 20 | 69 | 6E | 20 | 61 | 6E |
| 20 | 53 | 4D | 53 | 2D | 53 | 55 | 42 | 4D | 49 | 54 | 20 |
| 6D | 65 | 73 | 73 | 61 | 67 | 65 | 2C | 20 | 6F | 72 | 20 |
| 61 | 6E | 20 | 53 | 4D | 53 | 2D | 43 | 4F | 4D | 4D | 41 |
| 4E | 44 | 20 | 6D | 65 | 73 | 73 | 61 | 67 | 65 | 2C | 20 |
| 77 | 68 | 65 | 72 | 65 | 20 | 74 | 68 | 65 | 20 | 75 | 73 |
| 65 | 72 | 20 | 64 | 61 | 74 | 61 | 20 | 63 | 61 | 6E | 20 |
| 62 | 65 | 20 | 70 | 61 | 73 | 73 | 65 | 64 | 20 | 74 | 72 |
| 61 | 6E | 73 | 70 | | | | | | | | |

SMS-PP (SEND SHORT MESSAGE) Message 1.4

Logically:

| | |
|----------------|--|
| SMS TPDU | |
| TP-MTI | SMS-SUBMIT |
| TP-RD | Instruct the SC to accept an SMS-SUBMIT for a SM |
| TP-VPF | TP-VP field not present |
| TP-RP | TP-Reply-Path is not set in this SMS-SUBMIT |
| TP-UDHI | The TP-UD field contains only the short message |
| TP-SRR | A status report is not requested |
| TP-MR | "00" |
| TP-DA | |
| TON | International number |
| NPI | "ISDN / telephone numbering plan" |
| Address value | "012345678" |
| TP-PID | Short message type 0 |
| TP-DCS | |
| Message coding | SMS default alphabet |
| Message class | class 0 |
| TP-UDL | 160 |
| TP-UD | "Two types are defined: - A short message to be sent to the network in an SMS-SUBMIT message, or an SMS-COMMAND message, where the user data can be passed transp" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 98 | 01 | 00 | 09 | 91 | 10 | 32 | 54 | 76 | F8 | 40 | F0 |
| | A0 | D4 | FB | 1B | 44 | CF | C3 | CB | 73 | 50 | 58 | 5E |
| | 06 | 91 | CB | E6 | B4 | BB | 4C | D6 | 81 | 5A | A0 | 20 |
| | 68 | 8E | 7E | CB | E9 | A0 | 76 | 79 | 3E | 0F | 9F | CB |
| | 20 | FA | 1B | 24 | 2E | 83 | E6 | 65 | 37 | 1D | 44 | 7F |
| | 83 | E8 | E8 | 32 | C8 | 5D | A6 | DF | DF | F2 | 35 | 28 |
| | ED | 06 | 85 | DD | A0 | 69 | 73 | DA | 9A | 56 | 85 | CD |
| | 24 | 15 | D4 | 2E | CF | E7 | E1 | 73 | 99 | 05 | 7A | CB |
| | 41 | 61 | 37 | 68 | DA | 9C | B6 | 86 | CF | 66 | 33 | E8 |
| | 24 | 82 | DA | E5 | F9 | 3C | 7C | 2E | B3 | 40 | 77 | 74 |
| | 59 | 5E | 06 | D1 | D1 | 65 | 50 | 7D | 5E | 96 | 83 | C8 |
| | 61 | 7A | 18 | 34 | 0E | BB | 41 | E2 | 32 | 08 | 1E | 9E |
| | CF | CB | 64 | 10 | 5D | 1E | 76 | CF | E1 | | | |

TERMINAL RESPONSE : SEND SHORT MESSAGE 1.4.1

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SEND SHORT MESSAGE |
| Command qualifier: | packing not required |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

BER-TLV: 81 03 01 13 00 82 02 82 81 83 01 00

Expected Sequence 1.5 (SEND SHORT MESSAGE, packing not required, SMS default alphabet, message of 160 bytes, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.5.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND SHORT MESSAGE 1.5.1 | [packing not required, SMS default alphabet] |
| 4 | ME → USER | Display "The address data object holds the RP_Destination_Address" | [Alpha Identifier] |
| 5 | ME → SS | Send SMS-PP "Two types are defined: - A short message to be sent to the network in an SMS-SUBMIT message, or an SMS-COMMAND message, where the user data can be passed transp" | [message of 160 bytes] |
| 6 | SS → ME | SMS RP-ACK | |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND SHORT MESSAGE 1.5.1 | [Command performed successfully] |

PROACTIVE COMMAND : SEND SHORT MESSAGE 1.5.1

Logically:

Command details

| | |
|--------------------|----------------------|
| Command number: | 1 |
| Command type: | SEND SHORT MESSAGE |
| Command qualifier: | packing not required |

Device identities

| | |
|---------------------|---------|
| Source device: | SIM |
| Destination device: | Network |

Alpha identifier:

"The address data object holds the RP Destination Address"

Address

| | |
|------------------------|-----------------------------------|
| TON: | International number |
| NPI: | "ISDN / telephone numbering plan" |
| Dialling number string | "112233445566778" |

SMS TPDU

| | |
|--------|--|
| TP-MTI | SMS-SUBMIT |
| TP-RDI | Instruct the SC to accept an SMS-SUBMIT for a SM |
| TP-VPF | TP-VP field not present |
| TP-RP | TP-Reply-Path is not set in this SMS-SUBMIT |

| | |
|---------|---|
| TP-UDHI | The TP-UD field contains only the short message |
| TP-SRR | A status report is not requested |

TP-MR
TP-DA

"00"

TP-DA

| | |
|---------------|-----------------------------------|
| TON | International number |
| NPI | "ISDN / telephone numbering plan" |
| Address value | "012345678" |

TP-PID

Short message type 0

TP-DCS

| | |
|----------------|----------------------|
| Message coding | SMS default alphabet |
| Message class | class 0 |

TP-UDL

160

TP-UD

"Two types are defined: - A short message to be sent to the network in an SMS-SUBMIT message, or an SMS-COMMAND message, where the user data can be passed transp"

Coding:

| BER-TLV: | D0 | 81 | E9 | 81 | 03 | 01 | 13 | 00 | 82 | 02 | 81 | 83 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| | 85 | 38 | 54 | 68 | 65 | 20 | 61 | 64 | 64 | 72 | 65 | 73 |
| | 73 | 20 | 64 | 61 | 74 | 61 | 20 | 6F | 62 | 6A | 65 | 63 |
| | 74 | 20 | 68 | 6F | 6C | 64 | 73 | 20 | 74 | 68 | 65 | 20 |
| | 52 | 50 | 20 | 44 | 65 | 73 | 74 | 69 | 6E | 61 | 74 | 69 |
| | 6F | 6E | 20 | 41 | 64 | 64 | 72 | 65 | 73 | 73 | 86 | 09 |
| | 91 | 11 | 22 | 33 | 44 | 55 | 66 | 77 | F8 | 8B | 81 | 98 |
| | 01 | 00 | 09 | 91 | 10 | 32 | 54 | 76 | F8 | 40 | F0 | A0 |
| | D4 | FB | 1B | 44 | CF | C3 | CB | 73 | 50 | 58 | 5E | 06 |
| | 91 | CB | E6 | B4 | BB | 4C | D6 | 81 | 5A | A0 | 20 | 68 |
| | 8E | 7E | CB | E9 | A0 | 76 | 79 | 3E | 0F | 9F | CB | 20 |
| | FA | 1B | 24 | 2E | 83 | E6 | 65 | 37 | 1D | 44 | 7F | 83 |
| | E8 | E8 | 32 | C8 | 5D | A6 | DF | DF | F2 | 35 | 28 | ED |
| | 06 | 85 | DD | A0 | 69 | 73 | DA | 9A | 56 | 85 | CD | 24 |
| | 15 | D4 | 2E | CF | E7 | E1 | 73 | 99 | 05 | 7A | CB | 41 |
| | 61 | 37 | 68 | DA | 9C | B6 | 86 | CF | 66 | 33 | E8 | 24 |
| | 82 | DA | E5 | F9 | 3C | 7C | 2E | B3 | 40 | 77 | 74 | 59 |
| | 5E | 06 | D1 | D1 | 65 | 50 | 7D | 5E | 96 | 83 | C8 | 61 |
| | 7A | 18 | 34 | 0E | BB | 41 | E2 | 32 | 08 | 1E | 9E | CF |
| | CB | 64 | 10 | 5D | 1E | 76 | CF | E1 | | | | |

SMS-PP (SEND SHORT MESSAGE) Message 1.5

Logically:

| | |
|----------------|--|
| SMS TPDU | |
| TP-MTI | SMS-SUBMIT |
| TP-RDI | Instruct the SC to accept an SMS-SUBMIT for a SM |
| TP-VPF | TP-VP field not present |
| TP-RP | TP-Reply-Path is not set in this SMS-SUBMIT |
| TP-UDHI | The TP-UD field contains only the short message |
| TP-SRR | A status report is not requested |
| TP-MR | "00" |
| TP-DA | |
| TON | International number |
| NPI | "ISDN / telephone numbering plan" |
| Address value | "012345678" |
| TP-PID | Short message type 0 |
| TP-DCS | |
| Message coding | SMS default alphabet |
| Message class | class 0 |
| TP-UDL | 160 |
| TP-UD | "Two types are defined: - A short message to be sent to the network in an SMS-SUBMIT message, or an SMS-COMMAND message, where the user data can be passed transp" |

| | | | | | | | | | | | | |
|---------|----|----|----|----|----|----|----|----|----|----|----|----|
| Coding: | 01 | 00 | 09 | 91 | 10 | 32 | 54 | 76 | F8 | 40 | F0 | A0 |
| | D4 | FB | 1B | 44 | CF | C3 | CB | 73 | 50 | 58 | 5E | 06 |
| | 91 | CB | E6 | B4 | BB | 4C | D6 | 81 | 5A | A0 | 20 | 68 |
| | 8E | 7E | CB | E9 | A0 | 76 | 79 | 3E | 0F | 9F | CB | 20 |
| | FA | 1B | 24 | 2E | 83 | E6 | 65 | 37 | 1D | 44 | 7F | 83 |
| | E8 | E8 | 32 | C8 | 5D | A6 | DF | DF | F2 | 35 | 28 | ED |
| | 06 | 85 | DD | A0 | 69 | 73 | DA | 9A | 56 | 85 | CD | 24 |
| | 15 | D4 | 2E | CF | E7 | E1 | 73 | 99 | 05 | 7A | CB | 41 |
| | 61 | 37 | 68 | DA | 9C | B6 | 86 | CF | 66 | 33 | E8 | 24 |
| | 82 | DA | E5 | F9 | 3C | 7C | 2E | B3 | 40 | 77 | 74 | 59 |
| | 5E | 06 | D1 | D1 | 65 | 50 | 7D | 5E | 96 | 83 | C8 | 61 |
| | 7A | 18 | 34 | 0E | BB | 41 | E2 | 32 | 08 | 1E | 9E | CF |
| | CB | 64 | 10 | 5D | 1E | 76 | CF | E1 | | | | |

TERMINAL RESPONSE : SEND SHORT MESSAGE 1.5.1

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SEND SHORT MESSAGE |
| Command qualifier: | packing not required |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

BER-TLV: 81 03 01 13 00 82 02 82 81 83 01 00

Expected Sequence 1.6 (SEND SHORT MESSAGE, alpha identifier 160 bytes long, SMS default alphabet, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.6.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND SHORT MESSAGE 1.6.1 | [packing not required, SMS default alphabet] |
| 4 | ME → USER | Display "Two types are defined: - A short message to be sent to the network in an SMS-SUBMIT message, or an SMS-COMMAND message, where the user data can be passed transparently; - A short message to be sent to the network in an SMS-SUBMIT " | [Alpha Identifier of 160 bytes] |
| 5 | ME → SS | Send SMS-PP "" | [space] |
| 6 | SS → ME | SMS RP-ACK | |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND SHORT MESSAGE 1.6.1 | [Command performed successfully] |

PROACTIVE COMMAND : SEND SHORT MESSAGE 1.6.1

Logically:

Command details

| | |
|--------------------|----------------------|
| Command number: | 1 |
| Command type: | SEND SHORT MESSAGE |
| Command qualifier: | packing not required |

Device identities

| | |
|---------------------|---------|
| Source device: | SIM |
| Destination device: | Network |

Alpha identifier:

"Two types are defined: - A short message to be sent to the network in an SMS-SUBMIT message, or an SMS-COMMAND message, where the user data can be passed transparently; - A short message to be sent to the network in an SMS-SUBMIT "

SMS TPDU

| | |
|---------|--|
| TP-MTI | SMS-SUBMIT |
| TP-RD | Instruct the SC to accept an SMS-SUBMIT for a SM |
| TP-VPF | TP-VP field not present |
| TP-RP | TP-Reply-Path is not set in this SMS-SUBMIT |
| TP-UDHI | The TP-UD field contains only the short message |
| TP-SRR | A status report is not requested |
| TP-MR | "00" |

TP-DA

| | |
|---------------|-----------------------------------|
| TON | International number |
| NPI | "ISDN / telephone numbering plan" |
| Address value | "01" |

TP-PID

Short message type 0

TP-DCS

| | |
|----------------|----------------------|
| Message coding | SMS default alphabet |
| Message class | class 0 |

TP-UDL

1

TP-UD

" "

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 81 | FD | 81 | 03 | 01 | 13 | 00 | 82 | 02 | 81 | 83 |
| | 85 | 81 | E6 | 54 | 77 | 6F | 20 | 74 | 79 | 70 | 65 | 73 |
| | 20 | 61 | 72 | 65 | 20 | 64 | 65 | 66 | 69 | 6E | 65 | 64 |

| | | | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|----|----|----|
| 3A | 20 | 2D | 20 | 41 | 20 | 73 | 68 | 6F | 72 | 74 | 20 |
| 6D | 65 | 73 | 73 | 61 | 67 | 65 | 20 | 74 | 6F | 20 | 62 |
| 65 | 20 | 73 | 65 | 6E | 74 | 20 | 74 | 6F | 20 | 74 | 68 |
| 65 | 20 | 6E | 65 | 74 | 77 | 6F | 72 | 6B | 20 | 69 | 6E |
| 20 | 61 | 6E | 20 | 53 | 4D | 53 | 2D | 53 | 55 | 42 | 4D |
| 49 | 54 | 20 | 6D | 65 | 73 | 73 | 61 | 67 | 65 | 2C | 20 |
| 6F | 72 | 20 | 61 | 6E | 20 | 53 | 4D | 53 | 2D | 43 | 4F |
| 4D | 4D | 41 | 4E | 44 | 20 | 6D | 65 | 73 | 73 | 61 | 67 |
| 65 | 2C | 20 | 77 | 68 | 65 | 72 | 65 | 20 | 74 | 68 | 65 |
| 20 | 75 | 73 | 65 | 72 | 20 | 64 | 61 | 74 | 61 | 20 | 63 |
| 61 | 6E | 20 | 62 | 65 | 20 | 70 | 61 | 73 | 73 | 65 | 64 |
| 20 | 74 | 72 | 61 | 6E | 73 | 70 | 61 | 72 | 65 | 6E | 74 |
| 6C | 79 | 3B | 20 | 2D | 20 | 41 | 20 | 73 | 68 | 6F | 72 |
| 74 | 20 | 6D | 65 | 73 | 73 | 61 | 67 | 65 | 20 | 74 | 6F |
| 20 | 62 | 65 | 20 | 73 | 65 | 6E | 74 | 20 | 74 | 6F | 20 |
| 74 | 68 | 65 | 20 | 6E | 65 | 74 | 77 | 6F | 72 | 6B | 20 |
| 69 | 6E | 20 | 61 | 6E | 20 | 53 | 4D | 53 | 2D | 53 | 55 |
| 42 | 4D | 49 | 54 | 20 | 8B | 09 | 01 | 00 | 09 | 91 | 10 |
| 40 | F0 | 01 | 20 | | | | | | | | |

SMS-PP (SEND SHORT MESSAGE) Message 1.6

Logically:

| | | | | | | | | | | | |
|----------------|--|--|--|--|--|--|--|--|--|--|--|
| SMS TPDU | | | | | | | | | | | |
| TP-MTI | | | | | | | | | | | |
| TP-RD | | | | | | | | | | | |
| TP-VPF | | | | | | | | | | | |
| TP-RP | | | | | | | | | | | |
| TP-UDHI | | | | | | | | | | | |
| TP-SRR | | | | | | | | | | | |
| TP-MR | | | | | | | | | | | |
| TP-DA | | | | | | | | | | | |
| TON | | | | | | | | | | | |
| NPI | | | | | | | | | | | |
| Address value | | | | | | | | | | | |
| TP-PID | | | | | | | | | | | |
| TP-DCS | | | | | | | | | | | |
| Message coding | | | | | | | | | | | |
| Message class | | | | | | | | | | | |
| TP-UDL | | | | | | | | | | | |
| TP-UD | | | | | | | | | | | |

Coding: 01 00 09 91 10 40 F0 01 20

TERMINAL RESPONSE : SEND SHORT MESSAGE 1.6.1

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SEND SHORT MESSAGE |
| Command qualifier: | packing not required |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

BER-TLV: 81 03 01 13 00 82 02 82 81 83 01 00

Expected Sequence 1.7(SEND SHORT MESSAGE, alpha identifier length '00', packing not required, 8-bit data, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.7.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND SHORT MESSAGE 1.7.1 | [packing not required, 8-bit data] |
| 4 | ME | No information to user | |
| 5 | ME → SS | Send SMS-PP "Test Message" | [Alpha identifier length '00'] |
| 6 | SS → ME | SMS RP-ACK | |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND SHORT MESSAGE 1.7.1 | [Command performed successfully] |

PROACTIVE COMMAND : SEND SHORT MESSAGE 1.7.1

Logically:

| | |
|------------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | SEND SHORT MESSAGE |
| Command qualifier: | packing not required |
| Device identities | |
| Source device: | SIM |
| Destination device: | Network |
| Alpha identifier: | |
| Address | |
| TON: | International number |
| NPI: | "ISDN / telephone numbering plan" |
| Dialling number string | "112233445566778" |
| SMS TPDU | |
| TP-MTI | SMS-SUBMIT |
| TP-RD | Instruct the SC to accept an SMS-SUBMIT for a SM |
| TP-VPF | TP-VP field not present |
| TP-RP | TP-Reply-Path is not set in this SMS-SUBMIT |
| TP-UDHI | The TP-UD field contains only the short message |
| TP-SRR | A status report is not requested |
| TP-MR | "00" |
| TP-DA | |
| TON | International number |
| NPI | "ISDN / telephone numbering plan" |
| Address value | "012345678" |
| TP-PID | Short message type 0 |
| TP-DCS | |
| Message coding | 8-bit data |
| Message class | class 0 |
| TP-UDL | 12 |
| TP-UD | "Test Message" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 37 | 81 | 03 | 01 | 13 | 00 | 82 | 02 | 81 | 83 | 85 |
| | 00 | 86 | 09 | 91 | 11 | 22 | 33 | 44 | 55 | 66 | 77 | F8 |
| | 8B | 18 | 01 | 00 | 09 | 91 | 10 | 32 | 54 | 76 | F8 | 40 |
| | F4 | 0C | 54 | 65 | 73 | 74 | 20 | 4D | 65 | 73 | 73 | 61 |
| | 67 | 65 | | | | | | | | | | |

SMS-PP (SEND SHORT MESSAGE) Message 1.7

Logically:

| | |
|----------------|--|
| SMS TPDU | |
| TP-MTI | SMS-SUBMIT |
| TP-RD | Instruct the SC to accept an SMS-SUBMIT for a SM |
| TP-VPF | TP-VP field not present |
| TP-RP | TP-Reply-Path is not set in this SMS-SUBMIT |
| TP-UDHI | The TP-UD field contains only the short message |
| TP-SRR | A status report is not requested |
| TP-MR | "00" |
| TP-DA | |
| TON | International number |
| NPI | "ISDN / telephone numbering plan" |
| Address value | "012345678" |
| TP-PID | Short message type 0 |
| TP-DCS | |
| Message coding | 8-bit data |
| Message class | class 0 |

| | | | | | | | | | | | |
|---------|--|--|--|--|--|--|--|--|--|--|--|
| TP-UDL | 12 | | | | | | | | | | |
| TP-UD | "Test Message" | | | | | | | | | | |
| Coding: | 01 00 09 91 10 32 54 76 F8 40 F4 0C | | | | | | | | | | |
| | 54 65 73 74 20 4D 65 73 73 61 67 65 | | | | | | | | | | |

TERMINAL RESPONSE : SEND SHORT MESSAGE 1.7.1

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SEND SHORT MESSAGE |
| Command qualifier: | packing not required |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | |
|----------|--|
| BER-TLV: | 81 03 01 13 00 82 02 82 81 83 01 00 |
|----------|--|

Expected Sequence 1.8 (SEND SHORT MESSAGE, packing not required, 8-bit data, no alpha identifier, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 1.8.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND SHORT MESSAGE 1.8.1 | [packing not required, 8-bit data] |
| 4 | ME → USER | May give information to user concerning what is happening | [No Alpha Identifier] |
| 5 | ME → SS | Send SMS-PP "Test Message" | |
| 6 | SS → ME | SMS RP-ACK | |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND SHORT MESSAGE 1.8.1 | [Command performed successfully] |

PROACTIVE COMMAND : SEND SHORT MESSAGE 1.8.1

Logically:

Command details

Command number: 1

Command type: SEND SHORT MESSAGE

Command qualifier: packing not required

Device identities

Source device: SIM

Destination device: Network

Address

TON: International number

NPI: "ISDN / telephone numbering plan"

Dialling number string "112233445566778"

SMS TPDU

TP-MTI SMS-SUBMIT

TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM

TP-VPF TP-VP field not present

TP-RP TP-Reply-Path is not set in this SMS-SUBMIT

TP-UDHI The TP-UD field contains only the short message

TP-SRR A status report is not requested

TP-MR "00"

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "012345678"

TP-PID Short message type 0

TP-DCS

Message coding 8-bit data

Message class class 0

TP-UDL 12

TP-UD "Test Message"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 2E | 81 | 03 | 01 | 13 | 00 | 82 | 02 | 81 | 83 | 86 |
| | 09 | 91 | 11 | 22 | 33 | 44 | 55 | 66 | 77 | F8 | 8B | 18 |
| | 01 | 00 | 09 | 91 | 10 | 32 | 54 | 76 | F8 | 40 | F4 | 0C |
| | 54 | 65 | 73 | 74 | 20 | 4D | 65 | 73 | 73 | 61 | 67 | 65 |

SMS-PP (SEND SHORT MESSAGE) Message 1.8

Logically:

SMS TPDU

TP-MTI SMS-SUBMIT

TP-RD Instruct the SC to accept an SMS-SUBMIT for a SM

TP-VPF TP-VP field not present

TP-RP TP-Reply-Path is not set in this SMS-SUBMIT

TP-UDHI The TP-UD field contains only the short message

TP-SRR A status report is not requested

TP-MR "00"

TP-DA

TON International number

NPI "ISDN / telephone numbering plan"

Address value "012345678"

TP-PID Short message type 0

TP-DCS

Message coding 8-bit data

Message class class 0

TP-UDL 12

TP-UD "Test Message"

| | | | | | | | | | | | | |
|---------|----|----|----|----|----|----|----|----|----|----|----|----|
| Coding: | 01 | 00 | 09 | 91 | 10 | 32 | 54 | 76 | F8 | 40 | F4 | 0C |
| | 54 | 65 | 73 | 74 | 20 | 4D | 65 | 73 | 73 | 61 | 67 | 65 |

TERMINAL RESPONSE : SEND SHORT MESSAGE 1.8.1

Logically:

Command details

Command number: 1

Command type: SEND SHORT MESSAGE

Command qualifier: packing not required

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 13 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

27.22.4.10.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 1 to 8.

27.22.4.10.2 SEND SHORT MESSAGE (UCS2 support)

27.22.4.10.2.1 Definition and applicability

See Section 3.2.2.

27.22.4.10.2.2 Conformance requirement

The ME shall support the Proactive SIM: SEND SHORT MESSAGE facility as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 6.1, clause 6.4.10 (Send Short Message), clause 6.6.9 (Send Short Message), clause 12.6 (Command Details), clause 12.7 (Device Identities), clause 12.2 (Alpha Identifier), clause 12.1 (Address), clause 12.13 (SMS-TPDU), clause 12.31 (Icon Identifier), clause 5.2 (Terminal Profile)

Additionnally, the ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in the following technical specifications: ISO/IEC 10646 [17], “Universal Multiple Octet Coded Character Set (UCS)”.

27.22.4.10.2.3 Test Purpose

To verify that the ME correctly formats and sends a short message to the network (System Simulator) as indicated in the SEND SHORT MESSAGE proactive SIM command, and returns a TERMINAL RESPONSE command to the SIM indicating the status of the transmission of the Short Message.

27.22.4.10.2.4 Method of test

27.22.4.10.2.4.1 Initial Conditions

The ME is connected to the system Simulator and the SIM Simulator.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.10.2.4.2 Procedure

Expected Sequence 2.1 (SEND SHORT MESSAGE, packing not required, UCS2 (16-bit data))

| Step | Direction | MESSAGE / Action | Comments |
|------|--------------|---|-------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 2.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND SHORT MESSAGE 2.1.1 | [packing not required, 16-bit data] |
| 4 | ME → USER | Display "Send SM" | [Alpha Identifier] |
| 5 | ME → SS | Send SMS-PP "ЗДРАВСТВУЙТЕ" | ["Hello" in russian] |
| 6 | SS → ME | SMS RP-ACK | |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND SHORT MESSAGE 2.1.1 | [Command performed successfully] |

PROACTIVE COMMAND : SEND SHORT MESSAGE : 2.1.1

Logically:

Command details

Command number: 1
 Command type: SEND SHORT MESSAGE
 Command qualifier: packing not required

Device identities

Source device: SIM
 Destination device: Network
 Alpha identifier: "Send SM"
 Address

TON: International number
 NPI: "ISDN / telephone numbering plan"
 Dialling number string "112233445566778"

SMS TPDU

TP-MTI SMS-SUBMIT
 TP-RDInstruct the SC to accept an SMS-SUBMIT for a SM
 TP-VPF TP-VP field not present
 TP-RP TP-Reply-Path is not set in this SMS-SUBMIT
 TP-UDHI The TP-UD field contains only the short message
 TP-SRR A status report is not requested
 TP-MR "00"
 TP-DA

TON International number
 NPI "ISDN / telephone numbering plan"
 Address value "012345678"

TP-PID Short message type 0

TP-DCS

Message coding 16-bit data
 Message class class 0
 TP-UDL 24
 TP-UD ЗДРАВСТВУЙТЕ "

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 4D | 81 | 03 | 01 | 13 | 00 | 82 | 02 | 81 | 83 | 85 |
| | 07 | 53 | 65 | 6E | 64 | 20 | 53 | 4D | 86 | 09 | 91 | 11 |
| | 22 | 33 | 44 | 55 | 66 | 77 | F8 | 8B | 18 | 01 | 00 | 09 |
| | 91 | 10 | 32 | 54 | 76 | F8 | 40 | 08 | 18 | 04 | 17 | 04 |
| | 14 | 04 | 20 | 04 | 10 | 04 | 12 | 04 | 21 | 04 | 22 | 04 |
| | 12 | 04 | 23 | 04 | 19 | 04 | 22 | 04 | 15 | | | |

SMS-PP (SEND SHORT MESSAGE) Message 2.1

Logically:

| | | | | | | | | | | | | | |
|----------------|----|----|----|----|----|----|----|----|----|----|----|----|---|
| SMS TPDU | | | | | | | | | | | | | |
| TP-MTI | | | | | | | | | | | | | |
| TP-RD | | | | | | | | | | | | | |
| TP-VPF | | | | | | | | | | | | | |
| TP-RP | | | | | | | | | | | | | |
| TP-UDHI | | | | | | | | | | | | | |
| TP-SRR | | | | | | | | | | | | | |
| TP-MR | | | | | | | | | | | | | |
| TP-DA | | | | | | | | | | | | | |
| TON | | | | | | | | | | | | | |
| NPI | | | | | | | | | | | | | |
| Address value | | | | | | | | | | | | | |
| TP-PID | | | | | | | | | | | | | |
| TP-DCS | | | | | | | | | | | | | |
| Message coding | | | | | | | | | | | | | |
| Message class | | | | | | | | | | | | | |
| TP-UDL | | | | | | | | | | | | | |
| TP-UD | | | | | | | | | | | | | " |
| Coding: | 01 | 00 | 09 | 91 | 10 | 32 | 54 | 76 | F8 | 40 | 08 | 18 | |
| | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 | 04 | 12 | 04 | 21 | |
| | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 | 04 | 22 | 04 | 15 | |

TERMINAL RESPONSE : SEND SHORT MESSAGE 2.2.1

Logically:

| | | | | | | | | | | | | | |
|---------------------|--|--|--|--|--|--|--|--|--|--|--|--|--------------------------------|
| Command details | | | | | | | | | | | | | |
| Command number: | | | | | | | | | | | | | 1 |
| Command type: | | | | | | | | | | | | | SEND SHORT MESSAGE |
| Command qualifier: | | | | | | | | | | | | | packing not required |
| Device identities | | | | | | | | | | | | | |
| Source device: | | | | | | | | | | | | | ME |
| Destination device: | | | | | | | | | | | | | SIM |
| Result | | | | | | | | | | | | | |
| General Result: | | | | | | | | | | | | | Command performed successfully |

Coding:

BER-TLV: 81 03 01 13 00 82 02 82 81 83 01 00

27.22.4.10.2.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 1.

27.22.4.10.3 SEND SHORT MESSAGE (icon support)

27.22.4.10.3.1 Definition and applicability

See Section 3.2.2.

27.22.4.10.3.2 Conformance requirement

27.22.4.10.3.3 Test Purpose

To verify that the ME correctly formats and sends a short message to the network (System Simulator) as indicated in the SEND SHORT MESSAGE proactive SIM command, and returns a TERMINAL RESPONSE command to the SIM indicating the status of the transmission of the Short Message.

27.22.4.10.3.4 Method of test

27.22.4.10.3.4.1 Initial Conditions

See Annex C

27.22.4.10.3.4.2 Procedure

Expected Sequence 3.1A (SEND SHORT MESSAGE, basic icon self-explanatory, packing not required, 8-bit data, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|--------------|---|------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 3.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND SHORT MESSAGE 3.1.1 | [packing not required, 8-bit data] |
| 4 | ME → USER | Displays the icon and not the alpha identifier | [basic icon self-explanatory] |
| 5 | ME → SS | Send SMS-PP "Test Message " | |
| 6 | SS → ME | SMS RP-ACK | |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND SHORT MESSAGE 3.1.1A | [Command performed successfully] |

PROACTIVE COMMAND : SEND SHORT MESSAGE 3.1.1

Logically:

| | |
|------------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | SEND SHORT MESSAGE |
| Command qualifier: | packing not required |
| Device identities | |
| Source device: | SIM |
| Destination device: | Network |
| Alpha identifier: | "NO ICON" |
| Address | |
| TON: | International number |
| NPI: | "ISDN / telephone numbering plan" |
| Dialling number string | "112233445566778" |
| SMS TPDU | |
| TP-MTI | SMS-SUBMIT |
| TP-RD | Instruct the SC to accept an SMS-SUBMIT for a SM |
| TP-VPF | TP-VP field not present |
| TP-RP | TP-Reply-Path is not set in this SMS-SUBMIT |
| TP-UDHI | The TP-UD field contains only the short message |
| TP-SRR | A status report is not requested |
| TP-MR | "00" |
| TP-DA | |
| TON | International number |
| NPI | "ISDN / telephone numbering plan" |
| Address value | "012345678" |
| TP-PID | Short message type 0 |
| TP-DCS | |
| Message coding | 8bit-data |
| Message class | class 0 |
| TP-UDL | 12 |
| TP-UD | "Test Message " |
| Icon Identifier | |
| Icon Qualifier | self-explanatory |
| Icon Identifier | 1 (number of record in EF IMG) |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 3B | 81 | 03 | 01 | 13 | 00 | 82 | 02 | 81 | 83 | 85 |
| | 07 | 4E | 4F | 20 | 49 | 43 | 4F | 4E | 86 | 09 | 91 | 11 |
| | 22 | 33 | 44 | 55 | 66 | 77 | F8 | 8B | 18 | 01 | 00 | 09 |
| | 91 | 10 | 32 | 54 | 76 | F4 | 40 | F4 | 0C | 54 | 65 | 73 |
| | 74 | 20 | 4D | 65 | 73 | 73 | 61 | 67 | 65 | 9E | 02 | 00 |
| | | | 01 | | | | | | | | | |

SMS-PP (SEND SHORT MESSAGE) Message 3.1

Logically:

| | |
|---------------|--|
| SMS TPDU | |
| TP-MTI | SMS-SUBMIT |
| TP-RD | Instruct the SC to accept an SMS-SUBMIT for a SM |
| TP-VPF | TP-VP field not present |
| TP-RP | TP-Reply-Path is not set in this SMS-SUBMIT |
| TP-UDHI | The TP-UD field contains only the short message |
| TP-SRR | A status report is not requested |
| TP-MR | "00" |
| TP-DA | |
| TON | International number |
| NPI | "ISDN / telephone numbering plan" |
| Address value | "012345678" |
| TP-PID | Short message type 0 |

| | | | | | | | | | | | | | |
|----------------|----|----|----|----|----|----|----|----|----|----|----|----|--|
| TP-DCS | | | | | | | | | | | | | |
| Message coding | | | | | | | | | | | | | |
| Message class | | | | | | | | | | | | | |
| TP-UDL | | | | | | | | | | | | | |
| TP-UD | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| Coding: | 01 | 00 | 09 | 91 | 10 | 32 | 54 | 76 | F8 | 40 | F4 | 0C | |
| | 54 | 65 | 73 | 74 | 20 | 4D | 65 | 73 | 73 | 61 | 67 | 65 | |

TERMINAL RESPONSE : SEND SHORT MESSAGE 3.1.1A

Logically:

| | | | | | | | | | | | | | |
|---------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Command details | | | | | | | | | | | | | |
| Command number: | | | | | | | | | | | | | |
| Command type: | | | | | | | | | | | | | |
| Command qualifier: | | | | | | | | | | | | | |
| Device identities | | | | | | | | | | | | | |
| Source device: | | | | | | | | | | | | | |
| Destination device: | | | | | | | | | | | | | |
| Result | | | | | | | | | | | | | |
| General Result: | | | | | | | | | | | | | |

Coding:

BER-TLV: 81 03 01 13 00 82 02 82 81 83 01 00

Expected Sequence 3.1B (SEND SHORT MESSAGE, basic icon self-explanatory, packing not required, 8-bit data, requested icon could not be displayed)

| Step | Direction | MESSAGE / Action | Comments |
|------|--------------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 3.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND SHORT MESSAGE 3.1.1 | [packing not required, 8-bit data, basic icon self-explanatory]] |
| 4 | ME → USER | Displays the alpha identifier without the icon | |
| 5 | ME → SS | Send SMS-PP "Test Message " | |
| 6 | SS → ME | SMS RP-ACK | |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND SHORT MESSAGE 3.1.1B | [Command performed successfully, but requested icon could not be displayed] |

TERMINAL RESPONSE : SEND SHORT MESSAGE 3.1.1B

Logically:

| | | | | | | | | | | | | | |
|---------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Command details | | | | | | | | | | | | | |
| Command number: | | | | | | | | | | | | | |
| Command type: | | | | | | | | | | | | | |
| Command qualifier: | | | | | | | | | | | | | |
| Device identities | | | | | | | | | | | | | |
| Source device: | | | | | | | | | | | | | |
| Destination device: | | | | | | | | | | | | | |
| Result | | | | | | | | | | | | | |
| General Result: | | | | | | | | | | | | | |

displayed

Coding:

BER-TLV: 81 03 01 13 00 82 02 82 81 83 01 04

Expected Sequence 3.2A (SEND SHORT MESSAGE, basic icon non-self-explanatory, packing not required, 8-bit data, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 3.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND SHORT MESSAGE 3.2.1 | [packing not required, 8-bit data] |
| 4 | ME → USER | display the icon and "Send SM" | [basic icon non-self-explanatory] |
| 5 | ME → SS | Send SMS-PP " Test Message " | |
| 6 | SS → ME | SMS RP-ACK | |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND SHORT MESSAGE 3.2.1A | [Command performed successfully] |

PROACTIVE COMMAND : SEND SHORT MESSAGE 3.2.1

Logically:

| | |
|------------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | SEND SHORT MESSAGE |
| Command qualifier: | packing not required |
| Device identities | |
| Source device: | SIM |
| Destination device: | Network |
| Alpha Identifier | "Send SM" |
| Address | |
| TON: | International number |
| NPI: | "ISDN / telephone numbering plan" |
| Dialling number string | "112233445566778" |
| SMS TPDU | |
| TP-MTI | SMS-SUBMIT |
| TP-RD | Instruct the SC to accept an SMS-SUBMIT for a SM |
| TP-VPF | TP-VP field not present |
| TP-RP | TP-Reply-Path is not set in this SMS-SUBMIT |
| TP-UDHI | The TP-UD field contains only the short message |
| TP-SRR | A status report is not requested |
| TP-MR | "00" |
| TP-DA | |
| TON | International number |
| NPI | "ISDN / telephone numbering plan" |
| Address value | "012345678" |
| TP-PID | Short message type 0 |
| TP-DCS | |
| Message coding | 8bit-data |
| Message class | class 0 |
| TP-UDL | 12 |
| TP-UD | " Test Message" |
| Icon Identifier | |
| Icon Qualifier | non-self-explanatory |
| Icon Identifier | 1 (number of record in EF IMG) |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 3B | 81 | 03 | 01 | 13 | 00 | 82 | 02 | 81 | 83 | 85 |
| | 07 | 53 | 65 | 6E | 64 | 20 | 53 | 4D | 86 | 09 | 91 | 11 |
| | 22 | 33 | 44 | 55 | 66 | 77 | F8 | 8B | 18 | 01 | 00 | 09 |
| | 91 | 10 | 32 | 54 | 76 | F8 | 40 | F4 | 0C | 54 | 65 | 73 |
| | 74 | 20 | 4D | 65 | 73 | 73 | 61 | 67 | 65 | 1E | 02 | 01 |
| | | 01 | | | | | | | | | | |

SMS-PP (SEND SHORT MESSAGE) Message 3.2

Logically:

| | |
|---------------|--|
| SMS TPDU | |
| TP-MTI | SMS-SUBMIT |
| TP-RD | Instruct the SC to accept an SMS-SUBMIT for a SM |
| TP-VPF | TP-VP field not present |
| TP-RP | TP-Reply-Path is not set in this SMS-SUBMIT |
| TP-UDHI | The TP-UD field contains only the short message |
| TP-SRR | A status report is not requested |
| TP-MR | "00" |
| TP-DA | |
| TON | International number |
| NPI | "ISDN / telephone numbering plan" |
| Address value | "012345678" |
| TP-PID | Short message type 0 |

| | | | | | | | | | | | | | |
|----------------|----|----|----|----|----|----|----|----|----|----|----|----|--|
| TP-DCS | | | | | | | | | | | | | |
| Message coding | | | | | | | | | | | | | |
| Message class | | | | | | | | | | | | | |
| TP-UDL | | | | | | | | | | | | | |
| TP-UD | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| Coding: | 01 | 00 | 09 | 91 | 10 | 32 | 54 | 76 | F8 | 40 | F4 | 0C | |
| | 54 | 65 | 73 | 74 | 20 | 4D | 65 | 73 | 73 | 61 | 67 | 65 | |

TERMINAL RESPONSE : SEND SHORT MESSAGE 3.2.1A

Logically:

| | | | | | | | | | | | | | |
|---------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Command details | | | | | | | | | | | | | |
| Command number: | | | | | | | | | | | | | |
| Command type: | | | | | | | | | | | | | |
| Command qualifier: | | | | | | | | | | | | | |
| Device identities | | | | | | | | | | | | | |
| Source device: | | | | | | | | | | | | | |
| Destination device: | | | | | | | | | | | | | |
| Result | | | | | | | | | | | | | |
| General Result: | | | | | | | | | | | | | |

Coding:

BER-TLV: 81 03 01 13 00 82 02 82 81 83 01 00

Expected Sequence 3.2B (SEND SHORT MESSAGE, basic icon non-self-explanatory, packing not required, 8-bit data, requested icon could not be displayed)

| Step | Direction | MESSAGE / Action | Comments |
|------|--------------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SHORT MESSAGE 3.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND SHORT MESSAGE 3.2.1 | [packing not required, 8-bit data, basic icon non-self-explanatory] |
| 4 | ME → USER | display "Send SM" without the icon | |
| 5 | ME → SS | Send SMS-PP " Test Message " | |
| 6 | SS → ME | SMS RP-ACK | |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND SHORT MESSAGE 3.2.1B | [Command performed successfully, but requested icon could not be displayed] |

TERMINAL RESPONSE : SEND SHORT MESSAGE 3.2.1B

Logically:

| | | | | | | | | | | | | | |
|---------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|
| Command details | | | | | | | | | | | | | |
| Command number: | | | | | | | | | | | | | |
| Command type: | | | | | | | | | | | | | |
| Command qualifier: | | | | | | | | | | | | | |
| Device identities | | | | | | | | | | | | | |
| Source device: | | | | | | | | | | | | | |
| Destination device: | | | | | | | | | | | | | |
| Result | | | | | | | | | | | | | |
| General Result: | | | | | | | | | | | | | |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 13 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 04 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

27.22.4.10.3.5 Test Requirement

The ME shall operate in the manner defined in expected sequences

27.22.4.11 SEND SS

Continuous length error in T.R. Result field.

27.22.4.11.1 SEND SS (normal)

27.22.4.11.1.1 Definition and applicability

See Section 3.2.2.

27.22.4.11.1.2 Conformance requirement

The ME shall support the Proactive SIM: Send SS facility as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 6.1, clause 6.4.11 (Send SS), 6.6.10 (Send SS), clause 12.12.1 (Additional information for Send SS), clause 5.2 (Terminal Profile), clause 12.6 (Command Details), clause 12.7 (Device Identities), clause 12.2 (Alpa identifier), clause 12.14 (SS String), clause 12.31 (Icon identifier), clause 6.5.4 (Icon identifiers).

27.22.4.11.1.3 Test Purpose

To verify that the ME correctly translates and sends the supplementary service request indicated in the SEND SS proactive SIM command to the system Simulator.

To verify that the ME returns a TERMINAL RESPONSE command to the SIM indicating the status of the transmission of the SS and any contents of the SS result as additional data.

27.22.4.11.1.4 Method of test

27.22.4.11.1.4.1 Initial Conditions

The ME is connected to the System Simulator and the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default. Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the System Simulator

27.22.4.11.1.4.2 Procedure

Expected Sequence 1.1 (SEND SS, call forward unconditional, all bearers, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SS 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND SS 1.1.1 | |
| 4 | ME → USER | Display "Call Forward" | |
| 5 | ME → SS | REGISTER 1.1 | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 1.1 | [Successful] |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND SS 1.1.1 | |

PROACTIVE COMMAND: SEND SS 1.1.1

Logically:

Command details

| | |
|--------------------|---------|
| Command number: | 1 |
| Command type: | SEND SS |
| Command qualifier: | "00" |

Device identities

| | |
|---------------------|---------|
| Source device: | SIM |
| Destination device: | Network |

Alpha identifier:

SS String

| | |
|------------|-----------------------------------|
| TON: | International |
| NPI: | "ISDN / telephone numbering plan" |
| SS string: | "**21*+01234567890123456789#" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 27 | 81 | 03 | 01 | 11 | 00 | 82 | 02 | 81 | 83 | 85 |
| | 0C | 43 | 61 | 6C | 6C | 20 | 46 | 6F | 72 | 77 | 61 | 72 |
| | 64 | 89 | 0E | 91 | AA | 12 | 0A | 21 | 43 | 65 | 87 | 09 |
| | 21 | 43 | 65 | 87 | B9 | | | | | | | |

REGISTER 1.1

Logically (only SS argument):

REGISTER SS ARGUMENT

SS-Code:

- Call Forwarding Unconditional

TeleserviceCode

- All Tele Services

ForwardedToNumber

- nature of address ind. : international
- numbering plan ind. : ISDN/Telephony (E.164)
- TBCD String : 01234567890123456789

Coding:

| | | | | | | | | | | | | |
|---------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV | 30 | 13 | 04 | 01 | 21 | 83 | 01 | 00 | 84 | 0B | 91 | 10 |
| | 32 | 54 | 76 | 98 | 10 | 32 | 54 | 76 | 98 | | | |

RELEASE COMPLETE (SS RETURN RESULT) 1.1

Logically (only from operation code):

```

REGISTER SS RETURN RESULT
  ForwardingInfo
  SS-Code
    - Call Forwarding Unconditional
  ForwardFeatureList
    ForwardingFeature
    TeleserviceCode
      - All Tele Services
  SS-Status
    - state ind. : operative
    - provision ind. : provisioned
    - registration ind. : registered
    - activation ind. : active
  ForwardedToNumber
    - nature of address ind. : international
    - numbering plan ind. : ISDN/Telephony (E.164)
    - TBCD String : 01234567890123456789

```

Coding:

| | | | | | | | | | | | | |
|---------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV | 0A | A0 | 1A | 04 | 01 | 21 | 30 | 15 | 30 | 13 | 83 | 01 |
| | 00 | 84 | 01 | 07 | 84 | 0B | 91 | 10 | 32 | 54 | 76 | 98 |
| | 10 | 32 | 54 | 76 | 98 | | | | | | | |

TERMINAL RESPONSE : SEND SS 1.1.1

Logically:

| | |
|-------------------------|----------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SEND SS |
| Command qualifier: | “00” |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Additional information: | Operation Code and SS Parameters |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 11 | 00 | 82 | 02 | 82 | 81 | 03 | 1E |
| | 00 | 0A | A0 | 1A | 04 | 01 | 21 | 30 | 15 | 30 | 13 |
| | 83 | 01 | 00 | 84 | 01 | 07 | 85 | 0B | 91 | 10 | 32 |
| | 54 | 76 | 98 | 10 | 32 | 54 | 76 | 98 | | | |

Expected Sequence 1.2 (SEND SS, call forward unconditional, all bearers, Return Error)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|----------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SS 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND SS 1.1.1 | |
| 4 | ME → USER | Display "Call Forward" | |
| 5 | ME → SS | REGISTER 1.1 | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN ERROR) 1.1 | [Return Error] |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND SS 1.2.1 | |

RELEASE COMPLETE (SS RETURN ERROR) 1.1

Logically (only from error code):

| | |
|-------------|------------------------|
| Error Code: | Facility not supported |
|-------------|------------------------|

Coding:

BER-TLV 02 11 15

TERMINAL RESPONSE : SEND SS 1.2.1

Logically:

| | |
|-------------------------|-----------------|
| Command details | |
| Command number: | 1 |
| Command type: | SEND SS |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | SS Return Error |
| Additional information: | Error Code |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 11 | 00 | 82 | 02 | 82 | 81 | 03 | 02 |
| | 34 | 15 | | | | | | | | | |

Expected Sequence 1.3 (SEND SS, call forward unconditional, all bearers, Reject)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|----------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SS 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND SS 1.1.1 | |
| 4 | ME → USER | Display "Call Forward" | |
| 5 | ME → SS | REGISTER 1.1 | |
| 6 | SS → ME | RELEASE COMPLETE (SS REJECT) 1.1. | [Reject] |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND SS 1.3.1 | |

RELEASE COMPLETE (SS REJECT) 1.1

Logically (only from problem code):

Problem Code:

- General problem
- Unrecognized component

Coding:

BER-TLV

80 01 00

TERMINAL RESPONSE : SEND SS 1.3.1

Logically:

Command details

| | |
|--------------------|---------|
| Command number: | 1 |
| Command type: | SEND SS |
| Command qualifier: | "00" |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-------------------------|--------------------------------|
| General Result: | SS Return Error |
| Additional information: | No specific cause can be given |

Coding:

BER-TLV: 81 03 01 11 00 82 02 82 81 03 02
 34 00

Expected Sequence 1.4 (SEND SS, call forward unconditional, all bearers, successful, SS request size limit)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SS 1.4.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND SS 1.4.1 | |
| 4 | ME → USER | Display "Call Forward" | |
| 5 | ME → SS | REGISTER 1.2 | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 1.2 | [Successful] |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND SS 1.4.1 | |

PROACTIVE COMMAND : SEND SS 1.4.1

Logically:

Command details

Command number: 1
Command type: SEND SS
Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Network
Alpha identifier: "Call Forward"

SS String

TON: International
NPI: "ISDN / telephone numbering plan"
SS string: "***21*+01234567890123456789012345678901234567*11#"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 32 | 81 | 03 | 01 | 11 | 00 | 82 | 02 | 81 | 83 | 85 |
| | 0C | 43 | 61 | 6C | 6C | 20 | 46 | 6F | 72 | 77 | 61 | 72 |
| | 64 | 89 | 1A | 91 | AA | 12 | 0A | 21 | 43 | 65 | 87 | 09 |
| | 21 | 43 | 65 | 87 | 09 | 21 | 43 | 65 | 87 | 09 | 21 | 43 |
| | 65 | A7 | 11 | FB | | | | | | | | |

REGISTER 1.2

Logically (only SS argument):

REGISTER SS ARGUMENT

RegisterSSArg

SS-Code

- Call Forwarding Unconditional

TeleserviceCode

- Telephony

ForwardedToNumber

- nature of address ind. : international

- numbering plan ind. : ISDN/Telephony (E.164)

- TBCD String : 01234567890123456789012345678901234567

Coding:

| | | | | | | | | | | | | |
|---------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV | 30 | 1C | 04 | 01 | 21 | 83 | 01 | 11 | 84 | 14 | 91 | 10 |
| | 32 | 54 | 76 | 98 | 10 | 32 | 54 | 76 | 98 | 10 | 32 | 54 |
| | 76 | 98 | 10 | 32 | 54 | 76 | | | | | | |

RELEASE COMPLETE (SS RETURN RESULT) 1.2

Logically (only from operation code):

```

REGISTER SS RETURN RESULT
  ForwardingInfo
  SS-Code
    - Call Forwarding Unconditional
  ForwardFeatureList
    ForwardingFeature
    TeleserviceCode
      - Telephony
  SS-Status
    - state ind. : operative
    - provision ind. : provisioned
    - registration ind. : registered
    - activation ind. : active
  ForwardedToNumber
    - nature of address ind. : international
    - numbering plan ind. : ISDN/Telephony (E.164)
    - TBCD String : 01234567890123456789012345678901234567

```

Coding:

| | | | | | | | | | | | | |
|---------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV | 0A | A0 | 23 | 04 | 01 | 21 | 30 | 1E | 30 | 1C | 83 | 01 |
| | 11 | 84 | 01 | 07 | 84 | 14 | 91 | 10 | 32 | 54 | 76 | 98 |
| | 10 | 32 | 54 | 76 | 98 | 10 | 32 | 54 | 76 | 98 | 10 | 32 |
| | 54 | 76 | | | | | | | | | | |

TERMINAL RESPONSE : SEND SS 1.4.1

Logically:

| | |
|-------------------------|----------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SEND SS |
| Command qualifier: | “00” |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Additional information: | Operation Code and SS Parameters |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 11 | 00 | 82 | 02 | 82 | 81 | 03 | 27 |
| | 00 | 0A | A0 | 23 | 04 | 01 | 21 | 30 | 1E | 30 | 1C |
| | 83 | 01 | 11 | 84 | 01 | 07 | 84 | 14 | 91 | 10 | 32 |
| | 54 | 76 | 98 | 10 | 32 | 54 | 76 | 98 | 10 | 32 | 54 |
| | 76 | 98 | 10 | 32 | 54 | 76 | | | | | |

Expected Sequence 1.5 (SEND SS, interrogate CLIR status, successful, alpha identifier limits)

| Step | Direction | MESSAGE / Action | Comments |
|-------------|------------------|---|-----------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SS 1.5.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND SS 1.5.1 | |
| 4 | ME → USER | Display "Even if the Fixed Dialling Number service is enabled, the supplementary service control string included in the SEND SS proactive command shall not be checked against those of the FDN list. Upon receiving this command, the ME shall deci" | |
| 5 | ME → SS | REGISTER 1.3 | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 1.3 | [Successful] |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND SS 1.5.1 | |

PROACTIVE COMMAND : SEND SS 1.5.1

Logically:

| | | | | | | | | | | | | |
|---------------------|--|--|--|--|--|--|---|--|--|--|--|--|
| Command details | | | | | | | | | | | | |
| Command number: | | | | | | | 1 | | | | | |
| Command type: | | | | | | | SEND SS | | | | | |
| Command qualifier: | | | | | | | "00" | | | | | |
| Device identities | | | | | | | | | | | | |
| Source device: | | | | | | | SIM | | | | | |
| Destination device: | | | | | | | Network | | | | | |
| Alpha identifier: | | | | | | | "Even if the Fixed Dialling Number service is enabled, the supplementary service control string included in the SEND SS proactive command shall not be checked against those of the FDN list. Upon receiving this command, the ME shall deci" | | | | | |
| SS String | | | | | | | | | | | | |
| TON: | | | | | | | Undefined | | | | | |
| NPI: | | | | | | | Undefined | | | | | |
| SS string: | | | | | | | "*#31#" | | | | | |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 81 | FD | 81 | 03 | 01 | 11 | 00 | 82 | 02 | 81 | 83 |
| | 85 | 81 | EB | 45 | 76 | 65 | 6E | 20 | 69 | 66 | 20 | 74 |
| | 68 | 65 | 20 | 46 | 69 | 78 | 65 | 64 | 20 | 44 | 69 | 61 |
| | 6C | 6C | 69 | 6E | 67 | 20 | 4E | 75 | 6D | 62 | 65 | 72 |
| | 20 | 73 | 65 | 72 | 76 | 69 | 63 | 65 | 20 | 69 | 73 | 20 |
| | 65 | 6E | 61 | 62 | 6C | 65 | 64 | 2C | 20 | 74 | 68 | 65 |
| | 20 | 73 | 75 | 70 | 70 | 6C | 65 | 6D | 65 | 6E | 74 | 61 |
| | 72 | 79 | 20 | 73 | 65 | 72 | 76 | 69 | 63 | 65 | 20 | 63 |
| | 6F | 6E | 74 | 72 | 6F | 6C | 20 | 73 | 74 | 72 | 69 | 6E |
| | 67 | 20 | 69 | 6E | 63 | 6C | 75 | 64 | 65 | 64 | 20 | 69 |
| | 6E | 20 | 74 | 68 | 65 | 20 | 53 | 45 | 4E | 44 | 20 | 53 |
| | 53 | 20 | 70 | 72 | 6F | 61 | 63 | 74 | 69 | 76 | 65 | 20 |
| | 63 | 6F | 6D | 6D | 61 | 6E | 64 | 20 | 73 | 68 | 61 | 6C |
| | 6C | 20 | 6E | 6F | 74 | 20 | 62 | 65 | 20 | 63 | 68 | 65 |
| | 63 | 6B | 65 | 64 | 20 | 61 | 67 | 61 | 69 | 6E | 73 | 74 |
| | 20 | 74 | 68 | 6F | 73 | 65 | 20 | 6F | 66 | 20 | 74 | 68 |
| | 65 | 20 | 46 | 44 | 4E | 20 | 6C | 69 | 73 | 74 | 2E | 20 |
| | 55 | 70 | 6F | 6E | 20 | 72 | 65 | 63 | 65 | 69 | 76 | 69 |
| | 6E | 67 | 20 | 74 | 68 | 69 | 73 | 20 | 63 | 6F | 6D | 6D |
| | 61 | 6E | 64 | 2C | 20 | 74 | 68 | 65 | 20 | 4D | 45 | 20 |
| | 73 | 68 | 61 | 6C | 6C | 20 | 64 | 65 | 63 | 69 | 89 | 04 |
| | FF | BA | 13 | FB | | | | | | | | |

REGISTER 1.3

Logically (only SS argument):

INTERROGATE SS ARGUMENT
SS-Code
- Calling Line Id Restriction

Coding:

| | | | | | |
|---------|----|----|----|----|----|
| BER-TLV | 30 | 03 | 04 | 01 | 12 |
|---------|----|----|----|----|----|

RELEASE COMPLETE (SS RETURN RESULT) 1.3

Logically (only from operation code):

INTERROGATE SS RESULT

CliRestrictionInfo

SS-Status

- state ind. : operative
- provision ind. : provisioned
- registration ind. : registered
- activation ind. : not active

CliRestrictionOption

- Temporary Def Allowed

Coding:

| | | | | | | | | | |
|---------|----|----|----|----|----|----|----|----|----|
| BER-TLV | 0E | A4 | 06 | 04 | 01 | 06 | 0A | 01 | 02 |
|---------|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE : SEND SS 1.5.1

Logically:

Command details

| | |
|--------------------|---------|
| Command number: | 1 |
| Command type: | SEND SS |
| Command qualifier: | "00" |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|------------------------|--------------------------------|
| General Result: | Command performed successfully |
| Additional information | |
| Operation Code: | SS Code |
| Parameters: | SS Return Result |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 11 | 00 | 82 | 02 | 82 | 81 | 03 | 01 |
| | 00 | 0E | A4 | 06 | 04 | 01 | 06 | 0A | 01 | 02 | |

Expected Sequence 1.6 (SEND SS, call forward unconditional, all bearers, successful, null data alpha identifier)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SS 1.6.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND SS 1.6.1 | |
| 4 | ME | Should not give any information to the user on the fact that the ME is sending an SS request | |
| 5 | ME → SS | REGISTER 1.1 | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 1.1 | [Successful] |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND SS 1.1.1 | |

PROACTIVE COMMAND : SEND SS 1.6.1

Logically:

| | |
|---------------------|-----------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SEND SS |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | SIM |
| Destination device: | Network |
| Alpha identifier: | null data object |
| SS String | |
| TON: | International |
| NPI: | "ISDN / telephone numbering plan" |
| SS string: | "**21*+01234567890123456789#" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1B | 81 | 03 | 01 | 11 | 00 | 82 | 02 | 81 | 83 | 85 |
| | 00 | 89 | 0E | 91 | AA | 12 | 0A | 21 | 43 | 65 | 87 | 09 |
| | 21 | 43 | 65 | 87 | B9 | | | | | | | |

27.22.4.11.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 1, 2, 3, 4, 5 and 6.

27.22.4.11.2 SEND SS (Icon support)

27.22.4.11.2.1 Definition and applicability

See Section 3.2.2.

27.22.4.11.2.2 Conformance requirement

27.22.4.11.2.3 Test Purpose

To verify that the ME displays the text contained in the SEND SS proactive SIM command, and returns a successful result in the TERMINAL RESPONSE command send to the SIM.

In addition to verify that if an icon is provided by the SIM, the icon indicated in the command may be used by the ME to inform the user, in addition to, or instead of the alpha identifier, as indicated with the icon qualifier.

27.22.4.11.2.4 Method of test

27.22.4.11.2.4.1 Initial Conditions

The ME is connected to the System Simulator and the SIM Simulator.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the System Simulator

See Annex C for coding of the elementary files on SIM

.27.22.4.11.2.4.2 Procedure

Expected Sequence 2.1A (SEND SS, call forward unconditional, all bearers, successful, basic icon self explanatory, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SS 2.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND SS 2.1.1 | [BASIC-ICON, self-explanatory] |
| 4 | ME → USER | Display the icon without the alpha identifier | |
| 5 | ME → SS | REGISTER 1.1 | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 1.1 | [Successful] |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND SS 2.1.1A | [Command performed successfully] |

PROACTIVE COMMAND : SEND SS 2.1.1

Logically:

Command details

Command number: 1
 Command type: SEND SS
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: Network
 Alpha Identifier:
 "Basic Icon" SS String
 TON: International
 NPI: "ISDN / telephone numbering plan"
 SS string: "***21*+01234567890123456789#"
 Icon Identifier:
 Icon qualifier: icon is self-explanatory
 Icon Identifier: record 1 in EF_(IMG)

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 2A | 81 | 03 | 01 | 11 | 00 | 82 | 02 | 81 | 83 | 85 |
| | 0B | 04 | 42 | 61 | 73 | 69 | 63 | 20 | 49 | 63 | 6F | 6E |
| | 89 | 0E | 91 | AA | 12 | 0A | 21 | 43 | 65 | 87 | 09 | 21 |
| | 43 | 65 | 87 | B9 | 9E | 02 | 00 | 01 | | | | |

TERMINAL RESPONSE : SEND SS 2.1.1A

Logically:

| | |
|-------------------------|----------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SEND SS |
| Command qualifier: | “00” |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Additional information: | Operation Code and SS Parameters |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 11 | 00 | 82 | 02 | 82 | 81 | 03 | 1E |
| | 00 | 0A | A0 | 1A | 04 | 01 | 21 | 30 | 15 | 30 | 13 |
| | 83 | 01 | 00 | 84 | 01 | 07 | 85 | 0B | 91 | 10 | 32 |
| | 54 | 76 | 98 | 10 | 32 | 54 | 76 | 98 | | | |

Expected Sequence 2.1B (SEND SS, call forward unconditional, all bearers, successful, basic icon self explanatory, requested icon could not be displayed)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SS 2.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND SS 2.1.1 | [BASIC-ICON, self-explanatory] |
| 4 | ME → USER | Display “Basic Icon” without the icon | |
| 5 | ME → SS | REGISTER 1.1 | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 1.1 | [Successful] |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND SS 2.1.1B | [Command performed successfully, but requested icon could not be displayed] |

TERMINAL RESPONSE : SEND SS 2.1.1B

Logically:

| | |
|-------------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | SEND SS |
| Command qualifier: | “00” |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully, but requested icon could not be displayed |
| Additional information: | Operation Code and SS Parameters |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 11 | 00 | 82 | 02 | 82 | 81 | 03 | 1E |
| | 04 | 0A | A0 | 1A | 04 | 01 | 21 | 30 | 15 | 30 | 13 |
| | 83 | 01 | 00 | 84 | 01 | 07 | 85 | 0B | 91 | 10 | 32 |
| | 54 | 76 | 98 | 10 | 32 | 54 | 76 | 98 | | | |

Expected Sequence 2.2A (SEND SS, call forward unconditional, all bearers, successful, colour icon self explanatory, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SS 2.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND SS 2.2.1 | [COLOUR-ICON, self-explanatory] |
| 4 | ME → USER | Display the icon | |
| 5 | ME → SS | REGISTER 1.1 | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 1.1 | [Successful] |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND SS 2.1.1A | [Command performed successfully] |

PROACTIVE COMMAND : SEND SS 2.2.1

Logically:

Command details

| | |
|---------------------|-----------------------------------|
| Command number: | 1 |
| Command type: | SEND SS |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | |
| Destination device: | |
| Alpha identifier : | |
| SS String | |
| TON: | International |
| NPI: | "ISDN / telephone numbering plan" |
| SS string: | "**21*+01234567890123456789#" |
| Icon Identifier: | |
| Icon qualifier: | icon is self-explanatory |
| Icon Identifier: | record 2 in EF _(IMG) |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 81 | 03 | 01 | 11 | 00 | 82 | 02 | 81 | 83 | 85 |
| | 43 | 6F | 6C | 6F | 75 | 72 | 20 | 49 | 63 | 6F | 6E |
| | 89 | 0E | 91 | AA | 12 | 0A | 21 | 43 | 65 | 87 | 09 |
| | 43 | 65 | 87 | B9 | 9E | 02 | 00 | 02 | | | 21 |

Expected Sequence 2.2B (SEND SS, call forward unconditional, all bearers, successful, colour icon self explanatory, requested icon could not be displayed)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SS 2.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND SS 2.2.1 | [COLOUR-ICON, self-explanatory] |
| 4 | ME → USER | Display "Colour Icon" without the icon | |
| 5 | ME → SS | REGISTER 1.1 | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 1.1 | [Successful] |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND SS 2.1.1B | [Command performed but requested icon could not be displayed] |

Expected Sequence 2.3A (SEND SS, call forward unconditional, all bearers, successful, basic icon non self-explanatory, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SS 2.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND SS 2.3.1 | [BASIC-ICON, non self-explanatory] |
| 4 | ME → USER | Display "Basic Icon" and the icon | |
| 5 | ME → SS | REGISTER 1.1 | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 1.1 | [Successful] |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND SS 2.1.1A | [Command performed successfully] |

PROACTIVE COMMAND : SEND SS 2.3.1

Logically:

Command details

| | |
|--------------------|---------|
| Command number: | 1 |
| Command type: | SEND SS |
| Command qualifier: | "00" |

Device identities

| | |
|---------------------|---------|
| Source device: | SIM |
| Destination device: | Network |

Alpha Identifier

| | |
|---------------------|----------------------|
| Data coding scheme: | unpacked, 8 bit data |
| Text: | "Basic Icon" |

SS String

| | |
|------------|-----------------------------------|
| TON: | International |
| NPI: | "ISDN / telephone numbering plan" |
| SS string: | "**21*+01234567890123456789#" |

Icon Identifier

| | |
|------------------|---------------------------------|
| Icon qualifier: | icon is non self-explanatory |
| Icon Identifier: | record 1 in EF _(IMG) |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 2A | 81 | 03 | 01 | 11 | 00 | 82 | 02 | 81 | 83 | 85 |
| | 0B | 04 | 42 | 61 | 73 | 69 | 63 | 20 | 49 | 63 | 6F | 6E |
| | 89 | 0E | 91 | AA | 12 | 0A | 21 | 43 | 65 | 87 | 09 | 21 |
| | 43 | 65 | 87 | B9 | 9E | 02 | 01 | 01 | | | | |

Expected Sequence 2.3B (SEND SS, call forward unconditional, all bearers, successful, basic icon non self-explanatory)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SS 2.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND SS 2.3.1 | [BASIC-ICON, non self-explanatory] |
| 4 | ME → USER | Display "Basic Icon" without the icon | |
| 5 | ME → SS | REGISTER 1.1 | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 1.1 | [Successful] |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND SS 2.1.1B | [Command performed but requested icon could not be displayed] |

Expected Sequence 2.4 (SEND SS, call forward unconditional, all bearers, successful, basic icon non self-explanatory, no alpha identifier presented)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|-------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SS 2.4.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND SS 2.4.1 | [BASIC-ICON, non self-explanatory] |
| 4 | ME → SIM | TERMINAL RESPONSE : SEND SS 2.4.1 | [Command data not understood by ME] |

PROACTIVE COMMAND : SEND SS 2.4.1

Logically:

| | |
|---------------------|-----------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SEND SS |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | SIM |
| Destination device: | Network |
| SS String | |
| TON: | International |
| NPI: | "ISDN / telephone numbering plan" |
| SS string: | "**21*+01234567890123456789#" |
| Icon Identifier | |
| Icon qualifier: | icon is non self-explanatory |
| Icon Identifier: | record 1 in EF _(IMG) |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1D | 81 | 03 | 01 | 11 | 00 | 82 | 02 | 81 | 83 | 89 |
| | 0E | 91 | AA | 12 | 0A | 21 | 43 | 65 | 87 | 09 | 21 | 43 |
| | 65 | 87 | B9 | 9E | 02 | 01 | 01 | | | | | |

TERMINAL RESPONSE : SEND SS 2.4.1

Logically:

| | |
|---------------------|-----------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SEND SS |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command data not understood by ME |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 11 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 32 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

27.22.4.11.2.5 Test Requirement

The ME shall operate in the manner defined in expected sequences .

27.22.4.11.2 SEND SS (UCS2 support)**27.22.4.11.2.1 Definition and applicability**

See Section 3.2.2.

27.22.4.11.2.2 Conformance requirement

The ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in the following technical specifications: ISO/IEC 10646 [17], "Universal Multiple Octet Coded Character Set (UCS)".

27.22.4.11.2.3 Test Purpose

To verify that the ME displays the UCS2 text contained in the SEND SS proactive SIM command, and returns a successful result in the TERMINAL RESPONSE command send to the SIM.

27.22.4.11.2.4 Method of test**27.22.4.11.2.4.1 Initial Conditions**

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default. Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the System Simulator.

27.22.4.11.2.4.2 Procedure

Expected Sequence 3.1 (SEND SS, call forward unconditional, all bearers, successful, UCS2 text)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND SS 3.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SEND SS 3.1.1 | |
| 4 | ME → USER | Display "ЗДРАВСТВУЙТЕ" | ["Hello" in Russian] |
| 5 | ME → SS | REGISTER 1.1 | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 1.1 | [Successful] |
| 7 | ME → SIM | TERMINAL RESPONSE: SEND SS 1.1.1 | [Command performed successfully] |

PROACTIVE COMMAND : SEND SS 3.1.1

Logically:

Command details

| | |
|--------------------|---------|
| Command number: | 1 |
| Command type: | SEND SS |
| Command qualifier: | "00" |

Device identities

| | |
|---------------------|---------|
| Source device: | SIM |
| Destination device: | Network |

Alpha Identifier

| | |
|---------------------|----------------|
| Data coding scheme: | UCS2 (16bit) |
| Text: | "ЗДРАВСТВУЙТЕ" |

SS String

| | |
|------------|-----------------------------------|
| TON: | International |
| NPI: | "ISDN / telephone numbering plan" |
| SS string: | "**21*+01234567890123456789#" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 34 | 81 | 03 | 01 | 11 | 00 | 82 | 02 | 81 | 83 | 85 |
| | 19 | 80 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 | 04 | 12 |
| | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 | 04 | 22 |
| | 04 | 15 | 89 | 0E | 91 | AA | 12 | 0A | 21 | 43 | 65 | 87 |
| | 09 | 21 | 43 | 65 | 87 | B9 | | | | | | |

27.22.4.11.2.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 1.

27.22.4.12 SEND USSD

27.22.4.12.1 SEND USSD (normal)

27.22.4.12.1.1 Definition and applicability

See Section 3.2.2.

27.22.4.12.1.2 Conformance requirement

The ME shall support the Proactive SIM: Send USSD facility as defined in the following technical specifications:

TS GSM 11.14 [15] clause 6.1, clause 6.4.12 (Send USSD), 6.6.11 (Send USSD), clause 12.12.7 (Additional information for USSD problem), clause 5.2 (Terminal Profile), clause 12.6 (Command Details), clause 12.7 (Device Identities), clause 12.2 (Alpa identifier), clause 12.17 (USSD String), clause 12.31 (Icon identifier), clause 6.5.4 (Icon identifiers).

TS GSM 03.38 [7] clause 5 (Cell broadcast data coding scheme)

Additionnally the ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in the following technical specifications: ISO/IEC 10646 [17], “Universal Multiple Octet Coded Character Set (UCS)”.

27.22.4.12.1.3 Test Purpose

To verify that the ME correctly translates and sends the unstructured supplementary service request indicated in the SEND USSD proactive SIM command to the system Simulator.

To verify that the ME returns a TERMINAL RESPONSE command to the SIM indicating the status of the transmission of the USSD request and including a USSD result as a text string in the TERMINAL RESPONSE.

27.22.4.12.1.4 Method of test

27.22.4.12.1.4.1 Initial Conditions

The ME is connected to the System Simulator and the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default. Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the System Simulator

27.22.4.12.1.4.2 Procedure

Expected Sequence 1.1 (SEND USSD, 7-bit data, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|--------------|---|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND USSD 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND USSD 1.1.1 | |
| 4 | ME → USER | Display “7-bit USSD” | |
| 5 | ME → SS | REGISTER 1.1 | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 1.1 | [“USSD string received from SS”] |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND USSD 1.1.1 | |

PROACTIVE COMMAND: SEND USSD 1.1.1

Logically:

| | | | | | | | | | | | |
|---------------------|---|--|--|--|--|--|--|--|--|--|--|
| Command details | | | | | | | | | | | |
| Command number: | 1 | | | | | | | | | | |
| Command type: | SEND USSD | | | | | | | | | | |
| Command qualifier: | "00" | | | | | | | | | | |
| Device identities | | | | | | | | | | | |
| Source device: | SIM | | | | | | | | | | |
| Destination device: | Network | | | | | | | | | | |
| Alpha identifier: | "7-bit USSD" | | | | | | | | | | |
| USSD String | | | | | | | | | | | |
| Data coding scheme: | 7-bit default, no message class | | | | | | | | | | |
| USSD string: | 'ABCDEFHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890' | | | | | | | | | | |

1234567890"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 50 | 81 | 03 | 01 | 12 | 00 | 82 | 02 | 81 | 83 | 85 |
| | 0A | 37 | 2D | 62 | 69 | 74 | 20 | 55 | 53 | 53 | 44 | 8A |
| | 39 | F0 | 41 | E1 | 90 | 58 | 34 | 1E | 91 | 49 | E5 | 92 |
| | D9 | 74 | 3E | A1 | 51 | E9 | 94 | 5A | B5 | 5E | B1 | 59 |
| | 6D | 2B | 2C | 1E | 93 | CB | E6 | 33 | 3A | AD | 5E | B3 |
| | DB | EE | 37 | 3C | 2E | 9F | D3 | EB | F6 | 3B | 3E | AF |
| | 6F | C5 | 64 | 33 | 5A | CD | 76 | C3 | E5 | 60 | | |

REGISTER 1.1

Logically (only USSD argument)

| | | | | | | | | | | | |
|---|--|--|--|--|--|--|--|--|--|--|--|
| ProcessUnstructuredSS-Request ARGUMENT | | | | | | | | | | | |
| USSD-DataCodingScheme: | | | | | | | | | | | |
| - 7-bit default, no message class | | | | | | | | | | | |
| USSD string: | | | | | | | | | | | |
| - "ABCDEFHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890" | | | | | | | | | | | |

Coding:

| | | | | | | | | | | | | |
|---------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV | 30 | 3D | 04 | 01 | F0 | 04 | 38 | 41 | E1 | 90 | 58 | 34 |
| | 1E | 91 | 49 | E5 | 92 | D9 | 74 | 3E | A1 | 51 | E9 | 94 |
| | 5A | B5 | 5E | B1 | 59 | 6D | 2B | 2C | 1E | 93 | CB | E6 |
| | 33 | 3A | AD | 5E | B3 | DB | EE | 37 | 3C | 2E | 9F | D3 |
| | EB | F6 | 3B | 3E | AF | 6F | C5 | 64 | 33 | 5A | CD | 76 |
| | C3 | E5 | 60 | | | | | | | | | |

RELEASE COMPLETE (SS RETURN RESULT) 1.1

Logically (only from USSD result):

| | | | | | | | | | | | |
|---|--|--|--|--|--|--|--|--|--|--|--|
| ProcessUnstructuredSS-Request RETURN RESULT | | | | | | | | | | | |
| USSD-DataCodingScheme: | | | | | | | | | | | |
| - 7-bit default, no message class | | | | | | | | | | | |
| USSD string: | | | | | | | | | | | |
| - "USSD string received from SS" | | | | | | | | | | | |

Coding:

| | | | | | | | | | | | | |
|---------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV | 30 | 1E | 04 | 01 | F0 | 04 | 19 | D5 | E9 | 94 | 08 | 9A |
| | D3 | E5 | 69 | F7 | 19 | 24 | 2F | 8F | CB | 69 | 7B | 99 |
| | 0C | 32 | CB | DF | 6D | D0 | 74 | 0A | | | | |

TERMINAL RESPONSE : SEND USSD 1.1.1

Logically:

| | |
|---------------------|---------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SEND USSD |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Text string | |
| Data coding scheme: | 7-bit default, no message class |
| String: | "USSD string received from SS" |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 12 | 00 | 82 | 02 | 82 | 81 | 83 | 01 |
| | 00 | 8D | 1A | F0 | D5 | E9 | 94 | 08 | 9A | D3 | E5 |
| | 69 | F7 | 19 | 24 | 2F | 8F | CB | 69 | 7B | 99 | 0C |
| | 32 | CB | DF | 6D | D0 | 74 | 0A | | | | |

Expected Sequence 1.2 (SEND USSD, 8-bit data, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|--------------|---|------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND USSD 1.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND USSD 1.2.1 | |
| 4 | ME → USER | Display "8-bit USSD" | |
| 5 | ME → SS | REGISTER 1.2 | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 1.2 | ["USSD string received from SS"] |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND SS 1.2.1 | |

PROACTIVE COMMAND: SEND USSD 1.2.1

Logically:

| Command details | | | | | | | | | | | | |
|---------------------|--|--|--|--|--|--|---|--|--|--|--|--|
| Command number: | | | | | | | 1 | | | | | |
| Command type: | | | | | | | SEND USSD | | | | | |
| Command qualifier: | | | | | | | "00" | | | | | |
| Device identities | | | | | | | | | | | | |
| Source device: | | | | | | | SIM | | | | | |
| Destination device: | | | | | | | Network | | | | | |
| Alpha identifier: | | | | | | | "8-bit USSD" | | | | | |
| USSD String | | | | | | | | | | | | |
| Data coding scheme: | | | | | | | Uncompressed, no message class meaning, 8-bit data | | | | | |
| USSD string: | | | | | | | "ABCDEFHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890" | | | | | |

1234567890"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 58 | 81 | 03 | 01 | 12 | 00 | 82 | 02 | 81 | 83 | 85 |
| | 0A | 38 | 2D | 62 | 69 | 74 | 20 | 55 | 53 | 53 | 44 | 8A |
| | 41 | 44 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 4A |
| | 4B | 4C | 4D | 4E | 4F | 50 | 51 | 52 | 53 | 54 | 55 | 56 |
| | 57 | 58 | 59 | 5A | 2D | 61 | 62 | 63 | 64 | 65 | 66 | 67 |
| | 68 | 69 | 6A | 6B | 6C | 6D | 6E | 6F | 70 | 71 | 72 | 73 |
| | 74 | 75 | 76 | 77 | 78 | 79 | 7A | 2D | 31 | 32 | 33 | 34 |
| | 35 | 36 | 37 | 38 | 39 | 30 | | | | | | |

REGISTER 1.2

Logically (only USSD argument):

| |
|---|
| ProcessUnstructuredSS-Request ARGUMENT |
| USSD-DataCodingScheme: |
| - Uncompressed, no message class meaning, 8-bit data |
| USSD string: |
| - "ABCDEFHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890" |

Coding:

| | | | | | | | | | | | | |
|---------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV | 30 | 45 | 04 | 01 | 44 | 04 | 40 | 41 | 42 | 43 | 44 | 45 |
| | 46 | 47 | 48 | 49 | 4A | 4B | 4C | 4D | 4E | 4F | 50 | 51 |
| | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 5A | 2D | 61 | 62 |
| | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 6A | 6B | 6C | 6D | 6E |
| | 6F | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 7A |
| | 2D | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 30 | |

RELEASE COMPLETE (SS RETURN RESULT) 1.2

Logically (only from USSD result):

| |
|--|
| ProcessUnstructuredSS-Request RETURN RESULT |
| USSD-DataCodingScheme: |
| - Uncompressed, no message class meaning, 8-bit data |
| USSD string: |
| - "USSD string received from SS" |

Coding:

| | | | | | | | | | | | | |
|---------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV | 30 | 21 | 04 | 01 | 44 | 04 | 1C | 55 | 53 | 53 | 44 | 20 |
| | 73 | 74 | 72 | 69 | 6E | 67 | 20 | 72 | 65 | 63 | 65 | 69 |
| | 76 | 65 | 64 | 20 | 66 | 72 | 6F | 6D | 20 | 53 | 53 | |

TERMINAL RESPONSE : SEND USSD 1.2.1

Logically:

| Command details | |
|---------------------|--|
| Command number: | 1 |
| Command type: | SEND USSD |
| Command qualifier: | “00” |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Text string | |
| Data coding scheme: | Uncompressed, no message class meaning, 8-bit data |
| String: | “USSD string received from SS” |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 12 | 00 | 82 | 02 | 82 | 81 | 83 | 01 |
| | 00 | 8D | 1D | 44 | 55 | 53 | 53 | 44 | 20 | 73 | 74 |
| | 72 | 69 | 6E | 67 | 20 | 72 | 65 | 63 | 65 | 69 | 76 |
| | 65 | 64 | 20 | 66 | 72 | 6F | 6D | 20 | 53 | 53 | |

Expected Sequence 1.3 (SEND USSD, UCS2 data, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|--------------|---|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND USSD 1.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND USSD 1.3.1 | |
| 4 | ME → USER | Display “UCS2 USSD” | |
| 5 | ME → SS | REGISTER 1.3 | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 1.3 | [“USSD string received from SS”] |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND SS 1.3.1 | |

PROACTIVE COMMAND: SEND USSD 1.3.1

Logically:

| Command details | | | | | | | | | | | |
|---------------------|--|--|--|--|--|--|---|--|--|--|--|
| Command number: | | | | | | | 1 | | | | |
| Command type: | | | | | | | SEND USSD | | | | |
| Command qualifier: | | | | | | | "00" | | | | |
| Device identities | | | | | | | | | | | |
| Source device: | | | | | | | SIM | | | | |
| Destination device: | | | | | | | Network | | | | |
| Alpha identifier: | | | | | | | "UCS2 USSD" | | | | |
| USSD String | | | | | | | | | | | |
| Data coding scheme: | | | | | | | Uncompressed, no message class meaning, UCS2 (16 bit) | | | | |
| USSD string: | | | | | | | "ЗДРАВСТВУЙТЕ" ("Hello" in Russian) | | | | |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 2F | 81 | 03 | 01 | 12 | 00 | 82 | 02 | 81 | 83 | 85 |
| | 09 | 55 | 43 | 53 | 32 | 20 | 55 | 53 | 53 | 44 | 8A | 19 |
| | 48 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 | 04 | 12 | 04 |
| | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 | 04 | 22 | 04 |
| | | | 15 | | | | | | | | | |

REGISTER 1.3

Logically (only USSD argument):

| |
|---|
| ProcessUnstructuredSS-Request ARGUMENT |
| USSD-DataCodingScheme: |
| - Uncompressed, no message class meaning, UCS2 (16 bit) |
| USSD string: |
| - "ЗДРАВСТВУЙТЕ" ("Hello" in Russian) |

Coding:

| | | | | | | | | | | | | |
|---------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV | 30 | 1D | 04 | 01 | 48 | 04 | 18 | 04 | 17 | 04 | 14 | 04 |
| | 20 | 04 | 10 | 04 | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 |
| | 23 | 04 | 19 | 04 | 22 | 04 | 15 | | | | | |

RELEASE COMPLETE (SS RETURN RESULT) 1.3

Logically (only from USSD result):

| |
|---|
| ProcessUnstructuredSS-Request RETURN RESULT |
| USSD-DataCodingScheme: |
| - Uncompressed, no message class meaning, UCS2 (16 bit) |
| USSD string: |
| - "USSD string received from SS" |

Coding:

| | | | | | | | | | | | | |
|---------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV | 30 | 3D | 04 | 01 | 48 | 04 | 38 | 00 | 55 | 00 | 53 | 00 |
| | 53 | 00 | 44 | 00 | 20 | 00 | 73 | 00 | 74 | 00 | 72 | 00 |
| | 69 | 00 | 6E | 00 | 67 | 00 | 20 | 00 | 72 | 00 | 65 | 00 |
| | 63 | 00 | 65 | 00 | 69 | 00 | 76 | 00 | 65 | 00 | 64 | 00 |
| | 20 | 00 | 66 | 00 | 72 | 00 | 6F | 00 | 6D | 00 | 20 | 00 |
| | 53 | 00 | | | 53 | | | | | | | |

TERMINAL RESPONSE : SEND USSD 1.3.1

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | SEND USSD |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Text string | |
| Data coding scheme: | Uncompressed, no message class meaning, UCS2 (16 bit) |
| String: | "USSD string received from SS" |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 12 | 00 | 82 | 02 | 82 | 81 | 83 | 01 |
| | 00 | 8D | 39 | 48 | 00 | 55 | 00 | 53 | 00 | 53 | 00 |
| | 44 | 00 | 20 | 00 | 73 | 00 | 74 | 00 | 72 | 00 | 69 |
| | 00 | 6E | 00 | 67 | 00 | 20 | 00 | 72 | 00 | 65 | 00 |
| | 63 | 00 | 65 | 00 | 69 | 00 | 76 | 00 | 65 | 00 | 64 |
| | 00 | 20 | 00 | 66 | 00 | 72 | 00 | 6F | 00 | 6D | 00 |
| | 20 | 00 | 53 | 00 | 53 | | | | | | |

Expected Sequence 1.4 (SEND USSD, 7-bit data, unsuccessful (Return Error))

| Step | Direction | MESSAGE / Action | Comments |
|------|--------------|---|--------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND USSD 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND USSD 1.1.1 | |
| 4 | ME → USER | Display "7-bit USSD" | |
| 5 | ME → SS | REGISTER 1.1 | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN ERROR) 1.1 | Return Error |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND USSD 1.4.1 | |

RELEASE COMPLETE (SS RETURN ERROR) 1.1

Logically (only from Return Error code):

ProcessUnstructuredSS-Request RETURN ERROR
 Return Error code:
 - Unknown alphabet

Coding:

| | | | |
|---------|----|----|----|
| BER-TLV | 02 | 01 | 47 |
|---------|----|----|----|

TERMINAL RESPONSE : SEND USSD 1.4.1

Logically:

| | |
|-------------------------|--------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SEND USSD |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | USSD Return Error |
| Additional information: | "Unknown alphabet" |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 12 | 00 | 82 | 02 | 82 | 81 | 83 | 02 |
| | 37 | 46 | | | | | | | | | |

Expected Sequence 1.5 (SEND USSD, 7-bit data, unsuccessful (Reject))

| Step | Direction | MESSAGE / Action | Comments |
|------|--------------|---|----------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND USSD 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND USSD 1.1.1 | |
| 4 | ME → USER | Display "7-bit USSD" | |
| 5 | ME → SS | REGISTER 1.1 | |
| 6 | SS → ME | RELEASE COMPLETE (SS REJECT) 1.1 | Reject |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND USSD 1.5.1 | |

RELEASE COMPLETE (SS REJECT) 1.1

Logically (only from Problem code):

```
ProcessUnstructuredSS-Request REJECT
  Invoke Problem code:
    - Mistyped parameter
```

Coding:

| | | | |
|---------|----|----|----|
| BER-TLV | 81 | 01 | 02 |
|---------|----|----|----|

TERMINAL RESPONSE : SEND USSD 1.5.1

Logically:

| Command details | |
|-------------------------|----------------------------------|
| Command number: | 1 |
| Command type: | SEND USSD |
| Command qualifier: | “00” |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | USSD Return Error |
| Additional information: | “No specific cause can be given” |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 12 | 00 | 82 | 02 | 82 | 81 | 83 | 02 |
| | 37 | 00 | | | | | | | | | |

Expected Sequence 1.6 (SEND USSD, 256 octets, 7-bit data, successful, long alpha identifier)

| Step | Direction | MESSAGE / Action | Comments |
|------|--------------|--|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND USSD 1.6.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND USSD 1.6.1 | |
| 4 | ME → USER | Display “once a RELEASE COMPLETE message containing the USSD Return Result message not containing an error has been received from the network, the ME shall inform the SIM that the command has” | |
| 5 | ME → SS | REGISTER 1.1 | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 1.1 | [“USSD string received from SS”] |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND USSD 1.1.1 | |

PROACTIVE COMMAND: SEND USSD 1.6.1

Logically:

Command details

Command number: 1
 Command type: SEND USSD
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: Network
 Alpha identifier:

USSD String

Data coding scheme: 7-bit default, no message class
 USSD string: "ABCDEFIGHJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

Coding:

| BER-TLV: | D0 | 81 | FD | 81 | 03 | 01 | 12 | 00 | 82 | 02 | 81 | 83 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| | 85 | 81 | B6 | 6F | 6E | 63 | 65 | 20 | 61 | 20 | 52 | 45 |
| | 4C | 45 | 41 | 53 | 45 | 20 | 43 | 4F | 4D | 50 | 4C | 45 |
| | 54 | 45 | 20 | 6D | 65 | 73 | 73 | 61 | 67 | 65 | 20 | 63 |
| | 6F | 6E | 74 | 61 | 69 | 6E | 69 | 6E | 67 | 20 | 74 | 68 |
| | 65 | 20 | 55 | 53 | 53 | 44 | 20 | 52 | 65 | 74 | 75 | 72 |
| | 6E | 20 | 52 | 65 | 73 | 75 | 6C | 74 | 20 | 6D | 65 | 73 |
| | 73 | 61 | 67 | 65 | 20 | 6E | 6F | 74 | 20 | 63 | 6F | 6E |
| | 74 | 61 | 69 | 6E | 69 | 6E | 67 | 20 | 61 | 6E | 20 | 65 |
| | 72 | 72 | 6F | 72 | 20 | 68 | 61 | 73 | 20 | 62 | 65 | 65 |
| | 6E | 20 | 72 | 65 | 63 | 65 | 69 | 76 | 65 | 64 | 20 | 66 |
| | 72 | 6F | 6D | 20 | 74 | 68 | 65 | 20 | 6E | 65 | 74 | 77 |
| | 6F | 72 | 6B | 2C | 20 | 74 | 68 | 65 | 20 | 4D | 45 | 20 |
| | 73 | 68 | 61 | 6C | 6C | 20 | 69 | 6E | 66 | 6F | 72 | 6D |
| | 20 | 74 | 68 | 65 | 20 | 53 | 49 | 4D | 20 | 74 | 68 | 61 |
| | 74 | 20 | 74 | 68 | 65 | 20 | 63 | 6F | 6D | 6D | 61 | 6E |
| | 64 | 20 | 68 | 61 | 73 | 8A | 39 | F0 | 41 | E1 | 90 | 58 |
| | 34 | 1E | 91 | 49 | E5 | 92 | D9 | 74 | 3E | A1 | 51 | E9 |
| | 94 | 5A | B5 | 5E | B1 | 59 | 6D | 2B | 2C | 1E | 93 | CB |
| | E6 | 33 | 3A | AD | 5E | B3 | DB | EE | 37 | 3C | 2E | 9F |
| | D3 | EB | F6 | 3B | 3E | AF | 6F | C5 | 64 | 33 | 5A | CD |
| | 76 | C3 | E5 | 60 | | | | | | | | |

Expected Sequence 1.7 (SEND USSD, 7-bit data, successful, no alpha identifier)

| Step | Direction | MESSAGE / Action | Comments |
|------|--------------|---|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND USSD 1.7.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND USSD 1.7.1 | |
| 4 | ME → USER | Optionally display an informative message | |
| 5 | ME → SS | REGISTER 1.1 | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 1.1 | [“USSD string received from SS”] |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND USSD 1.1.1 | |

PROACTIVE COMMAND: SEND USSD 1.7.1

Logically:

| | |
|---------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | SEND USSD |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | SIM |
| Destination device: | Network |
| USSD String | |
| Data coding scheme: | 7-bit default, no message class |
| USSD string: | "ABCDEFIGHJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 44 | 81 | 03 | 01 | 12 | 00 | 82 | 02 | 81 | 83 | 8A |
| | 39 | F0 | 41 | E1 | 90 | 58 | 34 | 1E | 91 | 49 | E5 | 92 |
| | D9 | 74 | 3E | A1 | 51 | E9 | 94 | 5A | B5 | 5E | B1 | 59 |
| | 6D | 2B | 2C | 1E | 93 | CB | E6 | 33 | 3A | AD | 5E | B3 |
| | DB | EE | 37 | 3C | 2E | 9F | D3 | EB | F6 | 3B | 3E | AF |
| | 6F | C5 | 64 | 33 | 5A | CD | 76 | C3 | E5 | 60 | | |

Expected Sequence 1.8 (SEND USSD, 7-bit data, successful, null length alpha identifier)

| Step | Direction | MESSAGE / Action | Comments |
|------|--------------|---|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND USSD 1.8.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND USSD 1.8.1 | |
| 4 | ME → USER | the ME should not give any information to the user on the fact that the ME is sending a USSD request | |
| 5 | ME → SS | REGISTER 1.1 | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 1.1 | [“USSD string received from SS”] |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND USSD 1.1.1 | |

PROACTIVE COMMAND: SEND USSD 1.8.1

Logically:

| | |
|---------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | SEND USSD |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | SIM |
| Destination device: | Network |
| Alpha identifier : | "" |
| USSD String | |
| Data coding scheme: | 7-bit default, no message class |
| USSD string: | "ABCDEF ^{GHIJKLMNOP} QRSTUVWXYZ-abcde ^{fghijklmno} pqrstuvwxyz-1234567890" |

Coding:

| BER-TLV: | D0 | 46 | 81 | 03 | 01 | 12 | 00 | 82 | 02 | 81 | 83 | 85 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| | 00 | 8A | 39 | F0 | 41 | E1 | 90 | 58 | 34 | 1E | 91 | 49 |
| | E5 | 92 | D9 | 74 | 3E | A1 | 51 | E9 | 94 | 5A | B5 | 5E |
| | B1 | 59 | 6D | 2B | 2C | 1E | 93 | CB | E6 | 33 | 3A | AD |
| | 5E | B3 | DB | EE | 37 | 3C | 2E | 9F | D3 | EB | F6 | 3B |
| | 3E | AF | 6F | C5 | 64 | 33 | 5A | CD | 76 | C3 | E5 | 60 |

27.22.4.12.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 1.1 – 1.8.

27.22.4.12.2 SEND USSD (Icon support)

27.22.4.12.2.1 Definition and applicability

See Section 3.2.2.

27.22.4.12.2.2 Conformance requirement

27.22.4.12.2.3 Test Purpose

To verify that the ME displays the text contained in the SEND USSD proactive SIM command, and returns a successful result in the TERMINAL RESPONSE command send to the SIM.

In addition to verify that if an icon is provided by the SIM, the icon indicated in the command may be used by the ME to inform the user, in addition to, or instead of the alpha identifier, as indicated with the icon qualifier.

27.22.4.12.2.4 Method of test

27.22.4.12.2.4.1 Initial Conditions

The ME is connected to the System Simulator and the SIM Simulator.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the System Simulator

See Annex C for coding of the elementary files on SIM.

27.22.4.12.2.4.2 Procedure

Expected Sequence 2.1A (SEND USSD, 7-bit data, successful, basic icon self explanatory, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|--------------|---|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND USSD 2.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND USSD 2.1.1 | [BASIC-ICON, self-explanatory] |
| 4 | ME → USER | Display BASIC ICON | |
| 5 | ME → SS | REGISTER 2.1 | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 2.1 | ["USSD string received from SS"] |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND USSD 2.1.1A | [Command performed successfully] |

PROACTIVE COMMAND: SEND USSD 2.1.1

Logically:

Command details

Command number: 1
 Command type: SEND USSD
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: Network
 Alpha identifier: "Basic Icon"

USSD String

Data coding scheme: 7-bit default, no message class
 USSD string: "ABCDEFHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnpqrstuvwxyz-1234567890"

Icon Identifier:

Icon qualifier: icon is self-explanatory
 Icon Identifier: record 1 in EF_(IMG)

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 55 | 81 | 03 | 01 | 12 | 00 | 82 | 02 | 81 | 83 | 85 |
| | 0B | 04 | 42 | 61 | 73 | 69 | 63 | 20 | 49 | 63 | 6F | 6E |
| | 8A | 39 | F0 | 41 | E1 | 90 | 58 | 34 | 1E | 91 | 49 | E5 |
| | 92 | D9 | 74 | 3E | A1 | 51 | E9 | 94 | 5A | B5 | 5E | B1 |
| | 59 | 6D | 2B | 2C | 1E | 93 | CB | E6 | 33 | 3A | AD | 5E |
| | B3 | DB | EE | 37 | 3C | 2E | 9F | D3 | EB | F6 | 3B | 3E |
| | AF | 6F | C5 | 64 | 33 | 5A | CD | 76 | C3 | E5 | 60 | 9E |
| | 02 | 00 | 01 | | | | | | | | | |

REGISTER 2.1

Logically (only USSD argument)

ProcessUnstructuredSS-Request ARGUMENT

USSD-DataCodingScheme:

- 7-bit default, no message class

USSD string:

- “ABCDEF~~GHIJKLMN~~OPQRSTUVWXYZ-abcdefg~~hijklmn~~opqrstuvwxyz-1234567890”

Coding:

| | | | | | | | | | | | | |
|---------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV | 30 | 3D | 04 | 01 | F0 | 04 | 38 | 41 | E1 | 90 | 58 | 34 |
| | 1E | 91 | 49 | E5 | 92 | D9 | 74 | 3E | A1 | 51 | E9 | 94 |
| | 5A | B5 | 5E | B1 | 59 | 6D | 2B | 2C | 1E | 93 | CB | E6 |
| | 33 | 3A | AD | 5E | B3 | DB | EE | 37 | 3C | 2E | 9F | D3 |
| | EB | F6 | 3B | 3E | AF | 6F | C5 | 64 | 33 | 5A | CD | 76 |
| | C3 | E5 | 60 | | | | | | | | | |

RELEASE COMPLETE (SS RETURN RESULT) 2.1

Logically (only from USSD result):

ProcessUnstructuredSS-Request RETURN RESULT

USSD-DataCodingScheme:

- 7-bit default, no message class

USSD string:

- “USSD string received from SS”

Coding:

| | | | | | | | | | | | | |
|---------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV | 30 | 1E | 04 | 01 | F0 | 04 | 19 | D5 | E9 | 94 | 08 | 9A |
| | D3 | E5 | 69 | F7 | 19 | 24 | 2F | 8F | CB | 69 | 7B | 99 |
| | 0C | 32 | CB | DF | 6D | D0 | 74 | 0A | | | | |

TERMINAL RESPONSE : SEND USSD 2.1.1A

Logically:

Command details

| | |
|--------------------|-----------|
| Command number: | 1 |
| Command type: | SEND USSD |
| Command qualifier: | “00” |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

General Result: Command performed successfully

Text string

| | |
|---------------------|---------------------------------|
| Data coding scheme: | 7-bit default, no message class |
| String: | “USSD string received from SS” |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 12 | 00 | 82 | 02 | 82 | 81 | 83 | 01 |
| | 00 | 8D | 1A | F0 | D5 | E9 | 94 | 08 | 9A | D3 | E5 |
| | 69 | F7 | 19 | 24 | 2F | 8F | CB | 69 | 7B | 99 | 0C |
| | 32 | CB | DF | 6D | D0 | 74 | 0A | | | | |

Expected Sequence 2.1B (SEND USSD, 7-bit data, successful, basic icon self explanatory, requested icon could not be displayed)

| Step | Direction | MESSAGE / Action | Comments |
|-------------|------------------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND USSD 2.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND USSD 2.1.1 | [BASIC-ICON, self-explanatory] |
| 4 | ME → USER | Display “Basic Icon” without the icon | |
| 5 | ME → SS | REGISTER 2.1 | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 2.1 | ["USSD string received from SS"] |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND USSD 2.1.1B | [Command performed but requested icon could not be displayed] |

TERMINAL RESPONSE : SEND USSD 2.1.1B

Logically:

Command details

Command number: 1
Command type: SEND USSD
Command qualifier: “00”

Device identities

Source device: ME
Destination device: SIM

Result

General Result: Command performed successfully, but requested icon could not be displayed

Text string

Data coding scheme: 7-bit default, no message class
String: “USSD string received from SS”

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 12 | 00 | 82 | 02 | 82 | 81 | 83 | 01 |
| | 04 | 8D | 1A | F0 | D5 | E9 | 94 | 08 | 9A | D3 | E5 |
| | 69 | F7 | 19 | 24 | 2F | 8F | CB | 69 | 7B | 99 | 0C |
| | 32 | CB | DF | 6D | D0 | 74 | 0A | | | | |

Expected Sequence 2.2 (SEND USSD, 7-bit data, successful, colour icon self explanatory)

| Step | Direction | MESSAGE / Action | Comments |
|------|--------------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND USSD 2.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND USSD 2.2.1 | [COLOUR-ICON, self-explanatory] |
| 4 | ME → USER | Display COLOUR-ICON or May give information to user concerning what is happening | |
| 5 | ME → SS | REGISTER 2.1 | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 2.1 | ["USSD string received from SS"] |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND USSD 2.1.1A or TERMINAL RESPONSE : SEND USSD 2.1.1B | [Command performed successfully] or [Command performed but requested icon could not be displayed] |

PROACTIVE COMMAND: SEND USSD 2.2.1

Logically:

Command details

Command number: 1
Command type: SEND USSD
Command qualifier: "00"

Device identities

Source device: SIM
Destination device: Network
Alpha identifier : « Color Icon »
USSD String

Data coding scheme: 7-bit default, no message class
USSD string: "ABCDEFHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

Icon Identifier:

Icon qualifier: icon is self-explanatory
Icon Identifier: record 2 in EF_(IMG)

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 55 | 81 | 03 | 01 | 12 | 00 | 82 | 02 | 81 | 83 | 85 |
| | 0B | 04 | 43 | 6F | 6C | 6F | 72 | 20 | 49 | 63 | 6F | 6E |
| | 8A | 39 | F0 | 41 | E1 | 90 | 58 | 34 | 1E | 91 | 49 | E5 |
| | 92 | D9 | 74 | 3E | A1 | 51 | E9 | 94 | 5A | B5 | 5E | B1 |
| | 59 | 6D | 2B | 2C | 1E | 93 | CB | E6 | 33 | 3A | AD | 5E |
| | B3 | DB | EE | 37 | 3C | 2E | 9F | D3 | EB | F6 | 3B | 3E |
| | AF | 6F | C5 | 64 | 33 | 5A | CD | 76 | C3 | E5 | 60 | 9E |
| | 02 | 00 | 02 | | | | | | | | | |

Expected Sequence 2.3A (SEND USSD, 7-bit data, successful, basic icon non self-explanatory, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND USSD 2.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND USSD 2.3.1 | [BASIC-ICON, non self-explanatory] |
| 4 | ME → USER | Display "Basic Icon" and BASIC-ICON | |
| 5 | ME → SS | REGISTER 2.1 | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 2.1 | ["USSD string received from SS"] |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND USSD 2.1.1A | [Command performed successfully] |

PROACTIVE COMMAND: SEND USSD 2.3.1

Logically:

Command details

Command number: 1
 Command type: SEND USSD
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: Network
 Alpha Identifier: "Basic Icon"

USSD String

Data coding scheme: 7-bit default, no message class
 USSD string: "ABCDEFHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnopqrstuvwxyz-1234567890"

Icon Identifier

Icon qualifier: icon is non self-explanatory
 Icon Identifier: record 1 in EF_(IMG)

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 55 | 81 | 03 | 01 | 12 | 00 | 82 | 02 | 81 | 83 | 85 |
| | 0B | 04 | 42 | 61 | 73 | 69 | 63 | 20 | 49 | 63 | 6F | 6E |
| | 8A | 39 | F0 | 41 | E1 | 90 | 58 | 34 | 1E | 91 | 49 | E5 |
| | 92 | D9 | 74 | 3E | A1 | 51 | E9 | 94 | 5A | B5 | 5E | B1 |
| | 59 | 6D | 2B | 2C | 1E | 93 | CB | E6 | 33 | 3A | AD | 5E |
| | B3 | DB | EE | 37 | 3C | 2E | 9F | D3 | EB | F6 | 3B | 3E |
| | AF | 6F | C5 | 64 | 33 | 5A | CD | 76 | C3 | E5 | 60 | 9E |
| | 02 | 01 | | 01 | | | | | | | | |

Expected Sequence 2.3B (SEND USSD, 7-bit data, successful, basic icon non self-explanatory, requested icon could not be displayed)

| Step | Direction | MESSAGE / Action | Comments |
|------|--------------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND USSD 2.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND USSD 2.3.1 | [BASIC-ICON, non self-explanatory] |
| 4 | ME → USER | Display "Basic Icon" without the icon | |
| 5 | ME → SS | REGISTER 2.1 | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 2.1 | ["USSD string received from SS"] |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND USSD 2.1.1B | [Command performed but requested icon could not be displayed] |

Expected Sequence 2.4 (SEND USSD, 7-bit data, basic icon non self-explanatory, no alpha identifier presented)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|-------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND USSD 2.4.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND USSD 2.4.1 | [BASIC-ICON, non self-explanatory] |
| 4 | ME → SIM | TERMINAL RESPONSE : SEND USSD 2.4.1 | [Command data not understood by ME] |

PROACTIVE COMMAND : SEND USSD 2.4.1

Logically:

Command details

| | |
|--------------------|-----------|
| Command number: | 1 |
| Command type: | SEND USSD |
| Command qualifier: | "00" |

Device identities

| | |
|---------------------|---------|
| Source device: | SIM |
| Destination device: | Network |

USSD String

| | |
|---------------------|---|
| Data coding scheme: | 7-bit default, no message class |
| USSD string: | "ABCDEFHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnpqrstuvwxyz- |

Icon Identifier

| | |
|------------------|---------------------------------|
| Icon qualifier: | icon is non self-explanatory |
| Icon Identifier: | record 1 in EF _(IMG) |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 48 | 81 | 03 | 01 | 12 | 00 | 82 | 02 | 81 | 83 | 8A |
| | 39 | F0 | 41 | E1 | 90 | 58 | 34 | 1E | 91 | 49 | E5 | 92 |
| | D9 | 74 | 3E | A1 | 51 | E9 | 94 | 5A | B5 | 5E | B1 | 59 |
| | 6D | 2B | 2C | 1E | 93 | CB | E6 | 33 | 3A | AD | 5E | B3 |
| | DB | EE | 37 | 3C | 2E | 9F | D3 | EB | F6 | 3B | 3E | AF |
| | 6F | C5 | 64 | 33 | 5A | CD | 76 | C3 | E5 | 60 | 9E | 02 |
| | 01 | 01 | | | | | | | | | | |

TERMINAL RESPONSE : SEND USSD 2.4.1

Logically:

| | |
|---------------------|-----------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SEND USSD |
| Command qualifier: | “00” |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command data not understood by ME |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 12 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 32 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

27.22.4.12.2.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 2.1 – 2.4.

27.22.4.12.3 SEND USSD (UCS2 support)**27.22.4.12.3.1 Definition and applicability**

See Section 3.2.2.

27.22.4.12.3.2 Conformance requirement

The ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in the following technical specifications:

ISO/IEC 10646 [17].

27.22.4.12.3.3 Test Purpose

To verify that the ME displays the UCS2 text contained in the SEND USSD proactive SIM command, and returns a successful result in the TERMINAL RESPONSE command send to the SIM.

27.22.4.12.3.4 Method of test**27.22.4.12.3.4.1 Initial Conditions**

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default. Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the System Simulator.

27.22.4.12.3.4.2 Procedure

Expected Sequence 3.1 (SEND USSD, 7-bit data, successful, UCS2 text)

| Step | Direction | MESSAGE / Action | Comments |
|------|--------------|---|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND USSD 3.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SEND USSD 3.1.1 | |
| 4 | ME → USER | Display "ЗДРАВСТВУЙТЕ" | ["Hello" in Russian] |
| 5 | ME → SS | REGISTER 3.1 | |
| 6 | SS → ME | RELEASE COMPLETE (SS RETURN RESULT) 3.1 | [Successful] |
| 7 | ME → SIM | TERMINAL RESPONSE: SEND USSD 3.1.1 | [Command performed successfully] |

PROACTIVE COMMAND: SEND USSD 3.1.1

Logically:

Command details

Command number: 1
 Command type: SEND USSD
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: Network

Alpha Identifier

Data coding scheme: UCS2 (16bit)
 Text: "ЗДРАВСТВУЙТЕ"

USSD String

Data coding scheme: 7-bit default, no message class
 USSD string: "ABCDEFHIJKLMNOPQRSTUVWXYZ-abcdefghijklmnoqrstuvwxyz-

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 5F | 81 | 03 | 01 | 12 | 00 | 82 | 02 | 81 | 83 | 85 |
| | 19 | 80 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 | 04 | 12 |
| | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 | 04 | 22 |
| | 04 | 15 | 8A | 39 | F0 | 41 | E1 | 90 | 58 | 34 | 1E | 91 |
| | 49 | E5 | 92 | D9 | 74 | 3E | A1 | 51 | E9 | 94 | 5A | B5 |
| | 5E | B1 | 59 | 6D | 2B | 2C | 1E | 93 | CB | E6 | 33 | 3A |
| | AD | 5E | B3 | DB | EE | 37 | 3C | 2E | 9F | D3 | EB | F6 |
| | 3B | 3E | AF | 6F | C5 | 64 | 33 | 5A | CD | 76 | C3 | E5 |
| | | | | | | | | | | | | 60 |

REGISTER 3.1

Logically (only USSD argument)

ProcessUnstructuredSS-Request ARGUMENT

USSD-DataCodingScheme:

- 7-bit default, no message class

USSD string:

- “ABCDEF^{GHIJKLMNOPQRSTUVWXYZ}-abcdef^{ghijklmnopqrstuvwxyz-1234567890”}

Coding:

| | | | | | | | | | | | | |
|---------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV | 30 | 3D | 04 | 01 | F0 | 04 | 38 | 41 | E1 | 90 | 58 | 34 |
| | 1E | 91 | 49 | E5 | 92 | D9 | 74 | 3E | A1 | 51 | E9 | 94 |
| | 5A | B5 | 5E | B1 | 59 | 6D | 2B | 2C | 1E | 93 | CB | E6 |
| | 33 | 3A | AD | 5E | B3 | DB | EE | 37 | 3C | 2E | 9F | D3 |
| | EB | F6 | 3B | 3E | AF | 6F | C5 | 64 | 33 | 5A | CD | 76 |
| | C3 | E5 | 60 | | | | | | | | | |

RELEASE COMPLETE (SS RETURN RESULT) 3.1

Logically (only from USSD result):

ProcessUnstructuredSS-Request RETURN RESULT

USSD-DataCodingScheme:

- 7-bit default, no message class

USSD string:

- “USSD string received from SS”

Coding:

| | | | | | | | | | | | | |
|---------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV | 30 | 1E | 04 | 01 | F0 | 04 | 19 | D5 | E9 | 94 | 08 | 9A |
| | D3 | E5 | 69 | F7 | 19 | 24 | 2F | 8F | CB | 69 | 7B | 99 |
| | 0C | 32 | CB | DF | 6D | D0 | 74 | 0A | | | | |

TERMINAL RESPONSE : SEND USSD 3.1.1

Logically:

Command details

| | |
|--------------------|-----------|
| Command number: | 1 |
| Command type: | SEND USSD |
| Command qualifier: | “00” |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

General Result: Command performed successfully

Text string

| | |
|---------------------|---------------------------------|
| Data coding scheme: | 7-bit default, no message class |
| String: | “USSD string received from SS” |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 12 | 00 | 82 | 02 | 82 | 81 | 83 | 01 |
| | 00 | 8D | 1A | F0 | D5 | E9 | 94 | 08 | 9A | D3 | E5 |
| | 69 | F7 | 19 | 24 | 2F | 8F | CB | 69 | 7B | 99 | 0C |
| | 32 | CB | DF | 6D | D0 | 74 | 0A | | | | |

27.22.4.12.3.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 3.1

27.22.4.13 SET UP CALL

27.22.4.13.1 SET UP CALL (normal)

27.22.4.13.1.1 Definition and applicability

See Section 3.2.2.

27.22.4.13.1.2 Conformance requirement

The ME shall support the Proactive SIM: Set Up Call facility as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 6.1, clause 6.4.13 (Set Up Call), clause 6.6.12 (Set Up Call), clause 12.6 (Command details), clause 12.7 (Device Identities), clause 12.12 (Result), clause 12.12.3 (Additional information for network problem), clause 5.2 (Terminal Profile)

27.22.4.13.1.3 Test Purpose

To verify that the ME accepts the Proactive Command – Set Up Call , displays the alpha identifier to the user, attempts to set up a call to the address and returns the result in the TERMINAL RESPONSE.

27.22.4.13.1.4 Method of test

27.22.4.13.1.4.1 Initial Conditions

The ME is connected to both the SIM Simulator and the System Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the system simulator.

27.22.4.13.1.4.2 Procedure

Expected Sequence 1.1 (SET UP CALL, call confirmed by the user and connected)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP CALL 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SET UP CALL 1.1.1 | |
| 4 | ME → USER | ME displays "Not busy" during user confirmation phase. | |
| 5 | USER → ME | The user confirms the call set up | [user confirmation] |
| 6 | ME->SS | The ME attempts to set up a call to "+012340123456p1p2" | |
| 7 | SS → ME | The ME receives the CONNECT message from the system simulator. | |
| 8 | ME → SIM | TERMINAL RESPONSE 1.1.1 The ME shall not update EF LND with the called party address. | [Command performed successfully] |
| 9 | USER → ME | The user ends the call after 5 seconds. The ME returns to idle mode. | |

PROACTIVE COMMAND : SET UP CALL 1.1.1

Logically:

Command details

Command number: 1
 Command type: SET UP CALL
 Command qualifier: only if not currently busy on another call

Device identities

Source device: SIM
 Destination device: Network
 Alpha identifier: "Not busy"
 Address
 TON: International
 NPI: ISDN / telephone numbering plan
 Dialling number string "012340123456p1p2"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1E | 81 | 03 | 01 | 10 | 00 | 82 | 02 | 81 | 83 | 85 |
| | 08 | 4E | 6F | 74 | 20 | 62 | 75 | 73 | 79 | 86 | 09 | 91 |
| | 10 | 32 | 04 | 21 | 43 | 65 | 1C | 2C | | | | |

TERMINAL RESPONSE : SET UP CALL 1.1.1

Logically:

| | |
|---------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP CALL |
| Command qualifier: | only if not currently busy on another call |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

BER-TLV: 81 03 01 10 00 82 02 82 81 83 01 00

Expected Sequence 1.2 (SET UP CALL, call rejected by the user)

| Step | Direction | MESSAGE / Action | Comments |
|------|---------------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP CALL 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SET UP CALL 1.1.1 | |
| 4 | ME → USER | ME displays "Not busy" during the user confirmation phase | |
| 5 | USER → ME | The user rejects the set up call | [user rejects the call] |
| 6 | ME → SIM | TERMINAL RESPONSE 1.2.1 | [User did not accept call set-up request] |
| 7 | ME →> USER | The ME returns in idle mode. | |

TERMINAL RESPONSE : SET UP CALL 1.2.1

Logically:

| | |
|---------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP CALL |
| Command qualifier: | only if not currently busy on another call |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | User did not accept call set-up request |

Coding:

BER-TLV: 81 03 01 10 00 82 02 82 81 83 01 22

Expected Sequence 1.3 (SET UP CALL, redial)

The system simulator shall be configured such that call set up requests will be rejected with cause "User Busy".

| Step | Direction | MESSAGE / Action | Comments |
|------|------------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP CALL 1.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SET UP CALL 1.2.1 | [only if not currently busy on another call with redial] |
| 4 | ME → USER | ME displays "Not busy with redial" during the user confirmation phase | |
| 5 | USER → ME | The user confirms the set up call | [user confirms the call] |
| 6 | ME -> SS | ME attempts to set up a call to "+012340123456p1p2" at least twice | [redial mechanism] |
| 7 | ME → SIM | TERMINAL RESPONSE 1.3.1 | [network currently unable to process command] |
| 8 | ME -> USER | The ME returns in idle mode. | |

PROACTIVE COMMAND : SET UP CALL 1.2.1

Logically:

| Command details | |
|------------------------|--|
| Command number: | 1 |
| Command type: | SET UP CALL |
| Command qualifier: | only if not currently busy on another call with redial |
| Device identities | |
| Source device: | SIM |
| Destination device: | Network |
| Alpha identifier: | "Not busy with redial" |
| Address | |
| TON: | International |
| NPI: | ISDN / telephone numbering plan |
| Dialling number string | "012340123456p1p2" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 2A | 81 | 03 | 01 | 10 | 01 | 82 | 02 | 81 | 83 | 85 |
| | 14 | 4E | 6F | 74 | 20 | 62 | 75 | 73 | 79 | 20 | 77 | 69 |
| | 74 | 68 | 20 | 72 | 65 | 64 | 69 | 61 | 6C | 86 | 09 | 91 |
| | 10 | 32 | 04 | 21 | 43 | 65 | 1C | 2C | | | | |

TERMINAL RESPONSE : SET UP CALL 1.3.1

Logically:

| Command details | |
|-------------------------|--|
| Command number: | 1 |
| Command type: | SET UP CALL |
| Command qualifier: | only if not currently busy on another call with redial |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | network currently unable to process command |
| Additional Information: | User Busy |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 10 | 01 | 82 | 02 | 82 | 81 | 83 | 02 | 21 |
| | | | | | | | | | | | | |
| | 91 | | | | | | | | | | | |

Expected Sequence 1.4 (SET UP CALL, putting all other calls on hold, ME busy)

ME is busy on a call

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|-----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP CALL 1.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SET UP CALL 1.3.1 | [putting all other calls on hold] |
| 4 | ME → USER | ME displays "On hold" during the user confirmation phase | |
| 5 | USER → ME | The user confirms the set up call | [user confirms the call] |
| 6 | ME → SS | The active call is put on hold | |
| 7 | ME->SS | The ME attempts to set up a call to "+012340123456p1p2" | |
| 8 | SS → ME | The ME receives the CONNECT message from the system simulator. | |
| 9 | ME → SIM | TERMINAL RESPONSE 1.4.1 | [Command performed successfully] |
| 10 | USER → ME | The user ends the call after 5 seconds. The ME retrieves the previous call | |

PROACTIVE COMMAND : SET UP CALL 1.3.1

Logically:

Command details

| | |
|--------------------|---------------------------------|
| Command number: | 1 |
| Command type: | SET UP CALL |
| Command qualifier: | putting all other calls on hold |

Device identities

| | |
|------------------------|---------------------------------|
| Source device: | SIM |
| Destination device: | Network |
| Alpha identifier: | "On hold" |
| Address | |
| TON: | International |
| NPI: | ISDN / telephone numbering plan |
| Dialling number string | "012340123456p1p2" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1D | 81 | 03 | 01 | 10 | 02 | 82 | 02 | 81 | 83 | 85 |
| | 07 | 4F | 6E | 20 | 68 | 6F | 6C | 64 | 86 | 09 | 91 | 10 |
| | 32 | 04 | 21 | 43 | 65 | 1C | 2C | | | | | |

TERMINAL RESPONSE : SET UP CALL 1.4.1

Logically:

| | |
|---------------------|---------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP CALL |
| Command qualifier: | putting all other calls on hold |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

BER-TLV: 81 03 01 10 02 82 02 82 81 83 01 00

Expected Sequence 1.5 (SET UP CALL, disconnecting all other calls, ME busy)

ME is busy on a call

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP CALL 1.4.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SET UP CALL 1.4.1 | [disconnecting all other calls] |
| 4 | ME → USER | ME displays "Disconnect" during the user confirmation phase | |
| 5 | USER → ME | The user confirms the set up call | [user confirms the call] |
| 6 | ME -> SS | The ME disconnects the active call | |
| 7 | ME->SS | The ME attempts to set up a call to "+012340123456p1p2" | |
| 8 | SS → ME | The ME receives the CONNECT message from the system simulator. | |
| 9 | ME → SIM | TERMINAL RESPONSE 1.5.1 | [Command performed successfully] |
| 10 | USER → ME | The user ends the call after 5 seconds. | |

PROACTIVE COMMAND : SET UP CALL 1.4.1

Logically:

| | |
|------------------------|---------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP CALL |
| Command qualifier: | disconnecting all other calls |
| Device identities | |
| Source device: | SIM |
| Destination device: | Network |
| Alpha identifier: | "Disconnect" |
| Address | |
| TON: | International |
| NPI: | ISDN / telephone numbering plan |
| Dialling number string | "012340123456p1p2" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 20 | 81 | 03 | 01 | 10 | 04 | 82 | 02 | 81 | 83 | 85 |
| | 0A | 44 | 69 | 73 | 63 | 6F | 6E | 6E | 65 | 63 | 74 | 86 |
| | 09 | 91 | 10 | 32 | 04 | 21 | 43 | 65 | 1C | 2C | | |

TERMINAL RESPONSE : SET UP CALL 1.5.1

Logically:

| | |
|---------------------|---------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP CALL |
| Command qualifier: | putting all other calls on hold |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 10 | 04 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 1.6 (SET UP CALL, only if not currently busy on another call, ME busy)

ME is busy on a call

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP CALL 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SET UP CALL 1.1.1 | [only if not currently busy on another call] |
| 4 | ME → SIM | TERMINAL RESPONSE 1.6.1 | [ME currently unable to process command] |

TERMINAL RESPONSE : SET UP CALL 1.6.1

Logically:

| | |
|-------------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP CALL |
| Command qualifier: | only if not currently busy on another call |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | ME currently unable to process command |
| Additional Information: | ME currently busy on call |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 10 | 00 | 82 | 02 | 82 | 81 | 83 | 02 | 20 |
| | 02 | | | | | | | | | | | |

Expected Sequence 1.7 (SET UP CALL, putting all other calls on hold, call hold is not allowed)

ME is busy on a call.

The system simulator shall be configured to not allow Call Hold.

| Step | Direction | MESSAGE / Action | Comments |
|------|--------------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP CALL 1.4.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SET UP CALL 1.4.1 | [putting all other calls on hold] |
| 4 | ME → USER | ME displays "On hold" during the user confirmation phase | |
| 5 | USER → ME | The user confirms the set up call | [user confirms the call] |
| 6 | ME → SIM | TERMINAL RESPONSE 1.7.1 | [Network currently unable to process command] |

TERMINAL RESPONSE : SET UP CALL 1.7.1

Logically:

| | |
|-------------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP CALL |
| Command qualifier: | putting all other calls on hold |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | ME currently unable to process command |
| Additional Information: | No specific cause can be given |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 10 | 02 | 82 | 02 | 82 | 81 | 83 | 02 | 21 |
| | 00 | | | | | | | | | | | |

Expected Sequence 1.8 (SET UP CALL, Capability configuration)

| Step | Direction | MESSAGE / Action | Comments |
|-------------|------------------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP CALL 1.8.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SET UP CALL 1.8.1 | [Capability configuration parameters: full rate support] |
| 4 | ME → USER | ME displays "Capability config" during the user confirmation phase | |
| 5 | USER → ME | The user confirms the set up call | [user confirmation] |
| 6 | ME->SS | The ME attempts to set up a call to "+012340123456p1p2" using the capability configuration parameters supplied by SIM | |
| 7 | SS → ME | The ME receives the CONNECT message from the system simulator. | |
| 8 | ME → SIM | TERMINAL RESPONSE 1.8.1 | [Command performed successfully] |
| 9 | USER → ME | The user ends the call The ME returns in idle mode. | |

PROACTIVE COMMAND : SET UP CALL 1.8.1

Logically:

Command details

Command number: 1
 Command type: SET UP CALL
 Command qualifier: if not busy on another call

Device identities

Source device: SIM
 Destination device: Network
 Alpha identifier: "Capability config"

Address

TON: International
 NPI: ISDN / telephone numbering plan
 Dialling number string "012340123456p1p2"

Capability configuration parameters

Information transfer cap: full rate support only MS

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 2B | 81 | 03 | 01 | 10 | 00 | 82 | 02 | 81 | 83 | 85 |
| | 11 | 43 | 61 | 70 | 61 | 62 | 69 | 6C | 69 | 74 | 79 | 20 |
| | 63 | 6F | 6E | 66 | 69 | 67 | 86 | 09 | 91 | 10 | 32 | 04 |
| | 21 | 43 | 65 | 1C | 2C | 87 | 02 | 01 | 20 | | | |

TERMINAL RESPONSE : SET UP CALL 1.8.1

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP CALL |
| Command qualifier: | if not busy on another call |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

BER-TLV: 81 03 01 10 00 82 02 82 81 83 01 00

Expected Sequence 1.9 (SET UP CALL, max dialing number string, no alpha identifier)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP CALL 1.9.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE SET UP CALL 1.9.1 | [dialing number string, no alpha identifier] |
| 4 | ME → USER | ME displays "Capability" during the user confirmation phase | |
| 5 | USER → ME | The user confirms the set up call | [user confirmation] |
| 6 | ME->SS | The ME attempts to set up a call to "012345678901234567890123456789*#*#*#*#*#012345678901234567890123456789*#*#*#*#*#" | |
| 7 | SS → ME | The ME receives the CONNECT message from the system simulator. | |
| 8 | ME → SIM | TERMINAL RESPONSE 1.9.1 | [Command performed successfully] |
| 9 | USER → ME | The user ends the call The ME returns in idle mode. | |

PROACTIVE COMMAND : SET UP CALL 1.9.1

Logically:

| | | | | | | | | | | | |
|-------------------------|--|--|--|--|--|--|---|--|--|--|--|
| Command details | | | | | | | | | | | |
| Command number: | | | | | | | 1 | | | | |
| Command type: | | | | | | | SET UP CALL | | | | |
| Command qualifier: | | | | | | | only if not currently busy on another call with redial | | | | |
| Device identities | | | | | | | | | | | |
| Source device: | | | | | | | SIM | | | | |
| Destination device: | | | | | | | Network | | | | |
| Address | | | | | | | | | | | |
| TON: | | | | | | | International | | | | |
| NPI: | | | | | | | ISDN / telephone numbering plan | | | | |
| Dialling number string: | | | | | | | "012345678901234567890123456789*##*##*#*#01234567890123456789 0123456789*##*##*#*# " | | | | |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 34 | 81 | 03 | 01 | 10 | 01 | 82 | 02 | 81 | 83 |
| | 86 | 29 | 91 | 10 | 32 | 54 | 76 | 98 | 10 | 32 | 54 |
| | 76 | 98 | 10 | 32 | 54 | 76 | 98 | BA | BA | BA | BA |
| | 10 | 32 | 54 | 76 | 98 | 10 | 32 | 45 | 67 | 89 | 01 |
| | 54 | 76 | 98 | BA | BA | BA | BA | BA | | | 32 |

TERMINAL RESPONSE : SET UP CALL 1.9.1

Logically:

| | | | | | | | | | | | |
|---------------------|--|--|--|--|--|--|--|--|--|--|--|
| Command details | | | | | | | | | | | |
| Command number: | | | | | | | 1 | | | | |
| Command type: | | | | | | | SET UP CALL | | | | |
| Command qualifier: | | | | | | | only if not currently busy on another call with redial | | | | |
| Device identities | | | | | | | | | | | |
| Source device: | | | | | | | ME | | | | |
| Destination device: | | | | | | | SIM | | | | |
| Result | | | | | | | | | | | |
| General Result: | | | | | | | Command performed successfully | | | | |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 10 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 1.10 (SET UP CALL,256 octets length, long first alpha identifier)

| Step | Direction | MESSAGE / Action | Comments |
|-------------|------------------|---|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP CALL 1.10.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SET UP CALL 1.10.1 | [alpha identifier] |
| 4 | ME → USER | ME displays "Three types are defined: - set up a call, but only if not currently busy on another call; - set up a call, putting all other calls (if any) on hold; - set up a call, disconnecting all other calls (if any) first. For each of these types, " during the user confirmation phase. | |
| 5 | USER → ME | The user confirms the set up call | [user confirmation] |
| 6 | ME->SS | The ME attempts to set up a call to "+01" | |
| 7 | SS → ME | The ME receives the CONNECT message from the system simulator. | |
| 8 | ME → SIM | TERMINAL RESPONSE 1.10.1 | [Command performed successfully] |
| 9 | USER → ME | The user ends the call The ME returns in idle mode. | |

PROACTIVE COMMAND : SET UP CALL 1.10.1

Logically:

| | | | | | | | | | | | |
|-------------------------|---|--|--|--|--|--|--|--|--|--|--|
| Command details | | | | | | | | | | | |
| Command number: | 1 | | | | | | | | | | |
| Command type: | SET UP CALL | | | | | | | | | | |
| Command qualifier: | only if not currently busy on another call with redial | | | | | | | | | | |
| Device identities | | | | | | | | | | | |
| Source device: | SIM | | | | | | | | | | |
| Destination device: | Network | | | | | | | | | | |
| Alpha identifier: | "Three types are defined: - set up a call, but only if not currently busy on another call; - set up a call, putting all other calls (if any) on hold; - set up a call, disconnecting all other calls (if any) first. For each of these types, " | | | | | | | | | | |
| Address | | | | | | | | | | | |
| TON: | International | | | | | | | | | | |
| NPI: | ISDN / telephone numbering plan | | | | | | | | | | |
| Dialling number string: | "01" | | | | | | | | | | |

Coding:

| BER-TLV: | D0 | 81 | FD | 81 | 03 | 01 | 10 | 01 | 82 | 02 | 81 | 83 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| | 85 | 81 | ED | 54 | 68 | 72 | 65 | 65 | 20 | 74 | 79 | 70 |
| | 65 | 73 | 20 | 61 | 72 | 65 | 20 | 64 | 65 | 66 | 69 | 6E |
| | 65 | 64 | 3A | 20 | 2D | 20 | 73 | 65 | 74 | 20 | 75 | 70 |
| | 20 | 61 | 20 | 63 | 61 | 6C | 6C | 2C | 20 | 62 | 75 | 74 |
| | 20 | 6F | 6E | 6C | 79 | 20 | 69 | 66 | 20 | 6E | 6F | 74 |
| | 20 | 63 | 75 | 72 | 72 | 65 | 6E | 74 | 6C | 79 | 20 | 62 |
| | 75 | 73 | 79 | 20 | 6F | 6E | 20 | 61 | 6E | 6F | 74 | 68 |
| | 65 | 72 | 20 | 63 | 61 | 6C | 6C | 3B | 20 | 2D | 20 | 73 |
| | 65 | 74 | 20 | 75 | 70 | 20 | 61 | 20 | 63 | 61 | 6C | 6C |
| | 2C | 20 | 70 | 75 | 74 | 74 | 69 | 6E | 67 | 20 | 61 | 6C |
| | 6C | 20 | 6F | 74 | 68 | 65 | 72 | 20 | 63 | 61 | 6C | 6C |
| | 73 | 20 | 28 | 69 | 66 | 20 | 61 | 6E | 79 | 29 | 20 | 6F |
| | 6E | 20 | 68 | 6F | 6C | 64 | 3B | 20 | 2D | 20 | 73 | 65 |
| | 74 | 20 | 75 | 70 | 20 | 61 | 20 | 63 | 61 | 6C | 6C | 2C |
| | 20 | 64 | 69 | 73 | 63 | 6F | 6E | 6E | 65 | 63 | 74 | 69 |
| | 6E | 67 | 20 | 61 | 6C | 6C | 20 | 6F | 74 | 68 | 65 | 72 |
| | 20 | 63 | 61 | 6C | 6C | 73 | 20 | 28 | 69 | 66 | 20 | 61 |
| | 6E | 79 | 29 | 20 | 66 | 69 | 72 | 73 | 74 | 2E | 20 | 46 |
| | 6F | 72 | 20 | 65 | 61 | 63 | 68 | 20 | 6F | 66 | 20 | 74 |
| | 68 | 65 | 73 | 65 | 20 | 74 | 79 | 70 | 65 | 73 | 2C | 20 |
| | 86 | 02 | 91 | 10 | | | | | | | | |

TERMINAL RESPONSE : SET UP CALL 1.10.1

Logically:

| | | | | | | | | | | | |
|---------------------|--|--|--|--|--|--|--|--|--|--|--|
| Command details | | | | | | | | | | | |
| Command number: | 1 | | | | | | | | | | |
| Command type: | SET UP CALL | | | | | | | | | | |
| Command qualifier: | only if not currently busy on another call with redial | | | | | | | | | | |
| Device identities | | | | | | | | | | | |
| Source device: | ME | | | | | | | | | | |
| Destination device: | SIM | | | | | | | | | | |
| Result | | | | | | | | | | | |
| General Result: | Command performed successfully | | | | | | | | | | |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 10 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 1.11A (SET UP CALL, Called party subaddress, command performed successfully)

| Step | Direction | MESSAGE / Action | Comments |
|-------------|------------------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP CALL 1.11.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SET UP CALL 1.11.1 | [set up a call with called party subaddress] |
| 4 | ME → USER | ME displays "Called party" during the user confirmation phase | |
| 5 | USER → ME | The user confirms the set up call | [user confirmation] |
| 6 | ME->SS | The ME attempts to set up a call to "+012340123456p1p2" with the called party subaddress information | |
| 7 | SS → ME | The ME receives the CONNECT message from the system simulator. | |
| 8 | ME → SIM | TERMINAL RESPONSE 1.11.1A | [Command performed successfully] |
| 9 | USER → ME | The user ends the call The ME returns in idle mode. | |

Expected Sequence 1.11B (SET UP CALL, Called party subaddress, ME not supporting the called party subaddress)

| Step | Direction | MESSAGE / Action | Comments |
|-------------|------------------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP CALL 1.11.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SET UP CALL 1.11.1 | [set up a call with called party subaddress] |
| 4 | ME → SIM | TERMINAL RESPONSE 1.11.1B | [beyond ME's capabilities] |

PROACTIVE COMMAND : SET UP CALL 1.11.1

Logically:

| | |
|-------------------------|---------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP CALL |
| Command qualifier: | if not busy on another call |
| Device identities | |
| Source device: | SIM |
| Destination device: | Network |
| Alpha identifier: | "Called party" |
| Address | |
| TON: | International |
| NPI: | ISDN / telephone numbering plan |
| Dialling number string: | "012340123456p1p2" |
| Called party subaddress | |
| Type of subaddress: | NSAP (X.213 / ISO 8348 AD2) |
| Odd / even indicator: | even number of address signals |
| Subaddress information: | AFI, 95, 95, 95, 95, 95 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 2B | 81 | 03 | 01 | 10 | 00 | 82 | 02 | 81 | 83 | 85 |
| | 0C | 43 | 61 | 6C | 6C | 65 | 64 | 20 | 70 | 61 | 72 | 74 |
| | 79 | 86 | 09 | 91 | 10 | 32 | 04 | 21 | 43 | 65 | 1C | 2C |
| | 88 | 07 | 80 | 50 | 95 | 95 | 95 | 95 | 95 | | | |

TERMINAL RESPONSE : SET UP CALL 1.11.1A

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP CALL |
| Command qualifier: | if not busy on another call |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 10 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE : SET UP CALL 1.11.1B

Logically:

| Command details | |
|---------------------|-----------------------------|
| Command number: | 1 |
| Command type: | SET UP CALL |
| Command qualifier: | if not busy on another call |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Beyond ME's capabilities |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 10 | 00 | 82 | 02 | 83 | 81 | 83 | 01 | 30 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 1.12 (SET UP CALL, maximum duration for the redial mechanism)

The system simulator shall be configured such that call set up requests will be rejected with cause "User Busy" ..

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP CALL 1.12.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SET UP CALL 1.12.1 | [only if not currently busy on another call with redial] |
| 4 | ME → USER | ME displays "Duration" during the user confirmation phase | |
| 5 | USER → ME | The user confirms the set up call | [user confirms the call] |
| 6 | ME → SS | ME attempts to set up a call to "+012340123456p1p2". It stops its attempts after 10 seconds. | [redial mechanism with maximum duration of 10 seconds]] |
| 7 | ME → SIM | TERMINAL RESPONSE 1.12.1 | [network currently unable to process command] |
| 8 | ME → USER | The ME returns in idle mode. | |

PROACTIVE COMMAND : SET UP CALL 1.12.1

Logically:

| | |
|-------------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP CALL |
| Command qualifier: | only if not currently busy on another call with redial |
| Device identities | |
| Source device: | SIM |
| Destination device: | Network |
| Alpha identifier: | "Duration" |
| Address | |
| TON: | International |
| NPI: | ISDN / telephone numbering plan |
| Dialling number string: | "012340123456p1p2" |
| Duration | |
| Unit: | Seconds |
| Interval: | 10 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 22 | 81 | 03 | 01 | 10 | 01 | 82 | 02 | 81 | 83 | 85 |
| | 08 | 44 | 75 | 72 | 61 | 74 | 69 | 6F | 6E | 86 | 09 | 91 |
| | 10 | 32 | 04 | 21 | 43 | 65 | 1C | 2C | 84 | 02 | 01 | 0A |

TERMINAL RESPONSE : SET UP CALL 1.12.1

Logically:

| | |
|-------------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP CALL |
| Command qualifier: | only if not currently busy on another call with redial |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | network currently unable to process command |
| Additional Information: | User Busy |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 10 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 21 |
| | 91 | | | | | | | | | | | |

27.22.4.13.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 1.1 to 1.12

27.22.4.13.2 SET UP CALL (second alpha identifier)

27.22.4.13.2.1 Definition and applicability

See Section 3.2.2.

27.22.4.13.2.2 Conformance requirement

Same as 27.22.4.13.2.1.

27.22.4.13.2.3 Test Purpose

To verify that the ME accepts a Proactive Command – Set Up Call , displays the alpha identifiers to the user, attempts to set up a call to the address and returns the result in the TERMINAL RESPONSE.

27.22.4.13.2.4 Method of test

27.22.4.13.2.4.1 Initial Conditions

The ME is connected to both the SIM Simulator and the System Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and is in updated idle mode on the system simulator

27.22.4.13.1.4.2 Procedure

Expected Sequence 2.1 (SET UP CALL, two alpha identifiers)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP CALL 2.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SET UP CALL 2.1.1 | |
| 4 | ME → USER | ME displays "CONFIRMATION" during the user confirmation phase | |
| 5 | USER → ME | The user confirms the set up call | [user confirmation] |
| 6 | ME->SS | The ME attempts to set up a call to "+012340123456p1p2". The ME displays "CALL" if the ME supports 2 nd alpha identifier or otherwise "CONFIRMATION" | [second alpha identifier] |
| 7 | SS → ME | The ME receives the CONNECT message from the system simulator. | |
| 8 | ME → SIM | TERMINAL RESPONSE 2.1.1 The ME shall not update EF LND with the called party address. | [Command performed successfully] |
| 9 | USER → ME | The user ends the call after 5 seconds. The ME returns in idle mode. | |

PROACTIVE COMMAND : SET UP CALL 2.1.1

Logically:

| | |
|---------------------------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP CALL |
| Command qualifier: | only if not currently busy on another call |
| Device identities | |
| Source device: | SIM |
| Destination device: | Network |
| Alpha identifier: | "CONFIRMATION" |
| Address | |
| TON: | International |
| NPI: | ISDN / telephone numbering plan |
| Dialling number string | "012340123456p1p2" |
| Alpha identifier (call set up phase): | "CALL" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 28 | 81 | 03 | 01 | 10 | 00 | 82 | 02 | 81 | 83 | 85 |
| | 0C | 43 | 4F | 4E | 46 | 49 | 52 | 4D | 41 | 54 | 49 | 4F |
| | 4E | 86 | 09 | 91 | 10 | 32 | 04 | 21 | 43 | 65 | 1C | 2C |
| | 85 | 04 | 43 | 41 | 4C | 4C | | | | | | |

TERMINAL RESPONSE : SET UP CALL 2.1.1

Logically:

| | |
|---------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP CALL |
| Command qualifier: | only if not currently busy on another call |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 10 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

27.22.4.13.3.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 2.1

27.22.4.13.3 SET UP CALL (display of icons)

27.22.4.13.3.1 Definition and applicability

See Section 3.2.2.

27.22.4.13.3.2 Conformance requirement

27.22.4.13.3.3 Test Purpose

To verify that the ME accepts a Proactive Set Up Call , displays the message or icon to the user ,attempts to set up a call to the address, returns the result in the TERMINAL response.

27.22.4.13.3.4 Method of test

27.22.4.13.3.4.1 Initial Conditions

The ME is connected to both the SIM Simulator and the System Simulator.

The elementary files are coded as SIM Application Toolkit default with the following exceptions.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and is in updated idle mode on the system simulator.

Initial Conditions for Icon Management according to Annex C are valid.

27.22.4.13.3.4.2 Procedure

Expected Sequence 3.1A (SET UP CALL, display of basic icon during confirmation phase, not self-explanatory, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP CALL 3.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SET UP CALL 3.1.1 | Including icon identifier, icon shall be displayed in addition of the first alpha identifier |
| 4 | ME → USER | ME displays "Set up call Icon 3.1.1" and the basic icon during a user confirmation phase. | |
| 5 | USER → ME | The user confirms the set up call | [user confirmation] |
| 6 | ME->SS | The ME attempts to set up a call to "+012340123456p1p2" | |
| 7 | SS → ME | The ME receives the CONNECT message from the system simulator. | |
| 8 | ME → SIM | TERMINAL RESPONSE 3.1.1A | [Command performed successfully] |
| 9 | USER → ME | The user ends the call after 5 seconds. The ME returns in idle mode. | |

PROACTIVE COMMAND : SET UP CALL 3.1.1

Logically:

Command details

Command number: 1
Command type: SET UP CALL
Command qualifier: only if not currently busy on another call

Device identities

Source device: SIM
Destination device: Network
Alpha identifier: " Set up call Icon 3.1.1"
Address

TON: International
NPI: ISDN / telephone numbering plan
Dialling number string "012340123456p1p2"

Icon identifier

Icon qualifier: icon is not self-explanatory
Icon identifier: <record 1 in EF IMG>

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 38 | 81 | 03 | 01 | 10 | 00 | 82 | 02 | 81 | 83 | 85 |
| | 16 | 53 | 65 | 74 | 20 | 75 | 70 | 20 | 63 | 61 | 6C | 6C |
| | 20 | 49 | 63 | 6F | 6E | 20 | 33 | 2E | 31 | 2E | 31 | 86 |
| | 09 | 91 | 10 | 32 | 04 | 21 | 43 | 65 | 1C | 2C | 9E | 02 |
| | 01 | 01 | | | | | | | | | | |

TERMINAL RESPONSE : SET UP CALL 3.1.1A

Logically:

| Command details | | |
|---------------------|--|--|
| Command number: | 1 | |
| Command type: | SET UP CALL | |
| Command qualifier: | only if not currently busy on another call | |
| Device identities | | |
| Source device: | ME | |
| Destination device: | SIM | |
| Result | | |
| General Result: | Command performed successfully | |

Coding:

BER-TLV: 81 03 01 10 00 82 02 82 81 83 01 00

Expected Sequence 3.1B (SET UP CALL, display of basic icon during confirmation phase, not self-explanatory, requested icon could not be displayed)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP CALL 3.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SET UP CALL 3.1.1 | Including icon identifier, icon shall be displayed in addition of the first alpha identifier |
| 4 | ME → USER | ME displays "Set up call Icon 3.1.1" without the basic icon during a user confirmation phase. | |
| 5 | USER → ME | The user confirms the set up call | [user confirmation] |
| 6 | ME->SS | The ME attempts to set up a call to "+012340123456p1p2" | |
| 7 | SS → ME | The ME receives the CONNECT message from the system simulator. | |
| 8 | ME → SIM | TERMINAL RESPONSE 3.1.1B | [Command performed successfully, but requested icon could not be displayed]. |
| 9 | USER → ME | The user ends the call after 5 seconds. The ME returns in idle mode. | |

TERMINAL RESPONSE : SET UP CALL 3.1.1B

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP CALL |
| Command qualifier: | only if not currently busy on another call |
| Device identities | |
| Source device: | Network |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully, but requested icon could not be displayed |

Coding:

BER-TLV: 81 03 01 10 00 82 02 83 81 83 01 04

Expected Sequence 3.2A (SET UP CALL, display of basic icon during confirmation phase, self-explanatory, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP CALL 3.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SET UP CALL 3.2.1 | Including icon identifier, icon shall be displayed instead of the first alpha identifier |
| 4 | ME → USER | ME displays the basic icon during a user confirmation phase. | |
| 5 | USER → ME | The user confirms the set up call | [user confirmation] |
| 6 | ME->SS | The ME attempts to set up a call to "+012340123456p1p2" | |
| 7 | SS → ME | The ME receives the CONNECT message from the system simulator. | |
| 8 | ME → SIM | TERMINAL RESPONSE 3.2.1A | [Command performed successfully] |
| 9 | USER → ME | The user ends the call after 5 seconds. The ME returns in idle mode. | |

PROACTIVE COMMAND : SET UP CALL 3.2.1

Logically:

| | |
|------------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP CALL |
| Command qualifier: | only if not currently busy on another call |
| Device identities | |
| Source device: | SIM |
| Destination device: | Network |
| Alpha identifier: | " Set up call Icon 3.2.1" |
| Address | |
| TON: | International |
| NPI: | ISDN / telephone numbering plan |
| Dialling number string | "012340123456p1p2" |
| Icon identifier | |
| Icon qualifier: | icon is self-explanatory |
| Icon identifier: | <record 1 in EF IMG> |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 38 | 81 | 03 | 01 | 10 | 00 | 82 | 02 | 81 | 83 | 85 |
| | 16 | 53 | 65 | 74 | 20 | 75 | 70 | 20 | 63 | 61 | 6C | 6C |
| | 20 | 49 | 63 | 6F | 6E | 20 | 33 | 2E | 32 | 2E | 31 | 86 |
| | 09 | 91 | 10 | 32 | 04 | 21 | 43 | 65 | 1C | 2C | 9E | 02 |
| | 00 | 01 | | | | | | | | | | |

TERMINAL RESPONSE : SET UP CALL 3.2.1A

Logically:

| | |
|---------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP CALL |
| Command qualifier: | only if not currently busy on another call |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 10 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 3.2B (SET UP CALL, display of basic icon during confirmation phase, self-explanatory, requested icon could not be displayed)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP CALL 3.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SET UP CALL 3.2.1 | Including icon identifier, icon shall be displayed instead of the first alpha identifier |
| 4 | ME → USER | ME display " Set up call Icon 3.2.1" without the icon | |
| 5 | USER → ME | The user confirms the set up call | [user confirmation] |
| 6 | ME->SS | The ME attempts to set up a call to "+012340123456p1p2" | |
| 7 | SS → ME | The ME receives the CONNECT message from the system simulator. | |
| 8 | ME → SIM | TERMINAL RESPONSE 3.2.1B | [Command performed successfully, but requested icon could not be displayed]. |
| 9 | USER → ME | The user ends the call after 5 seconds. The ME returns in idle mode. | |

TERMINAL RESPONSE : SET UP CALL 3.2.1B

Logically:

| Command details | |
|------------------------------|---|
| Command number: | 1 |
| Command type: | SET UP CALL |
| Command qualifier: | only if not currently busy on another call |
| Device identities | |
| Source device: | Network |
| Destination device: | SIM |
| Result | |
| General Result: displayed | Command performed successfully, but requested icon could not be displayed |

Coding:

BER-TLV: 81 03 01 10 00 82 02 83 81 83 01 04

Expected Sequence 3.3A (SET UP CALL, display of colour icon during confirmation phase, not self-explanatory, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP CALL 3.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SET UP CALL 3.3.1 | Including icon identifier, icon shall be displayed in addition of the first alpha identifier |
| 4 | ME → USER | ME displays "Set up call Icon 3.3" and the colour icon during a user confirmation phase. | |
| 5 | USER → ME | The user confirms the set up call | [user confirmation] |
| 6 | ME->SS | The ME attempts to set up a call to "+012340123456p1p2" | |
| 7 | SS → ME | The ME receives the CONNECT message from the system simulator. | |
| 8 | ME → SIM | TERMINAL RESPONSE 3.3.1A | [Command performed successfully]] |
| 9 | USER → ME | The user ends the call after 5 seconds. The ME returns in idle mode. | |

PROACTIVE COMMAND : SET UP CALL 3.3.1

Logically:

| | |
|------------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP CALL |
| Command qualifier: | only if not currently busy on another call |
| Device identities | |
| Source device: | SIM |
| Destination device: | Network |
| Alpha identifier: | " Set up call Icon 3.3.1" |
| Address | |
| TON: | International |
| NPI: | ISDN / telephone numbering plan |
| Dialling number string | "012340123456p1p2" |
| Icon identifier | |
| Icon qualifier: | icon is self-explanatory |
| Icon identifier: | <record 2 in EF IMG> |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 38 | 81 | 03 | 01 | 10 | 00 | 82 | 02 | 81 | 83 | 85 |
| | 16 | 53 | 65 | 74 | 20 | 75 | 70 | 20 | 63 | 61 | 6C | 6C |
| | 20 | 49 | 63 | 6F | 6E | 20 | 33 | 2E | 33 | 2E | 31 | 86 |
| | 09 | 91 | 10 | 32 | 04 | 21 | 43 | 65 | 1C | 2C | 9E | 02 |
| | 01 | 02 | | | | | | | | | | |

TERMINAL RESPONSE : SET UP CALL 3.3.1A

Logically:

| | |
|---------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP CALL |
| Command qualifier: | only if not currently busy on another call |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

BER-TLV: 81 03 01 10 00 82 02 82 81 83 01 00

Expected Sequence 3.3B (SET UP CALL, display of colour icon during confirmation phase, not self-explanatory, requested icon could not be displayed)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP CALL 3.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SET UP CALL 3.3.1 | Including icon identifier, icon shall be displayed in addition of the first alpha identifier |
| 4 | ME → USER | ME only display alpha string : " Set up call Icon 3.3.1" | |
| 5 | USER → ME | The user confirms the set up call | [user confirmation] |
| 6 | ME->SS | The ME attempts to set up a call to "+012340123456p1p2" | |
| 7 | SS → ME | The ME receives the CONNECT message from the system simulator. | |
| 8 | ME → SIM | TERMINAL RESPONSE 3.3.1B | [Command performed successfully, but requested icon could not be displayed]. |
| 9 | USER → ME | The user ends the call after 5 seconds. The ME returns in idle mode. | |

TERMINAL RESPONSE : SET UP CALL 3.3.1B

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP CALL |
| Command qualifier: | only if not currently busy on another call |
| Device identities | |
| Source device: | Network |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully, but requested icon could not be displayed |

Coding:

BER-TLV: 81 03 01 10 00 82 02 83 81 83 01 04

Expected Sequence 3.4A (SET UP CALL, display of self explanatory basic icon during set up call, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP CALL 3.4.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SET UP CALL 3.4.1 | Including a second alpha identifier and two icons |
| 4 | ME → USER | ME displays the basic icon during a user confirmation phase. | |
| 5 | USER → ME | The user confirms the set up call | [user confirmation] |
| 6 | ME->SS | The ME attempts to set up a call to "+012340123456p1p2". The ME displays the basic icon during the set up call. If the ME cannot display the icon, it displays " Set up call Icon 3.4.1" | |
| 7 | SS → ME | The ME receives the CONNECT message from the system simulator. | |
| 8 | ME → SIM | TERMINAL RESPONSE 3.4.1A | [Command performed successfully] |
| 9 | USER → ME | The user ends the call after 5 seconds. The ME returns in idle mode. | |

PROACTIVE COMMAND : SET UP CALL 3.4.1

Logically:

| | |
|------------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP CALL |
| Command qualifier: | only if not currently busy on another call |
| Device identities | |
| Source device: | SIM |
| Destination device: | Network |
| Alpha identifier: | " Set up call Icon 3.4.1" |
| Address | |
| TON: | International |
| NPI: | ISDN / telephone numbering plan |
| Dialling number string | "012340123456p1p2" |
| Alpha identifier: | " Set up call Icon 3.4.2" |
| Icon identifier | |
| Icon qualifier: | icon is self-explanatory |
| Icon identifier: | <record 1 in EF IMG> |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----------------|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 48 | 81 | 03 | 01 | 10 | 00 | 82 | 02 | 81 | 83 | 85 |
| | 16 | 53 | 65 | 74 | 20 | 75 | 70 | 20 | 63 | 61 | 6C | 6C |
| | 20 | 49 | 63 | 6F | 6E | 20 | 33 | 2E | 34 | 2E | 31 | 86 |
| | 09 | 91 | 10 | 32 | 04 | 21 | 43 | 65 | 1C | 2C | 85 | 16 |
| | 53 | 65 | 74 | 20 | 75 | 70 | 20 | 63 | 61 | 6C | 6C | 20 |
| | 49 | 63 | 6F | 6 ^E | 20 | 33 | 2E | 34 | 2E | 32 | 9E | 02 |
| | 00 | 01 | | | | | | | | | | |

TERMINAL RESPONSE : SET UP CALL 3.4.1A

Logically:

| | |
|---------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP CALL |
| Command qualifier: | only if not currently busy on another call |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 10 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 3.4B (SET UP CALL, display of self explanatory basic icon during set up call, requested icon could not be displayed)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP CALL 3.4.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SET UP CALL 3.4.1 | Including a second alpha identifier and two icons |
| 4 | ME → USER | ME display " Set up call Icon 3.4.1" without the icon | |
| 5 | USER → ME | The user confirms the set up call | [user confirmation] |
| 6 | ME->SS | The ME attempts to set up a call to "+012340123456p1p2". The ME displays the basic icon during the set up call. If the ME cannot display the icon, it displays " Set up call Icon 3.4.1" | |
| 7 | SS → ME | The ME receives the CONNECT message from the system simulator. | |
| 8 | ME → SIM | TERMINAL RESPONSE 3.4.1B | [Command performed successfully, but requested icon could not be displayed]. |
| 9 | USER → ME | The user ends the call after 5 seconds. The ME returns in idle mode. | |

TERMINAL RESPONSE : SET UP CALL 3.4.1B

Logically:

| | | |
|---------------------|---|--|
| Command details | | |
| Command number: | 1 | |
| Command type: | SET UP CALL | |
| Command qualifier: | only if not currently busy on another call | |
| Device identities | | |
| Source device: | Network | |
| Destination device: | SIM | |
| Result | | |
| General Result: | Command performed successfully, but requested icon could not be displayed | |

Coding:

BER-TLV: 81 03 01 10 00 82 02 83 81 83 01 04

27.22.4.13.3.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 3.1 to 3.4.

27.22.4.14 POLLING OFF

27.22.4.14.1 Definition and applicability

See Section 3.2.2.

27.22.4.14.2 Conformance Requirement

The ME shall support the POLLING OFF as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.14 (Polling Off), clause 6.6.14 (Polling Off), clause 6.8 (Terminal Response), clause 6.11, clause 12.6 (Commands details), clause 12.7 (Device identities).

27.22.4.14.3 Test Purpose

To verify that the ME cancels the effect of any previous POLL INTERVAL commands and does not effect SIM presence detection.

27.22.4.14.4 Method of Test

27.22.4.14.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.14.4.2 Procedure

Expected Sequence 1.1 (POLLING OFF)

| Step | Direction | MESSAGE / Action | Comments |
|------|-------------|---|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: POLLING INTERVAL 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: POLL INTERVAL 1.1.1 | Interval = 1 min |
| 4 | ME → SIM | TERMINAL RESPONSE: POLL INTERVAL 1.1.1 | [command performed successfully] |
| 5 | SIM → ME | PROACTIVE COMMAND PENDING: POLLING OFF 1.1.2 | |
| 6 | ME → SIM | FETCH | |
| 7 | SIM → ME | PROACTIVE COMMAND: POLLING OFF 1.1.2 | |
| 8 | ME → SIM | TERMINAL RESPONSE: POLLING OFF 1.1.2 | [command performed successfully] |
| 9 | USER -> SIM | Call to be set up | |
| 10 | ME -> SIM | STATUS | SIM presence detection |
| 11 | ME | Time interval shall not exceed 30 seconds | |
| 12 | ME -> SIM | STATUS | SIM presence detection |

PROACTIVE COMMAND : POLL INTERVAL 1.1.1

Logically:

| | |
|---------------------|---------------|
| Command details | |
| Command number: | 1 |
| Command type: | POLL INTERVAL |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| Duration | |
| Time unit: | Minutes |
| Time interval: | 1 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0D | 81 | 03 | 01 | 03 | 00 | 82 | 02 | 81 | 82 | 84 |
| | 02 | 00 | 01 | | | | | | | | | |

TERMINAL RESPONSE : POLL INTERVAL 1.1.1

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | POLL INTERVAL |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 03 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

PROACTIVE COMMAND : POLLING OFF 1.1.2

Logically:

| | |
|---------------------|-------------|
| Command details | |
| Command number: | 1 |
| Command type: | POLLING OFF |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 09 | 81 | 03 | 01 | 04 | 00 | 82 | 02 | 81 | 82 |
|----------|----|----|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE : POLLING OFF 1.1.2

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | POLLING OFF |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 04 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

27.22.4.14.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 1.

27.22.4.15 PROVIDE LOCAL INFORMATION

27.22.4.15.1 Definition and applicability

See Section 3.2.2.

27.22.4.15.2 Conformance requirement

The ME shall support the PROVIDE LOCAL INFORMATION facility as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 6.4.15

27.22.4.15.3 Test Purpose

To verify that the ME returns the following requested local information within a TERMINAL RESPONSE :

- location information: the mobile country code (MCC), mobile network code (MNC), location area code (LAC) and cell ID of the current serving cell;
- the IMEI of the ME;
- the Network Measurement Results and the BCCH channel list;
- the current date, time and time zone;
- the current ME language setting;
- the Timing Advance,

if the local information is stored in the ME; otherwise, sends the correct error code to the SIM in the TERMINAL RESPONSE.

27.22.4.15.4 Method of tests

27.22.4.15.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The ME is connected to the System Simulator and has performed the location update procedure.

The GSM parameters of the system simulator are :

Mobile country Code (MCC) = 1,
 Mobile network code (MNC) = 1,
 Location Area code (LAC) = 1,
 Cell Identity value = 1,
 Timing advance = 0,
 Frequency parameters : DCS 1800, neighbour allocations = 561, 565, 568, 569, 573, 575, 577, 581, 582 and 585.

The elementary files are coded as the SIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.15.4.2 Procedure

Expected Sequence 1.1 (PROVIDE LOCAL INFORMATION, Local Info (MCC, MNC, LAC & Cell ID)).

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PROVIDE LOCAL INFORMATION 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : PROVIDE LOCAL INFORMATION 1.1.1 | |
| 4 | ME → SIM | TERMINAL RESPONSE : PROVIDE LOCAL INFORMATION 1.1.1 | [Command performed successfully, MCC MNC LAC and Cell Identity as system simulator] |

PROACTIVE COMMAND : PROVIDE LOCAL INFORMATION 1.1.1

Logically:

Command details
 Command number: 1
 Command type: PROVIDE LOCAL INFORMATION
 Qualifier : « 00 » Location information (MCC MNC LAC and Cell Identity)
 Device identities
 Source device: SIM
 Destination device: ME

Coding:

BER-TLV: D0 09 81 03 01 26 00 82 02 81 82

TERMINAL RESPONSE : PROVIDE LOCAL INFORMATION 1.1.1

Logically:

Command details
 Command number: 1
 Command type: PROVIDE LOCAL INFORMATION
 Qualifier : « 00 » Location information (MCC MNC LAC and Cell Identity)
 Device identities
 Source device: ME
 Destination device: SIM
 Result
 General Result: Command performed successfully
 Location Information
 MCC & MNC: MCC = 1, MNC = 1
 Location Area Code: 1
 Cell Identity Value: 1

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 26 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 93 | 07 | 00 | F1 | 10 | 00 | 01 | 00 | 01 | 01 | | |

Expected Sequence 1.2 (PROVIDE LOCAL INFORMATION, IMEI of the ME)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PROVIDE LOCAL INFORMATION 1.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : PROVIDE LOCAL INFORMATION 1.2.1 | |
| 4 | ME → SIM | TERMINAL RESPONSE : PROVIDE LOCAL INFORMATION 1.2.1 | [Command performed successfully, IMEI as system simulator] |

PROACTIVE COMMAND : PROVIDE LOCAL INFORMATION 1.2.1

Logically:

Command details

| | |
|-----------------|---------------------------|
| Command number: | 1 |
| Command type: | PROVIDE LOCAL INFORMATION |
| Qualifier : | « 01 » IMEI of the ME |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|--|
| BER-TLV: | D0 | 09 | 81 | 03 | 01 | 26 | 01 | 82 | 02 | 81 | 82 | |
|----------|----|----|----|----|----|----|----|----|----|----|----|--|

TERMINAL RESPONSE : PROVIDE LOCAL INFORMATION 1.2.1

Logically:

Command details

| | |
|-----------------|---------------------------|
| Command number: | 1 |
| Command type: | PROVIDE LOCAL INFORMATION |
| Qualifier : | « 01 » IMEI of the ME |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|--------------------------------|
| General Result: | Command performed successfully |
| IMEI | |

| | |
|-----------------|--------------------|
| IMEI of the ME: | The IMEI of the ME |
|-----------------|--------------------|

The result coding depends on the Mobile IMEI value

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 26 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 94 | 08 | XX | | |

As an example, if the IMEI of the mobile is “1234567890123456” then XX XX XX XX XX XX XX XX XX = 21 43 65 87 09 21 43 65

Expected Sequence 1.3 (PROVIDE LOCAL INFORMATION, Network measurement results (NMR))

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|----------|
| 1 | SIM → ME | PROACTIVE COMMAND PROVIDE LOCAL INFORMATION 1.3.1 | |
| 2 | ME → SIM | FETCH | |

| | | | |
|---|----------|---|---|
| 3 | SIM → ME | PROACTIVE COMMAND : PROVIDE LOCAL INFORMATION 1.3.1 | |
| 4 | ME → SIM | TERMINAL RESPONSE : PROVIDE LOCAL INFORMATION 1.3.1 | [Command performed successfully, NMR as system simulator] |

PROACTIVE COMMAND : PROVIDE LOCAL INFORMATION 1.3.1

Logically:

Command details

Command number: 1
 Command type: PROVIDE LOCAL INFORMATION
 Qualifier : « 02 » Network Measurement Results

Device identities

Source device: SIM
 Destination device: ME

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 09 | 81 | 03 | 01 | 26 | 02 | 82 | 02 | 81 | 82 |
|----------|----|----|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE : PROVIDE LOCAL INFORMATION 1.3.1

The actual values of the measurements are not tested.

Logically:

Command details

Command number: 1
 Command type: PROVIDE LOCAL INFORMATION
 Qualifier : « 02 » Network Measurement Results

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully
 Network Measurement Results RXLEV-FULL-SERVING-CELL=52, BA not used, DTX not used, as an example in the BER-TLV
 BCCH channel list 561, 565, 568, 569, 573, 575, 577, 581, 582 and 585

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 26 | 02 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | 96 | 10 | 34 | 34 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| | 00 | 00 | 00 | 00 | 00 | 00 | 9D | 0E | 8C | 63 | 58 | E2 |
| | 39 | 8F | 63 | F9 | 06 | 45 | 91 | A4 | 90 | 00 | | |

Expected Sequence 1.4 (PROVIDE LOCAL INFORMATION, Date, Time, Time Zone)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PROVIDE LOCAL INFORMATION 1.4.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : PROVIDE LOCAL INFORMATION 1.4.1 | |
| 4 | ME → SIM | TERMINAL RESPONSE : PROVIDE LOCAL INFORMATION 1.4.1 | [Command performed successfully] |

PROACTIVE COMMAND : PROVIDE LOCAL INFORMATION 1.4.1

Logically:

Command details

Command number: 1

Command type: PROVIDE LOCAL INFORMATION
 Qualifier : « 03 » Date Time and Time Zone
 Device identities
 Source device: SIM
 Destination device: ME
 Coding:

BER-TLV: D0 09 81 03 01 26 03 82 02 81 82

TERMINAL RESPONSE : PROVIDE LOCAL INFORMATION 1.4.1

Logically:

Command details
 Command number: 1
 Command type: PROVIDE LOCAL INFORMATION
 Qualifier : « 03 » Date Time and Time Zone
 Device identities
 Source device: ME
 Destination device: SIM
 Result
 General Result: Command performed successfully
 Date-Time and Time Zone information, as an example in TLV date an time set by the user : 7th may 2002, 14h 08mn 17s, no time zone

Coding:

BER-TLV: 81 03 01 26 03 82 02 82 81 83 01 00
 A6 07 20 50 70 41 80 71 FF

Expected Sequence 1.5 (PROVIDE LOCAL INFORMATION, Language setting)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PROVIDE LOCAL INFORMATION 1.5.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : PROVIDE LOCAL INFORMATION 1.5.1 | |
| 4 | ME → SIM | TERMINAL RESPONSE : PROVIDE LOCAL INFORMATION 1.5.1 | [Command performed successfully] |

PROACTIVE COMMAND : PROVIDE LOCAL INFORMATION 1.5.1

Logically:

Command details
 Command number: 1
 Command type: PROVIDE LOCAL INFORMATION
 Qualifier : « 04 » Language setting
 Device identities
 Source device: SIM
 Destination device: ME
 Coding:

BER-TLV: D0 09 81 03 01 26 04 82 02 81 82

TERMINAL RESPONSE : PROVIDE LOCAL INFORMATION 1.5.1

Logically:

Command details
 Command number: 1
 Command type: PROVIDE LOCAL INFORMATION
 Qualifier : « 04 » Language setting
 Device identities
 Source device: ME

Destination device: SIM
 Result
 General Result: Command performed successfully
 Language english (« en ») as an example for TLV
 Coding:
 BER-TLV: 81 03 01 26 04 82 02 82 81 83 01 00
 AD 02 65 6E

Expected Sequence 1.6 (PROVIDE LOCAL INFORMATION, Timing advance)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PROVIDE LOCAL INFORMATION 1.6.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : PROVIDE LOCAL INFORMATION 1.6.1 | |
| 4 | ME → SIM | TERMINAL RESPONSE : PROVIDE LOCAL INFORMATION 1.6.1 | [Command performed successfully] |

PROACTIVE COMMAND : PROVIDE LOCAL INFORMATION 1.6.1

Logically:

Command details
 Command number: 1
 Command type: PROVIDE LOCAL INFORMATION
 Qualifier : « 05 » Timing Advance
 Device identities
 Source device: SIM
 Destination device: ME

Coding:

BER-TLV: D0 09 81 03 01 26 05 82 02 81 82

TERMINAL RESPONSE : PROVIDE LOCAL INFORMATION 1.6.1

Logically:

Command details
 Command number: 1
 Command type: PROVIDE LOCAL INFORMATION
 Qualifier : « 05 » Timing Advance
 Device identities
 Source device: ME
 Destination device: SIM
 Result
 General Result: Command performed successfully
 Timing Advance
 ME status : « 00 » ME is in idle state Idle State
 Timing Advance : 0

Coding:

BER-TLV: 81 03 01 26 05 82 02 82 81 83 01 00
 AE 02 00 00

27.22.4.16 SET UP EVENT LIST

27.22.4.16.1 SET UP EVENT LIST (normal)

27.22.4.16.1.1 Definition and applicability

See Section 3.2.2.

27.22.4.16.1.2 Conformance requirement

The ME shall support the Proactive SIM: Set Up Event List facility as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 6.4.16, 6.6.16

Additionally the ME shall support the Event Download: Call Connect and the Event Download: Call Disconnected mechanism as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 11.2, 11.2.1, 11.2.2, 11.3, 11.3.1 and 11.3.2.

27.22.4.16.1.3 Test Purpose

To verify that the ME accepts a list of events that it shall monitor the current list of events supplied by the SIM, is able to have this current list of events replaced and is able to have the list of events removed.

To verify that when the ME has successfully accepted or removed the list of events, it shall send TERMINAL RESPONSE (OK) to the SIM and when the ME is not able to successfully accept or remove the list of events, it shall send TERMINAL RESPONSE (Command beyond ME's capabilities).

27.22.4.16.1.4 Method of test

27.22.4.16.1.4.1 Initial Conditions

The ME is connected to both the SIM Simulator and the System Simulator.

The elementary files are coded as SIM Application Toolkit default with the following exceptions.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The elementary files for the second SIM Simulator are coded as SIM Application Toolkit default.

27.22.4.16.1.4.2 Procedure

Expected Sequence 1.1 (SET UP EVENT LIST, Set Up Call Connect Event)

| Step | Direction | MESSAGE / Action | Comments |
|------|--------------|--|------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SET UP EVENT LIST 1.1.1 | |
| 4 | ME → SIM | TERMINAL RESPONSE : SET UP EVENT LIST 1.1.1 | |
| 5 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 6 | SS → ME | SETUP 1.1.1 | [Incoming call alert] |
| 7 | USER → ME | User shall accept the incoming call | |
| 8 | ME → SS | CONNECT 1.1.1 | |
| 9 | ME → SIM | ENVELOPE: EVENT DOWNLOAD CALL CONNECTED 1.1.1 | [Call Connected Event] |
| 10 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

PROACTIVE COMMAND : SET UP EVENT LIST 1.1.1

Logically:

Command details

| | |
|--------------------|-------------------|
| Command number: | 1 |
| Command type: | SET UP EVENT LIST |
| Command qualifier: | '00' |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Event list

| | |
|----------|----------------|
| Event 1: | Call Connected |
|----------|----------------|

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 81 | 82 | 99 |
| | 01 | 01 | | | | | | | | | | |

TERMINAL RESPONSE : SET UP EVENT LIST 1.1.1

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP EVENT LIST |
| Command qualifier: | '00' |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

SET UP 1.1.1

Logically:

| | |
|-------------------------|-------|
| Transaction identifier | |
| Value: | XX XX |
| Address | |
| Value: | XX XX |
| Called party subaddress | |
| Value: | XX XX |

CONNECT 1.1.1

Logically:

| | |
|------------------------|-------|
| Transaction identifier | |
| Value: | XX XX |

ENVELOPE : EVENT DOWNLOAD CALL CONNECTED 1.1A.1

Logically:

| | |
|------------------------|----------------|
| Event list | |
| Event 1: | Call Connected |
| Device identities | |
| Source device: | Network |
| Destination device: | SIM |
| Transaction identifier | |
| Value: | XXXX |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|-----|
| BER-TLV: | D6 | xx | 99 | 01 | 01 | 82 | 02 | 83 | 81 | 9C | xx | ... |
|----------|----|----|----|----|----|----|----|----|----|----|----|-----|

Expected Sequence 1.2 (SET UP EVENT LIST, Replace Event)

| Step | Direction | MESSAGE / Action | Comments |
|------|--------------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SET UP EVENT LIST 1.2.1 | [Call Connected and Call Disconnected Events] |
| | ME → SIM | TERMINAL RESPONSE : SET UP EVENT LIST 1.2.1 | |
| 4 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.2.2 | |
| 5 | ME → SIM | FETCH | |
| 6 | SIM → ME | PROACTIVE COMMAND : SET UP EVENT LIST 1.2.2 | [Call Disconnected Event] |
| 7 | ME → SIM | TERMINAL RESPONSE : SET UP EVENT LIST 1.2.2 | |
| 8 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 10 | SS → ME | SETUP 1.2.2 | [Incoming call alert] |
| 11 | USER → ME | User shall accept the incoming call | |
| 12 | ME → SS | CONNECT 1.2.2 | |
| 13 | SS → ME | DISCONNECT 1.2.2 | |
| | ME → SIM | ENVELOPE: EVENT DOWNLOAD CALL DISCONNECT 1.2.2 | [Call Disconnect Event] |
| 14 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

PROACTIVE COMMAND : SET UP EVENT LIST 1.2.1

Logically:

Command details

| | |
|--------------------|-------------------|
| Command number: | 1 |
| Command type: | SET UP EVENT LIST |
| Command qualifier: | '00' |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Event list

| | |
|----------|-------------------|
| Event 1: | Call Connected |
| Event 2: | Call Disconnected |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0D | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 81 | 82 | 99 |
| | 02 | 01 | 02 | | | | | | | | | |

TERMINAL RESPONSE : SET UP EVENT LIST 1.2.1

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP EVENT LIST |
| Command qualifier: | '00' |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

BER-TLV: 81 03 01 05 00 82 02 82 81 83 01 00

PROACTIVE COMMAND : SET UP EVENT LIST 1.2.2

Logically:

| | |
|---------------------|-------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP EVENT LIST |
| Command qualifier: | '00' |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| Event list | |
| Event 1: | Call Disconnected |

Coding:

BER-TLV: D0 0C 81 03 01 05 00 82 02 81 82 99
 01 02**TERMINAL RESPONSE : SET UP EVENT LIST 1.2.2**

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP EVENT LIST |
| Command qualifier: | '00' |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

BER-TLV: 81 03 01 05 00 82 02 82 81 83 01 00

SET UP 1.2.2

Logically:

| | |
|-------------------------|-------|
| Transaction identifier | |
| Value: | XX XX |
| Address | |
| Value: | XX XX |
| Called party subaddress | |
| Value: | XX XX |

CONNECT 1.2.2

Logically:

| | |
|------------------------|-------|
| Transaction identifier | |
| Value: | XX XX |

DISCONNECT 1.2.2

Logically:

| | |
|------------------------|-------|
| Transaction identifier | |
| Value: | XX XX |
| Cause | |
| Value: | XX XX |

ENVELOPE: EVENT DOWNLOAD CALL DISCONNECTED 1.2.2

Logically:

| | |
|------------------------|-------------------|
| Event list | |
| Event 1: | Call Disconnected |
| Device identities | |
| Source device: | Network |
| Destination device: | SIM |
| Transaction identifier | |
| Value: | XX XX |
| Cause | |
| Value: | XX XX |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|-----|----|----|----|----|----|----|----|----|-----|
| BER-TLV: | D6 | xx | 99 | 01 | 02 | 82 | 02 | 83 | 81 | 9C | xx | ... |
| | 9A | xx | ... | | | | | | | | | |

Expected Sequence 1.3 (SET UP EVENT LIST, Remove Event)

| Step | Direction | MESSAGE / Action | Comments |
|------|--------------|--|------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SET UP EVENT LIST 1.3.1 | [Call Connected Event] |
| | ME → SIM | TERMINAL RESPONSE : SET UP EVENT LIST 1.3.1 | |
| 4 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.3.1 | |
| 5 | ME → SIM | FETCH | |
| 6 | SIM → ME | PROACTIVE COMMAND : SET UP EVENT LIST 1.3.2 | [Remove Event] |
| 7 | ME → SIM | TERMINAL RESPONSE : SET UP EVENT LIST 1.3.2 | |
| 8 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 10 | SS → ME | SETUP 1.3.2 | [Incoming call alert] |
| 11 | USER → ME | User shall accept the incoming call | |
| 12 | ME → SS | CONNECT 1.3.2 | |
| 13 | SS → ME | DISCONNECT 1.3.2 | |

PROACTIVE COMMAND : SET UP EVENT LIST 1.3.1

Logically:

Command details

| | |
|--------------------|-------------------|
| Command number: | 1 |
| Command type: | SET UP EVENT LIST |
| Command qualifier: | '00' |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Event list

| | |
|----------|----------------|
| Event 1: | Call Connected |
|----------|----------------|

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 81 | 82 | 99 |
| | 01 | 01 | | | | | | | | | | |

TERMINAL RESPONSE : SET UP EVENT LIST 1.3.1

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP EVENT LIST |
| Command qualifier: | '00' |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

PROACTIVE COMMAND : SET UP EVENT LIST 1.3.2

Logically:

| | |
|---------------------|-------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP EVENT LIST |
| Command qualifier: | '00' |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| Event list: | Empty |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0B | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 81 | 82 | 99 |
| | 00 | | | | | | | | | | | |

TERMINAL RESPONSE : SET UP EVENT LIST 1.3.2

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP EVENT LIST |
| Command qualifier: | '00' |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

SET UP 1.3.2

Logically:

| | |
|-------------------------|-------|
| Transaction identifier | |
| Value: | XX XX |
| Address | |
| Value: | XX XX |
| Called party subaddress | |
| Value: | XX XX |

CONNECT 1.3.2

Logically:

| | |
|------------------------|-------|
| Transaction identifier | |
| Value: | XX XX |

DISCONNECT 1.3.2

Logically:

| | |
|------------------------|-------|
| Transaction identifier | |
| Value: | XX XX |
| Cause | |
| Value: | XX XX |

Expected Sequence 1.4 (SET UP EVENT LIST, Remove Event on ME Power Cycle)

| Step | Direction | MESSAGE / Action | Comments |
|------|--------------|--|------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.4.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SET UP EVENT LIST 1.4.1 | [Call Connected Event] |
| | ME → SIM | TERMINAL RESPONSE : SET UP EVENT LIST 1.4.1 | |
| 4 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 5 | User → ME | Power off ME | |
| 6 | User → ME | Power on ME | |
| 7 | SS → ME | SETUP 1.4A | [Incoming call alert] |
| 8 | USER → ME | User shall accept the incoming call | |
| 9 | ME → SS | CONNECT 1.4.1 | |
| 10 | SS → ME | DISCONNECT 1.4.1 | |

PROACTIVE COMMAND : SET UP EVENT LIST 1.4.1

Logically:

| | |
|---------------------|-------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP EVENT LIST |
| Command qualifier: | '00' |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| Event list | |
| Event 1: | Call Connected |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 81 | 82 | 99 |
| | 01 | 01 | | | | | | | | | | |

TERMINAL RESPONSE : SET UP EVENT LIST 1.4.1

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP EVENT LIST |
| Command qualifier: | '00' |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | | | | | | | | | | | | |

SET UP 1.4.1

Logically:

| | |
|-------------------------|-------|
| Transaction identifier | |
| Value: | XX XX |
| Address | |
| Value: | XX XX |
| Called party subaddress | |
| Value: | XX XX |

CONNECT 1.4.1

Logically:

| | |
|------------------------|-------|
| Transaction identifier | |
| Value: | XX XX |

DISCONNECT 1.4.1

Logically:

| | |
|------------------------|-------|
| Transaction identifier | |
| Value: | XX XX |
| Cause | |
| Value: | XX XX |

27.22.4.16.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 1, 2, 3 and 4.

27.22.4.17 PERFORM CARD APDU**27.22.4.17.1 PERFORM CARD APDU (normal)****27.22.4.17.1.1 Definition and applicability**

See Section 3.2.2.

27.22.4.17.1.2 Conformance requirement

The ME shall support the Proactive SIM: Perform Card APDU facility as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 6.1, clause 5.2 (Terminal Profile), clause 6.4.17 (Perform Card APDU), clause 6.6.17 (Perform Card APDU), clause 6.8 (Structure of Terminal Response), clause 12.6 (Command Details), clause 12.7 (Device Identities), clause 12.35 (C-APDU), clause 12.36 (R-APDU), clause 12.12.9 (Additional information for MultipleCard Commands)

Additionally the ME shall support multiple card operation as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 6.4.19 (Power On Card), clause 6.6.19 (Power On Card), clause 6.4.18 (Power Off Card), clause 6.6.18 (Power Off Card)

27.22.4.17.1.3 Test Purpose

To verify that the ME sends an APDU command to the additional card identified in the PERFORM CARD APDU proactive SIM command, and successfully returns the result of the execution of the command in the TERMINAL RESPONSE command send to the SIM.

The ME-Manufacturer can assign the card reader identifier from 0 to 7.

This test applies for MEs with only one additional card reader.

In this particular case the card reader identifier 1 is chosen.

In this particular case a special Test-SIM (TestSIM) with T=0 protocol is chosen as additional card for the additional ME card reader (for coding of the TestSIM see Annex D).

27.22.4.17.1.4 Method of test

27.22.4.17.1.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The TestSIM is inserted in the additional ME card reader.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

If the ME supports a detachable card reader, the card reader shall be attached to the ME.

The elementary files of the TestSIM are coded as defined in Annex D.

27.22.4.17.1.4.2 Procedure

Expected Sequence 1.1 (PERFORM CARD APDU, card reader 1, additional card inserted, Select MF and Get Response)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: POWER ON CARD 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: POWER ON CARD 1.1.1 | [Power on card reader 1] |
| 4 | ME → SIM2 | RESET CARD | [Perform electrical initialisation] |
| 5 | SIM2 → ME | ANSWER TO RESET 1.1 | [ATR] |
| 6 | ME → SIM | TERMINAL RESPONSE: POWER ON CARD 1.1.1 | [ATR] |
| 7 | SIM → ME | PROACTIVE COMMAND PENDING: PERFORM CARD APDU 1.1.1 | |
| 8 | ME → SIM | FETCH | |
| 9 | SIM → ME | PROACTIVE COMMAND: PERFORM CARD APDU 1.1.1 | [Select Masterfile] |
| 10 | ME → SIM2 | C-APDU: SELECT 1.1 | [Select Masterfile] |
| 11 | SIM2 → ME | R-APDU: SELECT 1.1 | [Command performed successfully – length '1B' of response data] |
| 12 | ME → SIM | TERMINAL RESPONSE: PERFORM CARD APDU 1.1.1 | |
| 13 | SIM → ME | PROACTIVE COMMAND PENDING: PERFORM CARD APDU 1.1.2 | |
| 14 | ME → SIM | FETCH | |
| 15 | SIM → ME | PROACTIVE COMMAND: PERFORM CARD APDU 1.1.2 | [Get Response with length '1B'] |
| 16 | ME → SIM2 | C-APDU: GET RESPONSE 1.1 | [Get Response with length '1B'] |
| 17 | SIM2 → ME | R-APDU: GET RESPONSE 1.1 | [Response data with length '1B'] |
| 18 | ME → SIM | TERMINAL RESPONSE: PERFORM CARD APDU 1.1.2 | [Response data with length '1B'] |

PROACTIVE COMMAND POWER ON CARD 1.1.1

Logically:

Command details

| | |
|--------------------|---------------|
| Command number: | 1 |
| Command type: | POWER ON CARD |
| Command qualifier: | "00" |

Device identities

| | |
|---------------------|---------------|
| Source device: | SIM |
| Destination device: | Card reader 1 |

Coding:

BER-TLV: D0 09 81 03 01 31 00 82 02 81 11

ANSWER TO RESET 1.1

Logically:

| | |
|-------------------------|--|
| TS (Initial character): | '3B' |
| T0 (Format character): | '86' (Following interface characters: TD(1), number of historical characters: 6) |
| TD1: | '00' (Following interface characters: none, Transfer protocol: T=0) |
| T1: | 91 |
| T2: | 99 |
| T3: | 00 |
| T4: | 12 |
| T5: | C1 |
| T6: | 00 |

Coding:

| | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 3B | 86 | 00 | 91 | 99 | 00 | 12 | C1 | 00 |
|----------|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE : POWER ON CARD 1.1.1

Logically:

| | |
|-------------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | POWER ON CARD |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Card ATR | |
| TS (Initial character): | '3B' |
| T0 (Format character): | '86' (Following interface characters: TD(1), number of historical characters: 6) |
| TD1: | '00' (Following interface characters: none, Transfer protocol: T=0) |
| T1: | 91 |
| T2: | 99 |
| T3: | 00 |
| T4: | 12 |
| T5: | C1 |
| T6: | 00 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 31 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A1 | 09 | 3B | 86 | 00 | 91 | 99 | 00 | 12 | C1 | 00 | |

PROACTIVE COMMAND PERFORM CARD APDU 1.1.1

Logically:

| | |
|---------------------|-------------------|
| Command details | |
| Command number: | 1 |
| Command type: | PERFORM CARD APDU |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | SIM |
| Destination device: | Card Reader 1 |
| C-APDU | |
| Class: | 'A0' |
| Instruction: | SELECT |
| P1 parameter: | '00' |
| P2 parameter: | '00' |
| Lc: | '02' |
| Data: | Master File |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 12 | 81 | 03 | 01 | 30 | 00 | 82 | 02 | 81 | 11 | A2 |
| | 07 | A0 | A4 | 00 | 00 | 02 | 3F | 00 | | | | |

C-APDU: SELECT 1.1

Logically:

| | |
|---------------|-------------|
| C-APDU | |
| Class: | 'A0' |
| Instruction: | SELECT |
| P1 parameter: | '00' |
| P2 parameter: | '00' |
| Lc: | '02' |
| Data: | Master File |

Coding:

| | | | | | | | |
|----------|----|----|----|----|----|----|----|
| BER-TLV: | A0 | A4 | 00 | 00 | 02 | 3F | 00 |
|----------|----|----|----|----|----|----|----|

R-APDU: SELECT 1.1

Logically:

Status Words SW1 / SW2: Command performed successfully – length '1B' of response data

Coding:

BER-TLV: 9F 1B

TERMINAL RESPONSE : PERFORM CARD APDU 1.1.1

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | PERFORM CARD APDU |
| Command qualifier: | “00” |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| R-APDU | |
| Status Words | |
| SW1 / SW2: | Command performed successfully – length ‘1B’ of response data |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 30 | 00 | 82 | 02 | 11 | 81 | 83 | 01 | 00 |
| | A3 | 02 | 9F | 1B | | | | | | | | |

PROACTIVE COMMAND PERFORM CARD APDU 1.1.2

Logically:

| | |
|---------------------|-------------------|
| Command details | |
| Command number: | 1 |
| Command type: | PERFORM CARD APDU |
| Command qualifier: | ‘00’ |
| Device identities | |
| Source device: | SIM |
| Destination device: | Card Reader 1 |
| C-APDU | |
| Class: | ‘A0’ |
| Instruction: | GET RESPONSE |
| P1 parameter: | ‘00’ |
| P2 parameter: | ‘00’ |
| Le: | ‘1B’ |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 10 | 81 | 03 | 01 | 30 | 00 | 82 | 02 | 81 | 11 | A2 |
| | 05 | A0 | C0 | 00 | 00 | 1B | | | | | | |

C-APDU: GET RESPONSE 1.1

Logically:

C-APDU

| | |
|---------------|--------------|
| Class: | 'A0' |
| Instruction: | GET RESPONSE |
| P1 parameter: | '00' |
| P2 parameter: | '00' |
| Le: | '1B' |

Coding:

BER-TLV: A0 C0 00 00 1B

R-APDU: GET RESPONSE 1.1

Logically:

R-APDU data

| | |
|-----------------------------------|--------------------------|
| RFU: | '00 00' |
| Not allocated memory: | '653 bytes' |
| File ID: | Master File |
| Type of file: | MF |
| RFU: | 00 00 22 FF 01' |
| Length of following data: | 14 bytes' |
| File characteristics: | |
| Clock Stop: | Not allowed |
| Min. frequency for GSM algorithm: | 13/8 MHz |
| Technology identification: | 3V Technology SIM |
| CHV1: | disabled |
| DFs in current directory: | 2 |
| EFs in current directory: | 8 |
| Number of CHV and admin. Codes: | 3 |
| RFU byte 18: | 00 |
| CHV1 status: | |
| False representations remaining: | 3 |
| RFU-bits 7-5: | 000 |
| Secret code: | Initialised |
| Unlock CHV1 status: | |
| False representations remaining: | 10 |
| RFU-bits 7-5: | 000 |
| Secret code: | Initialised |
| CHV2 status: | |
| False representations remaining: | 3 |
| RFU-bits 7-5: | 000 |
| Secret code: | Initialised |
| Unlock CHV2 status: | |
| False representations remaining: | 10 |
| RFU-bits 7-5: | 000 |
| Secret code: | Initialised |
| RFU bytes 23: | 00 |
| Reserved for admin. management: | 00 83 00 FF |
| Status Words | |
| SW1 / SW2: | Normal ending of command |

Coding:

BER-TLV: 00 00 02 8D 3F 00 01 00 00 22 FF 01
 0E 9B 02 08 03 00 83 8A 83 8A 00 00
 83 00 FF 90 00

TERMINAL RESPONSE : PERFORM CARD APDU 1.1.2

Logically:

| | |
|-----------------------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | PERFORM CARD APDU |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| R-APDU data | |
| RFU: | '00 00' |
| Not allocated memory: | '653 bytes' |
| File ID: | Master File |
| Type of file: | MF |
| RFU: | 00 00 22 FF 01' |
| Length of following data: | 14 bytes' |
| File characteristics: | |
| Clock Stop: | Not allowed |
| Min. frequency for GSM algorithm: | 13/8 MHz |
| Technology identification: | 3V Technology SIM |
| CHV1: | disabled |
| DFs in current directory: | 2 |
| EFs in current directory: | 8 |
| Number of CHV and admin. Codes: | 3 |
| RFU byte 18: | 00 |
| CHV1 status: | |
| False representations remaining: | 3 |
| RFU-bits 7-5: | 000 |
| Secret code: | Initialised |
| Unlock CHV1 status: | |
| False representations remaining: | 10 |
| RFU-bits 7-5: | 000 |
| Secret code: | Initialised |
| CHV2 status: | |
| False representations remaining: | 3 |
| RFU-bits 7-5: | 000 |
| Secret code: | Initialised |
| Unlock CHV2 status: | |
| False representations remaining: | 10 |
| RFU-bits 7-5: | 000 |
| Secret code: | Initialised |
| RFU bytes 23: | 00 |
| Reserved for admin. management: | 00 83 00 FF |
| Status Words | |
| SW1 / SW2: | Normal ending of command |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 30 | 00 | 82 | 02 | 11 | 81 | 83 | 01 | 00 |
| | A3 | 0F | 00 | 00 | 02 | 8D | 3F | 00 | 01 | 00 | 00 | 22 |
| | FF | 01 | 0E | 90 | 00 | | | | | | | |

Expected Sequence 1.2 (PERFORM CARD APDU, card reader 1, additional card inserted, Select DF GSM, Select EF PLMN , Update Binary, Read Binary on EF PLMN)

| Step | Direction | MESSAGE / Action | Comments |
|-------------|------------------|--|-------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: POWER ON CARD 1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: POWER ON CARD 1.1 | [Power on card reader 1] |
| 4 | ME → SIM2 | RESET CARD | [Perform electrical initialisation] |
| 5 | SIM2 → ME | ANSWER TO RESET 1.1 | [ATR] |
| 6 | ME → SIM | TERMINAL RESPONSE: POWER ON CARD 1.1 | [ATR] |
| 7 | SIM → ME | PROACTIVE COMMAND PENDING: PERFORM CARD APDU 1.2.1 | |
| 8 | ME → SIM | FETCH | |
| 9 | SIM → ME | PROACTIVE COMMAND: PERFORM CARD APDU 1.2.1 | [Select GSM] |
| 10 | ME → SIM2 | C-APDU: SELECT 1.2a | [Select GSM] |
| 11 | SIM2 → ME | R-APDU: SELECT 1.2a | |
| 12 | ME → SIM | TERMINAL RESPONSE: PERFORM CARD APDU 1.2.1 | |
| 13 | SIM → ME | PROACTIVE COMMAND PENDING: PERFORM CARD APDU 1.2.2 | |
| 14 | ME → SIM | FETCH | |
| 15 | SIM → ME | PROACTIVE COMMAND: PERFORM CARD APDU 1.2.2 | [Select PLMN] |
| 16 | ME → SIM2 | C-APDU: SELECT 1.2b | [Select PLMN] |
| 17 | SIM2 → ME | R-APDU: SELECT 1.2b | |
| 18 | ME → SIM | TERMINAL RESPONSE: PERFORM CARD APDU 1.2.2 | |
| 19 | SIM → ME | PROACTIVE COMMAND PENDING: PERFORM CARD APDU 1.2.3 | |
| 20 | ME → SIM | FETCH | |
| 21 | SIM → ME | PROACTIVE COMMAND: PERFORM CARD APDU 1.2.3 | [Update Binary] |
| 22 | ME → SIM2 | C-APDU: UPDATE BINARY 1.2 | [Update Binary] |
| 23 | SIM2 → ME | R-APDU: UPDATE BINARY 1.2 | |
| 24 | ME → SIM | TERMINAL RESPONSE: PERFORM CARD APDU 1.2.3 | |
| 25 | SIM → ME | PROACTIVE COMMAND PENDING: PERFORM CARD APDU 1.2.4 | |
| 26 | ME → SIM | FETCH | |
| 27 | SIM → ME | PROACTIVE COMMAND: PERFORM CARD APDU 1.2.4 | [Read Binary] |
| 28 | ME → SIM2 | C-APDU: READ BINARY 1.2 | [Read Binary] |
| 29 | SIM2 → ME | R-APDU: READ BINARY 1.2 | |
| 30 | ME → SIM | TERMINAL RESPONSE: PERFORM CARD APDU 1.2.4 | |
| 31 | SIM → ME | PROACTIVE COMMAND: PERFORM CARD APDU 1.2.5 | [Update Binary] |

| | | | |
|----|-----------|---|-----------------|
| 32 | ME → SIM2 | C-APDU: UPDATE BINARY 1.2a | [Update Binary] |
| 33 | SIM2 → ME | R-APDU: UPDATE BINARY 1.2 | |
| 34 | ME → SIM | TERMINAL RESPONSE: PERFORM CARD APDU 1.2.3 | |

PROACTIVE COMMAND PERFORM CARD APDU 1.2.1

Logically:

Command details
 Command number: 1
 Command type: PERFORM CARD APDU
 Command qualifier: "00"
 Device identities
 Source device: SIM
 Destination device: Card Reader 1
 C-APDU
 Class: 'A0'
 Instruction: SELECT
 P1 parameter: '00'
 P2 parameter: '00'
 Lc: '02'
 Data: DF GSM

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 12 | 81 | 03 | 01 | 30 | 00 | 82 | 02 | 81 | 11 | A2 |
| | 07 | A0 | A4 | 00 | 00 | 02 | 7F | 20 | | | | |

PROACTIVE COMMAND : PERFORM CARD APDU 1.2.2

Logically:

Command details
 Command number: 1
 Command type: PERFORM CARD APDU
 Command qualifier: "00"
 Device identities
 Source device: SIM
 Destination device: Card Reader 1
 C-APDU
 Class: 'A0'
 Instruction: SELECT
 P1 parameter: '00'
 P2 parameter: '00'
 Lc: '02'
 Data: EF PLMN

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 12 | 81 | 03 | 01 | 30 | 00 | 82 | 02 | 81 | 11 | A2 |
| | 07 | A0 | A4 | 00 | 00 | 02 | 6F | 30 | | | | |

PROACTIVE COMMAND : PERFORM CARD APDU 1.2.3

Logically:

| | |
|---------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | PERFORM CARD APDU |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | SIM |
| Destination device: | Card Reader 1 |
| C-APDU | |
| Class: | 'A0' |
| Instruction: | UPDATE BINARY |
| P1 parameter: | '00' |
| P2 parameter: | '00' |
| Lc: | '18' |
| Data: | '00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0B 0E 0F 10 11 12 13 14 15 16 17' |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 28 | 81 | 03 | 01 | 30 | 00 | 82 | 02 | 81 | 11 | A2 |
| | 1D | A0 | D6 | 00 | 00 | 18 | 00 | 01 | 02 | 03 | 04 | 05 |
| | 06 | 07 | 08 | 09 | 0A | 0B | 0C | 0D | 0E | 0F | 10 | 11 |
| | 12 | 13 | 14 | 15 | 16 | 17 | | | | | | |

PROACTIVE COMMAND : PERFORM CARD APDU 1.2.4

Logically:

| | |
|---------------------|-------------------|
| Command details | |
| Command number: | 1 |
| Command type: | PERFORM CARD APDU |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | SIM |
| Destination device: | Card Reader 1 |
| C-APDU | |
| Class: | 'A0' |
| Instruction: | READ BINARY |
| P1 parameter: | '00' |
| P2 parameter: | '00' |
| Le: | '18' |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 10 | 81 | 03 | 01 | 30 | 00 | 82 | 02 | 81 | 11 | A2 |
| | 05 | A0 | B0 | 00 | 00 | 18 | | | | | | |

PROACTIVE COMMAND : PERFORM CARD APDU 1.2.5

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | PERFORM CARD APDU |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | SIM |
| Destination device: | Card Reader 1 |
| C-APDU | |
| Class: | 'A0' |
| Instruction: | UPDATE BINARY |
| P1 parameter: | '00' |
| P2 parameter: | '00' |
| Lc: | '18' |
| Data: | 'FF FF FF FF FF FF FF FF FF FF' |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 28 | 81 | 03 | 01 | 30 | 00 | 82 | 02 | 81 | 11 | A2 |
| | 1D | A0 | D6 | 00 | 00 | 18 | FF | FF | FF | FF | FF | FF |
| | FF |
| | FF |

C-APDU: SELECT 1.2a

Logically:

| | |
|---------------|--------|
| C-APDU | |
| Class: | 'A0' |
| Instruction: | SELECT |
| P1 parameter: | '00' |
| P2 parameter: | '00' |
| Lc: | '02' |
| Data: | DF GSM |

Coding:

| | | | | | | | |
|----------|----|----|----|----|----|----|----|
| BER-TLV: | A0 | A4 | 00 | 00 | 02 | 7F | 20 |
|----------|----|----|----|----|----|----|----|

C-APDU: SELECT 1.2b

Logically:

| | |
|---------------|---------|
| C-APDU | |
| Class: | 'A0' |
| Instruction: | SELECT |
| P1 parameter: | '00' |
| P2 parameter: | '00' |
| Lc: | '02' |
| Data: | EF PLMN |

Coding:

| | | | | | | | |
|----------|----|----|----|----|----|----|----|
| BER-TLV: | A0 | A4 | 00 | 00 | 02 | 6F | 30 |
|----------|----|----|----|----|----|----|----|

C-APDU: UPDATE BINARY 1.2

Logically:

C-APDU

| | |
|---------------|--|
| Class: | 'A0' |
| Instruction: | UPDATE BINARY |
| P1 parameter: | '00' |
| P2 parameter: | '00' |
| Lc: | '18' |
| Data: | '00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0B 0E 0F 10 11 12 13 14 15 16 17' |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | A0 | D6 | 00 | 00 | 18 | 00 | 01 | 02 | 03 | 04 | 05 | 06 |
| | 07 | 08 | 09 | 0A | 0B | 0C | 0D | 0E | 0F | 10 | 11 | 12 |
| | 13 | 14 | 15 | 16 | 17 | | | | | | | |

C-APDU: READ BINARY 1.2

Logically:

C-APDU

| | |
|---------------|-------------|
| Class: | 'A0' |
| Instruction: | READ BINARY |
| P1 parameter: | '00' |
| P2 parameter: | '00' |
| Le: | '18' |

Coding:

| | | | | | |
|----------|----|----|----|----|----|
| BER-TLV: | A0 | B0 | 00 | 00 | 18 |
|----------|----|----|----|----|----|

C-APDU: UPDATE BINARY 1.2a

Logically:

C-APDU

| | |
|---------------|---|
| Class: | 'A0' |
| Instruction: | UPDATE BINARY |
| P1 parameter: | '00' |
| P2 parameter: | '00' |
| Lc: | '18' |
| Data: | 'FF FF FF FF FF FF FF FF FF FF' |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | A0 | D6 | 00 | 00 | 18 | FF |
| | FF |
| | FF | FF | FF | FF | FF | | | | | | | |

R-APDU: SELECT 1.2a

Logically:

| | |
|--------------|---|
| Status Words | |
| SW1 / SW2: | Normal ending of command – length '1B' of response data |

Coding:

| | | |
|----------|----|----|
| BER-TLV: | 9F | 1B |
|----------|----|----|

R-APDU: SELECT 1.2b

Logically:

| | |
|--------------|---|
| Status Words | |
| SW1 / SW2: | Normal ending of command - length '0F' of response data |

Coding:

| | | |
|----------|----|----|
| BER-TLV: | 9F | 0F |
|----------|----|----|

R-APDU: UPDATE BINARY 1.2

Logically:

| | |
|--------------|--------------------------|
| Status Words | |
| SW1 / SW2: | Normal ending of command |

Coding:

| | | |
|----------|----|----|
| BER-TLV: | 90 | 00 |
|----------|----|----|

R-APDU: READ BINARY 1.2

Logically:

| | |
|--------------|---|
| R-APDU data | |
| Data: | '00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0B 0E 0F 10 11 12 13 14 15 16 17 ' |
| Status Words | |
| SW1 / SW2: | Normal ending of command |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 00 | 01 | 02 | 03 | 04 | 05 | 06 | 07 | 08 | 09 | 0A | 0B |
| | 0C | 0D | 0E | 0F | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| | 90 | 00 | | | | | | | | | | |

TERMINAL RESPONSE : PERFORM CARD APDU 1.2.1

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | PERFORM CARD APDU |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| R-APDU | |
| Status Words | |
| SW1 / SW2: | Command performed successfully – length 1B of response data |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 30 | 00 | 82 | 02 | 11 | 81 | 83 | 01 | 00 |
| | A3 | 02 | 9F | 1B | | | | | | | | |

TERMINAL RESPONSE : PERFORM CARD APDU 1.2.2

Logically:

| | | | | | | | | | | | |
|---------------------|--|--|-----|---|--|--|--|--|--|--|--|
| Command details | | | | | | | | | | | |
| Command number: | | | 1 | | | | | | | | |
| Command type: | | | | PERFORM CARD APDU | | | | | | | |
| Command qualifier: | | | | "00" | | | | | | | |
| Device identities | | | | | | | | | | | |
| Source device: | | | ME | | | | | | | | |
| Destination device: | | | SIM | | | | | | | | |
| Result | | | | | | | | | | | |
| General Result: | | | | Command performed successfully | | | | | | | |
| R-APDU | | | | | | | | | | | |
| Status Words | | | | | | | | | | | |
| SW1 / SW2: | | | | Command performed successfully – length 0F of response data | | | | | | | |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 30 | 00 | 82 | 02 | 11 | 81 | 83 | 01 | 00 |
| | A3 | 02 | 9F | 0F | | | | | | | | |

TERMINAL RESPONSE : PERFORM CARD APDU 1.2.3

Logically:

| | | | | | | | | | | | |
|---------------------|--|--|-----|--------------------------------|--|--|--|--|--|--|--|
| Command details | | | | | | | | | | | |
| Command number: | | | 1 | | | | | | | | |
| Command type: | | | | PERFORM CARD APDU | | | | | | | |
| Command qualifier: | | | | "00" | | | | | | | |
| Device identities | | | | | | | | | | | |
| Source device: | | | ME | | | | | | | | |
| Destination device: | | | SIM | | | | | | | | |
| Result | | | | | | | | | | | |
| General Result: | | | | Command performed successfully | | | | | | | |
| R-APDU | | | | | | | | | | | |
| Status Words | | | | | | | | | | | |
| SW1 / SW2: | | | | Normal ending of command | | | | | | | |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 30 | 00 | 82 | 02 | 11 | 81 | 83 | 01 | 00 |
| | A3 | 02 | 90 | 00 | | | | | | | | |

TERMINAL RESPONSE : PERFORM CARD APDU 1.2.4

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | PERFORM CARD APDU |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| R-APDU | |
| R-APDU data | |
| Data: | '00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0B 0E 0F 10 11 12 13 14 15 16 17 ' |
| Status Words | |
| SW1 / SW2: | Normal ending of command |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 30 | 00 | 82 | 02 | 11 | 81 | 83 | 01 | 00 |
| | A2 | 81 | EF | A0 | D6 | 00 | 00 | EC | 00 | 01 | 02 | 03 |
| | 04 | 05 | 06 | 07 | 08 | 09 | 0A | 0B | 0C | 0D | 0E | 0F |
| | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 90 | 00 | | |

Expected Sequence 1.3 (PERFORM CARD APDU, card reader 1, card inserted, card powered off)

| Step | Direction | MESSAGE / Action | Comments |
|------|--------------|---|---------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: POWER OFF CARD 1.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: POWER OFF CARD 1.3.1 | [Power off card reader 1] |
| 4 | ME → SIM2 | POWER OFF CARD | [Power off card reader 1] |
| 5 | ME → SIM | TERMINAL RESPONSE: POWER OFF CARD 1.3.1 | [Successful] |
| 6 | ME | SIM2 is powered off from ME card reader | |
| 7 | SIM → ME | PROACTIVE COMMAND PENDING: PEFORM CARD APDU 1.1.1 | |
| 8 | ME → SIM | FETCH | |
| 9 | SIM → ME | PROACTIVE COMMAND: PERFORM CARD APDU 1.1.1 | [Select Master File] |
| 10 | ME → SIM | TERMINAL RESPONSE: PERFORM CARD APDU 1.3.1 | [Card powered off] |

PROACTIVE COMMAND : POWER OFF CARD 1.3.1

Logically:

| | |
|---------------------|----------------|
| Command details | |
| Command number: | 1 |
| Command type: | POWER OFF CARD |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | SIM |
| Destination device: | Card reader 1 |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 09 | 81 | 03 | 01 | 32 | 00 | 82 | 02 | 81 | 11 |
|----------|----|----|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE : POWER OFF CARD 1.3.1

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | POWER OFF CARD |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 32 | 00 | 82 | 02 | 82 | 81 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE : PERFORM CARD APDU 1.3.1

Logically:

| | |
|-------------------------|-----------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | PERFORM CARD APDU |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | MultipleCard commands error |
| Additional information: | Card powered off |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 32 | 00 | 82 | 02 | 82 | 81 | 02 | 38 |
| | | | | | | | | | | | 04 |

Expected Sequence 1.4 (PERFORM CARD APDU, card reader 1, no card inserted)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|----------------------|
| 1 | ME | SIM2 is removed from ME card reader | |
| 2 | SIM → ME | PROACTIVE COMMAND PENDING: PERFORM CARD APDU 1.1.1 | |
| 3 | ME → SIM | FETCH | |
| 4 | SIM → ME | PROACTIVE COMMAND: PERFORM CARD APDU 1.1.1 | [Select Master File] |
| 5 | ME → SIM | TERMINAL RESPONSE: PERFORM CARD APDU 1.4.1 | [No card inserted] |

TERMINAL RESPONSE : PERFORM CARD APDU 1.4.1

Logically:

| | |
|-------------------------|-----------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | PERFORM CARD APDU |
| Command qualifier: | “00” |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | MultipleCard commands error |
| Additional information: | Card removed or not present |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 32 | 00 | 82 | 02 | 82 | 81 | 02 | 38 |
| | 02 | | | | | | | | | | |

Expected Sequence 1.5 (PERFORM CARD APDU, card reader 7 (which is not the valid card reader identifier of the additional ME card reader))

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: PERFORM CARD APDU 1.5.1 | [invalid card reader ID] |
| 3 | ME → SIM | FETCH | |
| 4 | SIM → ME | PROACTIVE COMMAND: PERFORM CARD APDU 1.5.1 | [Select Master File] |
| 5 | ME → SIM | TERMINAL RESPONSE: PERFORM CARD APDU 1.5.1 | [Specified reader not valid] |

PROACTIVE COMMAND:: PERFORM CARD APDU 1.1.1

Logically:

| | |
|---------------------|-------------------|
| Command details | |
| Command number: | 1 |
| Command type: | PERFORM CARD APDU |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | SIM |
| Destination device: | Card Reader 7 |
| C-APDU | |
| Class: | 'A0' |
| Instruction: | SELECT |
| P1 parameter: | '00' |
| P2 parameter: | '00' |
| Lc: | '02' |
| Data: | Master File |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 12 | 81 | 03 | 01 | 30 | 00 | 82 | 02 | 81 | 17 | A2 |
| | 07 | A0 | A4 | 00 | 00 | 02 | 3F | 00 | | | | |

C-APDU: SELECT 1.1

Logically:

| | |
|---------------|-------------|
| C-APDU | |
| Class: | 'A0' |
| Instruction: | SELECT |
| P1 parameter: | '00' |
| P2 parameter: | '00' |
| Lc: | '02' |
| Data: | Master File |

Coding:

| | | | | | | | |
|----------|----|----|----|----|----|----|----|
| BER-TLV: | A0 | A4 | 00 | 00 | 02 | 3F | 00 |
|----------|----|----|----|----|----|----|----|

TERMINAL RESPONSE : PERFORM CARD APDU 1.5.1

Logically:

| | |
|-------------------------|-----------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | PERFORM CARD APDU |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | MultipleCard commands error |
| Additional information: | Specified reader not valid |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 32 | 00 | 82 | 02 | 82 | 81 | 02 | 38 |
| | | | | | | | | | | | 09 |

27.22.4.17.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences

27.22.4.17.2 PERFORM CARD APDU (detachable card reader)

27.22.4.17.2.1 Definition and applicability

See Section 3.2.2.

27.22.4.17.2.2 Conformance requirement

27.22.4.17.2.3 Test Purpose

To verify that the ME sends an APDU command to the additional card identified in the PERFORM CARD APDU proactive SIM command, and successfully returns the result of the execution of the command in the TERMINAL RESPONSE command send to the SIM.

27.22.4.17.2.4 Method of test

27.22.4.17.2.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The card reader shall be detached from the ME.

27.22.4.17.2.4.2 Procedure

Expected Sequence 2.1 (PERFORM CARD APDU, card reader 1, card reader detached)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: PEFORM CARD APDU 2.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: PERFORM CARD APDU 1.1.1 | [Select Master File] |
| 4 | ME → SIM | TERMINAL RESPONSE: PERFORM CARD APDU 2.1.1 | [Card reader detached] |

PROACTIVE COMMAND : PERFORM CARD APDU 2.1.1

Logically:

| | |
|---------------------|-------------------|
| Command details | |
| Command number: | 1 |
| Command type: | PERFORM CARD APDU |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | SIM |
| Destination device: | Card Reader 1 |
| C-APDU | |
| Class: | 'A0' |
| Instruction: | SELECT |
| P1 parameter: | '00' |
| P2 parameter: | '00' |
| Lc: | '02' |
| Data: | Master File |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 12 | 81 | 03 | 01 | 30 | 00 | 82 | 02 | 81 | 11 | A2 |
| | 07 | A0 | A4 | 00 | 00 | 02 | 3F | 00 | | | | |

TERMINAL RESPONSE : PERFORM CARD APDU 2.1.1

Logically:

| | |
|-------------------------|------------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | PERFORM CARD APDU |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | MultipleCard commands error |
| Additional information: | Card reader removed or not present |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 30 | 00 | 82 | 02 | 82 | 81 | 83 | 02 |
| | 38 | 01 | | | | | | | | | |

27.22.4.17.2.5 Test RequirementThe ME shall operate in the manner defined in expected sequence.

27.22.4.18 POWER OFF CARD**27.22.4.18.1 POWER OFF CARD (normal)****27.22.4.18.1.1 Definition and applicability**

See Section 3.2.2.

27.22.4.18.1.2 Conformance requirement

The ME shall support the Proactive SIM: Power Off Card facility as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 6.1, clause 6.4.18 (Power Off Card), clause 6.6.18 (Power Off Card), clause 12.6 (Command details), clause 12.7 (Device Identities), clause 12.12 (Result), clause 12.12.9 (Additional information for MultipleCard commands), clause 5.2 (Terminal Profile), Annex H(Support of Multiple Card Operation),

:

27.22.4.18.1.3 Test Purpose

To verify that the ME closes a session with the additional card identified in the POWER OFF CARD proactive SIM command, and successfully returns result in the TERMINAL RESPONSE command send to the SIM.

The ME-Manufacturer can assign the card reader identifier from 0 to 7.

This test applies for MEs with only one additional card reader.

In this particular case the card reader identifier 1 is chosen.

27.22.4.18.1.4 Method of test

27.22.4.18.1.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The ME card reader is connected to the second SIM Simulator (SIM2).

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

If the ME supports a detachable card reader, the card reader shall be attached to the ME.

Prior to this test the ME shall have powered on the second SIM Simulator (SIM2).

27.22.4.18.1.4.2 Procedure

Expected Sequence 1.1 (POWER OFF CARD, card reader 1)

| Step | Direction | MESSAGE / Action | Comments |
|------|--------------|---|---------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: POWER OFF CARD 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : POWER OFF CARD 1.1.1 | [Power off card reader 1] |
| 4 | ME → SIM2 | POWER OFF CARD | [Power off card reader 1] |
| 5 | ME → SIM | TERMINAL RESPONSE : POWER OFF CARD 1.1.1 | [Successful] |

PROACTIVE COMMAND : POWER OFF CARD 1.1.1

Logically:

Command details

| | |
|--------------------|----------------|
| Command number: | 1 |
| Command type: | POWER OFF CARD |
| Command qualifier: | "00" |

Device identities

| | |
|---------------------|---------------|
| Source device: | SIM |
| Destination device: | Card reader 1 |

Coding:

BER-TLV: D0 09 81 03 01 32 00 82 02 81 11

TERMINAL RESPONSE : POWER OFF CARD 1.1.1

Logically:

Command details

| | |
|--------------------|----------------|
| Command number: | 1 |
| Command type: | POWER OFF CARD |
| Command qualifier: | "00" |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|--------------------------------|
| General Result: | Command performed successfully |
|-----------------|--------------------------------|

Coding:

BER-TLV: 81 03 01 32 00 82 02 82 81 01 00

Expected Sequence 1.2 (POWER OFF CARD, card reader 1, no card inserted)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---------------------------|
| 1 | SIM2 | SIM2 is removed from ME card reader | |
| 2 | SIM → ME | PROACTIVE COMMAND PENDING: POWER OFF CARD 1.1.1 | |
| 3 | ME → SIM | FETCH | |
| 4 | SIM → ME | PROACTIVE COMMAND : POWER OFF CARD 1.1.1 | [Power off card reader 1] |
| 5 | ME → SIM | TERMINAL RESPONSE : POWER OFF CARD 1.2.1 | [No card inserted] |

TERMINAL RESPONSE : POWER OFF CARD 1.2.1

Logically:

| | |
|-------------------------|-----------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | POWER OFF CARD |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | MultipleCard commands error |
| Additional information: | Card removed or not present |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 32 | 00 | 82 | 02 | 82 | 81 | 02 | 38 |
| | | | | | | | | | | | 02 |

27.22.4.18.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences

27.22.4.18.2 POWER OFF CARD (detachable card reader)**27.22.4.18.2.1 Definition and applicability**

See Section 3.2.2.

27.22.4.18.2.2 Conformance requirement**27.22.4.18.2.3 Test Purpose**

To verify that the ME closes a session with the additional card identified in the POWER OFF CARD proactive SIM command, and successfully returns result in the TERMINAL RESPONSE command send to the SIM.

27.22.4.18.2.4 Method of test**27.22.4.18.2.4.1 Initial Conditions**

The ME is connected to the SIM Simulator.

The ME card reader is connected to the second SIM Simulator (SIM2).

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

Prior to this test the ME shall have powered on the second SIM Simulator (SIM2).

The card reader shall be detached from the ME.

27.22.4.18.2.4.2 Procedure

Expected Sequence 2.1 (POWER OFF CARD, card reader 1, no card reader attached)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: POWER OFF CARD 2.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : POWER OFF CARD 2.1.1 | [Power off card reader 1] |
| 4 | ME → SIM | TERMINAL RESPONSE : POWER ON CARD 2.1.1 | [Card reader removed or not present] |

PROACTIVE COMMAND : POWER OFF CARD 2.1.1

Logically:

Command details

| | |
|--------------------|----------------|
| Command number: | 1 |
| Command type: | POWER OFF CARD |
| Command qualifier: | "00" |

Device identities

| | |
|---------------------|---------------|
| Source device: | SIM |
| Destination device: | Card reader 1 |

Coding:

BER-TLV: D0 09 81 03 01 32 00 82 02 81 11

TERMINAL RESPONSE : POWER OFF CARD 2.1.1

Logically:

Command details

| | |
|--------------------|----------------|
| Command number: | 1 |
| Command type: | POWER OFF CARD |
| Command qualifier: | "00" |

Device identities

| | | |
|----------------|----|-------------------------|
| Source device: | ME | Destination device: SIM |
|----------------|----|-------------------------|

Result

| | |
|-------------------------|------------------------------------|
| General Result: | MultipleCard commands error |
| Additional information: | Card reader removed or not present |

Coding:

BER-TLV: 81 03 01 32 00 82 02 82 81 02 38
01

27.22.4.18.2.5 Test RequirementThe ME shall operate in the manner defined in expected sequences

27.22.4.19 POWER ON CARD

27.22.4.19.1 POWER ON CARD (normal)

27.22.4.19.1.1 Definition and applicability

See Section 3.2.2.

27.22.4.19.1.2 Conformance requirement

The ME shall support the Proactive SIM: Power On Card facility as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 6.1, clause 6.4.19 (Power On Card), clause 6.6.19 (Power On Card),), clause 12.6 (Command details), clause 12.7 (Device Identities), clause 12.12 (Result), clause 12.12.9 (Additional information for MultipleCard commands), clause 12.34 (Card ATR), clause 5.2 (Terminal Profile), 3GPP TS 11.14 [15] Annex H(Support of Multiple Card Operation), ISO /IEC 7816-3

27.22.4.19.1.3 Test Purpose

To verify that the ME starts a session with the additional card identified in the POWER ON CARD proactive SIM command, and successfully returns the Answer To Reset within the TERMINAL RESPONSE command send to the SIM.

The ME-Manufacturer can assign the card reader identifier from 0 to 7.

This test applies for MEs with only one additional card reader.

In this particular case the card reader identifier 1 is chosen.

27.22.4.19.1.4 Method of test

27.22.4.19.1.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The ME card reader is connected to the second SIM Simulator (SIM2).

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

If the ME supports a detachable card reader, the card reader shall be attached to the ME.

27.22.4.19.1.4.2 Procedure

Expected Sequence 1.1 (POWER ON CARD, card reader 1)

| Step | Direction | MESSAGE / Action | Comments |
|------|--------------|--|-------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: POWER ON CARD 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : POWER ON CARD 1.1.1 | [Power on card reader 1] |
| 4 | ME → SIM2 | RESET CARD | [Perform electrical initialisation] |
| 5 | SIM2 → ME | ANSWER TO RESET 1.1.1 | [ATR] |
| 6 | ME → SIM | TERMINAL RESPONSE : POWER ON CARD 1.1.1 | [ATR] |

PROACTIVE COMMAND : POWER ON CARD 1.1.1

Logically:

| | |
|---------------------|---------------|
| Command details | |
| Command number: | 1 |
| Command type: | POWER ON CARD |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | SIM |
| Destination device: | Card reader 1 |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 09 | 81 | 03 | 01 | 31 | 00 | 82 | 02 | 81 | 11 |
|----------|----|----|----|----|----|----|----|----|----|----|----|

ANSWER TO RESET 1.1.1

Logically:

| | |
|-----------------------------|------|
| TS (Initial character): | '3B' |
| T0 (Format character): | 0F |
| | |
| T1 (Historical character): | 'P' |
| T2 (Historical character): | 'o' |
| T3 (Historical character): | 'w' |
| T4 (Historical character): | 'e' |
| T5 (Historical character): | 'r' |
| T6 (Historical character): | 'O' |
| T7 (Historical character): | 'n' |
| T8 (Historical character): | 'C' |
| T9 (Historical character): | 'a' |
| T10 (Historical character): | 'r' |
| T11 (Historical character): | 'd' |
| T12 (Historical character): | 'T' |
| T13 (Historical character): | 'e' |
| T14 (Historical character): | 's' |
| T15 (Historical character): | 't' |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | A1 | 11 | 3B | 0F | 50 | 6F | 77 | 65 | 72 | 4F | 6E | 43 |
| | 61 | 72 | 64 | 54 | 65 | 74 | 75 | | | | | |

TERMINAL RESPONSE : POWER ON CARD 1.1.1

Logically:

| | |
|-----------------------------|-------------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | POWER ON CARD |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Card ATR | |
| TS (Initial character): | '3B' T0 (Format character): 0F |
| T1 (Historical character): | |
| T2 (Historical character): | 'P' |
| T3 (Historical character): | 'o' |
| T4 (Historical character): | 'w' |
| T5 (Historical character): | 'e' |
| T6 (Historical character): | 'r' |
| T7 (Historical character): | 'O' |
| T8 (Historical character): | 'n' |
| T9 (Historical character): | 'C' |
| T10 (Historical character): | 'a' |
| T11 (Historical character): | 'r' |
| T12 (Historical character): | 'd' |
| T13 (Historical character): | 'T' |
| T14 (Historical character): | 'e' |
| T15 (Historical character): | 's' |
| T16 (Historical character): | 't' |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 31 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A1 | 11 | 3B | 0F | 50 | 6F | 77 | 65 | 72 | 4F | 6E | 43 |
| | 61 | 72 | 64 | 54 | 65 | 74 | 75 | | | | | |

Expected Sequence 1.2 (POWER ON CARD, card reader 1, no ATR)

| Step | Direction | MESSAGE / Action | Comments |
|------|--------------|--|-------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: POWER ON CARD 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : POWER ON CARD 1.1.1 | [Power on card reader 1] |
| 4 | ME → SIM2 | RESET CARD | [Perform electrical initialisation] |
| 5 | SIM2 → ME | NO ATR | [No ATR] |
| 6 | ME → SIM | TERMINAL RESPONSE : POWER ON CARD 1.2.1 | [No ATR] |

TERMINAL RESPONSE : POWER ON CARD 1.2.1

Logically:

| Command details | |
|-------------------------|-----------------------------|
| Command number: | 1 |
| Command type: | POWER ON CARD |
| Command qualifier: | “00” |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | MultipleCard commands error |
| Additional information: | Card mute |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 31 | 00 | 82 | 02 | 82 | 81 | 83 | 02 | 38 |
| | 06 | | | | | | | | | | | |

Expected Sequence 1.3 (POWER ON CARD, card reader 1, no card inserted)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|-------------------------------|
| 1 | SIM2 | SIM2 is removed from ME card reader | |
| 2 | SIM → ME | PROACTIVE COMMAND PENDING: POWER ON CARD 1.1.1 | |
| 3 | ME → SIM | FETCH | |
| 4 | SIM → ME | PROACTIVE COMMAND : POWER ON CARD 1.1.1 | [Power on card reader 1] |
| 5 | ME → SIM | TERMINAL RESPONSE : POWER ON CARD 1.3.1 | [Card removed or not present] |

TERMINAL RESPONSE : POWER ON CARD 1.3.1

Logically:

| Command details | |
|-------------------------|-----------------------------|
| Command number: | 1 |
| Command type: | POWER ON CARD |
| Command qualifier: | “00” |
| Device identities | |
| Source device: | Card reader 0 |
| Destination device: | SIM |
| Result | |
| General Result: | MultipleCard commands error |
| Additional information: | Card removed or not present |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 31 | 00 | 82 | 02 | 82 | 81 | 83 | 02 | 38 |
| | 02 | | | | | | | | | | | |

27.22.4.19.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences

27.22.4.19.2 POWER ON CARD (detachable card reader)

27.22.4.19.2.1 Definition and applicability

See Section 3.2.2.

27.22.4.19.2.2 Conformance requirement

27.22.4.19.2.3 Test Purpose

To verify that the ME starts a session with the additional card identified in the POWER ON CARD proactive SIM command, and successfully returns the Answer To Reset within the TERMINAL RESPONSE command send to the SIM.

27.22.4.19.2.4 Method of test

27.22.4.19.2.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default with the following exceptions.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The card reader shall be detached from the ME.

27.22.4.19.2.4.2 Procedure

Expected Sequence 2.1 (POWER ON CARD, card reader 1, no card reader attached)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: POWER ON CARD 2.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : POWER ON CARD 2.1.1 | [Power on card reader 1] |
| 4 | ME → SIM | TERMINAL RESPONSE : POWER ON CARD 2.1.1 | [Card reader removed or not present] |

PROACTIVE COMMAND : POWER ON CARD 2.1.1

Logically:

| | |
|---------------------|---------------|
| Command details | |
| Command number: | 1 |
| Command type: | POWER ON CARD |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | SIM |
| Destination device: | Card reader 1 |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 09 | 81 | 03 | 01 | 31 | 00 | 82 | 02 | 81 | 11 |
|----------|----|----|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE : POWER ON CARD 1.1.1

Logically:

| | |
|-------------------------|------------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | POWER ON CARD |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | Card reader 0 |
| Destination device: | SIM |
| Result | |
| General Result: | MultipleCard commands error |
| Additional information: | Card reader removed or not present |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 31 | 00 | 82 | 02 | 82 | 81 | 83 | 02 | 38 |
| | 01 | | | | | | | | | | | |

27.22.4.19.2.5 Test Requirement

The ME shall operate in the manner defined in expected sequences

27.22.4.20 GET READER STATUS**27.22.4.20.1 GET READER STATUS (normal)****27.22.4.20.1.1 Definition and applicability**

See Section 3.2.2.

27.22.4.20.1.2 Conformance requirement

The ME shall support the Proactive SIM: Get Card Reader Status facility as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 6.1(Introduction), clause 5.2 (Terminal Profile), clause 6.4.20 (Get Reader Status), clause 6.6.20 (Get Reader Status), clause 6.8 (Terminal Response), clause 12.6 (Command Details), clause 12.7 (Device Identities), clause 12.33 (Card Reader Status), clause 12.57 (Card Reader Identifier), Annex H (Support of Multiple Card Operation)Additionally the ME shall support multiple card operation as defined in the following technical specifications:

3GPP TS 11.14 [] clause 6.4.19 (Power On Card), clause 6.6.19 (Power On Card), clause 6.4.18 (Power Off Card), 6.6.18 (Power Off Card)

27.22.4.20.1.3 Test Purpose

To verify that the ME sends starts a session with the additional card identified in the GET CARD READER STATUS proactive SIM command, and successfully returns information about all interfaces to additional card reader(s) in the TERMINAL RESPONSE command send to the SIM.

The ME-Manufacturer can assign the card reader identifier from 0 to 7.

This test applies for MEs with only one additional card reader.

In this particular case the card reader identifier 1 is chosen.

In this test case the second SIM-Simulator (SIM2) shall response with the ATR “3B 00”.

27.22.4.20.1.4 Method of test

27.22.4.20.1.4.1 Initial Conditions

The ME shall support the Proactive SIM: Get Card Reader Status (Card Reader Status) facility. The ME is connected to the SIM Simulator.

The ME card reader is connected to the second SIM Simulator (SIM2).

The elementary files are coded as SIM Application Toolkit default with the following exceptions.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

If the ME supports a detachable card reader, the card reader shall be attached to the ME.

Prior to this test the ME shall have powered on the second SIM Simulator (SIM2).

27.22.4.20.1.4.2 Procedure

Expected Sequence 1.1 (GET CARD READER STATUS, card reader 1, card inserted, card powered)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: POWER ON CARD 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND PENDING: POWER ON CARD 1.1.1 | [Power on card reader 1] |
| 4 | ME → SIM2 | RESET CARD | [Perform electrical initialisation] |
| 5 | SIM2 → ME | ANSWER TO RESET 1.1.1 | [ATR] |
| 6 | ME → SIM | TERMINAL RESPONSE : POWER ON CARD 1.1.1 | [ATR] |
| 7 | SIM → ME | PROACTIVE COMMAND PENDING: GET CARD READER STATUS 1.1.1 | |
| 8 | ME → SIM | FETCH | |
| 9 | SIM → ME | PROACTIVE COMMAND : GET CARD READER STATUS 1.1.1 | [Get Card Reader Status] |
| 10 | ME → SIM | TERMINAL RESPONSE : GET CARD READER STATUS 1.1.1a Or TERMINAL RESPONSE : GET CARD READER STATUS 1.1.1b or TERMINAL RESPONSE : GET CARD READER STATUS 1.1.1c or TERMINAL RESPONSE : GET CARD READER STATUS 1.1.1d | [Successful] [Successful] [Successful] [Successful] |

PROACTIVE COMMAND : POWER ON CARD 1.1.1

Logically:

Command details

| | |
|--------------------|---------------|
| Command number: | 1 |
| Command type: | POWER ON CARD |
| Command qualifier: | "00" |

Device identities

| | |
|---------------------|---------------|
| Source device: | SIM |
| Destination device: | Card reader 1 |

Coding:

BER-TLV: D0 09 81 03 01 31 00 82 02 81 11

ANSWER TO RESET 1.1.1

Logically:

| | |
|-------------------------|------|
| TS (Initial character): | '3B' |
| T0 (Format character): | '00' |

Coding:

| | | | | |
|----------|----|----|----|----|
| BER-TLV: | A1 | 02 | 3B | 00 |
|----------|----|----|----|----|

TERMINAL RESPONSE : POWER ON CARD 1.1.1

Logically:

| | |
|-------------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | POWER ON CARD |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Card ATR | |
| TS (Initial character): | '3B' |
| T0 (Format character): | '00' |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 31 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A1 | 02 | | 3B | 00 | | | | | | | |

PROACTIVE COMMAND : GET CARD READER STATUS 1.1.1

Logically:

| | |
|---------------------|------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | GET CARD READER STATUS |
| Command qualifier: | Card reader status |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 09 | 81 | 03 | 01 | 33 | 00 | 82 | 02 | 81 | 82 |
|----------|----|----|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE : GET CARD READER STATUS 1.1.1a

Logically:

| Command details | |
|--------------------------|--------------------------------|
| Command number: | 1 |
| Command type: | GET CARD READER STATUS |
| Command qualifier: | Card reader status |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Card reader status | |
| Identity of card reader: | '01' |
| Card reader removable: | 'No' |
| Card reader present: | Yes |
| Card reader ID-1 size: | 'Yes' |
| Card present in reader: | Yes |
| Card powered: | Yes |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 33 | 00 | 82 | 02 | 82 | 81 | 83 | 01 |
| | 00 | A0 | 01 | F1 | | | | | | | |

TERMINAL RESPONSE : GET CARD READER STATUS 1.1.1b

Logically:

| Command details | |
|--------------------------|--------------------------------|
| Command number: | 1 |
| Command type: | GET CARD READER STATUS |
| Command qualifier: | Card reader status |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Card reader status | |
| Identity of card reader: | '01' |
| Card reader removable: | 'No' |
| Card reader present: | Yes |
| Card reader ID-1 size: | 'No' |
| Card present in reader: | Yes |
| Card powered: | Yes |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 33 | 00 | 82 | 02 | 82 | 81 | 83 | 01 |
| | 00 | A0 | 01 | D1 | | | | | | | |

TERMINAL RESPONSE : GET CARD READER STATUS 1.1.1c

Logically:

| | |
|--------------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | GET CARD READER STATUS |
| Command qualifier: | Card reader status |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Card reader status | |
| Identity of card reader: | '01' |
| Card reader removable: | 'Yes' |
| Card reader present: | Yes |
| Card reader ID-1 size: | 'Yes' |
| Card present in reader: | Yes |
| Card powered: | Yes |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 33 | 00 | 82 | 02 | 82 | 81 | 83 | 01 |
| | 00 | A0 | 01 | | F9 | | | | | | |

TERMINAL RESPONSE : GET CARD READER STATUS 1.1.1d

Logically:

| | |
|--------------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | GET CARD READER STATUS |
| Command qualifier: | Card reader status |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Card reader status | |
| Identity of card reader: | '01' |
| Card reader removable: | 'Yes' |
| Card reader present: | Yes |
| Card reader ID-1 size: | 'No' |
| Card present in reader: | Yes |
| Card powered: | Yes |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 33 | 00 | 82 | 02 | 82 | 81 | 83 | 01 |
| | 00 | A0 | 01 | | D9 | | | | | | |

Expected Sequence 1.2 (GET CARD READER STATUS, card reader 1, card inserted, card not powered)

| Step | Direction | MESSAGE / Action | Comments |
|-------------|------------------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: POWER OFF CARD 1.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : POWER OFF CARD 1.2.1 | [Power off card reader 1] |
| 4 | ME → SIM2 | POWER OFF CARD | [Power off card reader 1] |
| 5 | ME → SIM | TERMINAL RESPONSE : POWER OFF CARD 1.2.1 | [Successful] |
| 6 | SIM → ME | PROACTIVE COMMAND PENDING: GET CARD READER STATUS 1.1.1 | |
| 7 | ME → SIM | FETCH | |
| 8 | SIM → ME | PROACTIVE COMMAND : GET CARD READER STATUS 1.1.1 | [Get Card Reader Status] |
| 9 | ME → SIM | TERMINAL RESPONSE : GET CARD READER STATUS 1.2.1a Or TERMINAL RESPONSE : GET CARD READER STATUS 1.2.1b or TERMINAL RESPONSE : GET CARD READER STATUS 1.2.1c Or TERMINAL RESPONSE : GET CARD READER STATUS 1.2.1d | [Successful] [Successful] [Successful] [Successful] [Successful] |

PROACTIVE COMMAND : POWER OFF CARD 1.2.1

Logically:

| | |
|---------------------|----------------|
| Command details | |
| Command number: | 1 |
| Command type: | POWER OFF CARD |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | SIM |
| Destination device: | Card reader 1 |

Coding:

BER-TLV: D0 09 81 03 01 32 00 82 02 81 11

TERMINAL RESPONSE : POWER OFF CARD 1.2.1

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | POWER OFF CARD |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 32 | 00 | 82 | 02 | 82 | 81 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE : GET CARD READER STATUS 1.2.1a

Logically:

| | |
|--------------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | GET CARD READER STATUS |
| Command qualifier: | Card reader status |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Card reader status | |
| Identity of card reader: | '01' |
| Card reader removable: | 'No' |
| Card reader present: | Yes |
| Card reader ID-1 size: | 'Yes' |
| Card present in reader: | Yes |
| Card powered: | No |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 33 | 00 | 82 | 02 | 82 | 81 | 83 | 01 |
| | 00 | A0 | 01 | | 71 | | | | | | |

TERMINAL RESPONSE : GET CARD READER STATUS 1.2.1b

Logically:

| | |
|--------------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | GET CARD READER STATUS |
| Command qualifier: | Card reader status |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Card reader status | |
| Identity of card reader: | '01' |
| Card reader removable: | 'No' |
| Card reader present: | Yes |
| Card reader ID-1 size: | 'No' |
| Card present in reader: | Yes |
| Card powered: | No |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 33 | 00 | 82 | 02 | 82 | 81 | 83 | 01 |
| | 00 | A0 | 01 | | 51 | | | | | | |

TERMINAL RESPONSE : GET CARD READER STATUS 1.2.1c

Logically:

| | |
|--------------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | GET CARD READER STATUS |
| Command qualifier: | Card reader status |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Card reader status | |
| Identity of card reader: | '01' |
| Card reader removable: | 'Yes' |
| Card reader present: | Yes |
| Card reader ID-1 size: | 'Yes' |
| Card present in reader: | Yes |
| Card powered: | No |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 33 | 00 | 82 | 02 | 82 | 81 | 83 | 01 |
| | 00 | A0 | 01 | 79 | | | | | | | |

TERMINAL RESPONSE : GET CARD READER STATUS 1.2.1d

Logically:

| | |
|--------------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | GET CARD READER STATUS |
| Command qualifier: | Card reader status |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Card reader status | |
| Identity of card reader: | '01' |
| Card reader removable: | 'Yes' |
| Card reader present: | Yes |
| Card reader ID-1 size: | 'No' |
| Card present in reader: | Yes |
| Card powered: | No |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 33 | 00 | 82 | 02 | 82 | 81 | 83 | 01 |
| | 00 | A0 | 01 | 59 | | | | | | | |

Expected Sequence 1.3 (GET CARD READER STATUS, card reader 1, card not present)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM2 | SIM2 is removed from ME card reader | |
| 2 | SIM → ME | PROACTIVE COMMAND PENDING: GET CARD READER STATUS 1.1.1 | |
| 3 | ME → SIM | FETCH | [Get Card Reader Status] |
| 4 | SIM → ME | PROACTIVE COMMAND : GET CARD READER STATUS 1.1.1 | [Successful] |
| 5 | ME → SIM | TERMINAL RESPONSE : GET CARD READER STATUS 1.3.1a Or TERMINAL RESPONSE : GET CARD READER STATUS 1.3.1b or TERMINAL RESPONSE : GET CARD READER STATUS 1.3.1c or TERMINAL RESPONSE : GET CARD READER STATUS 1.3.1d | [Successful] [Successful] [Successful] [Successful] |

TERMINAL RESPONSE : GET CARD READER STATUS 1.3.1a

Logically:

Command details

| | |
|--------------------|------------------------|
| Command number: | 1 |
| Command type: | GET CARD READER STATUS |
| Command qualifier: | Card reader status |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|--------------------------------|
| General Result: | Command performed successfully |
|-----------------|--------------------------------|

Card reader status

| | |
|--------------------------|-------|
| Identity of card reader: | '1' |
| Card reader removable: | 'No' |
| Card reader present: | Yes |
| Card reader ID-1 size: | 'Yes' |
| Card present in reader: | No |
| Card powered: | No |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 33 | 00 | 82 | 02 | 82 | 81 | 83 | 01 |
| | 00 | A0 | 01 | 31 | | | | | | | |

TERMINAL RESPONSE : GET CARD READER STATUS 1.3.1b

Logically:

| | |
|--------------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | GET CARD READER STATUS |
| Command qualifier: | card reader status |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Card reader status | |
| Identity of card reader: | '1' |
| Card reader removable: | 'No' |
| Card reader present: | Yes |
| Card reader ID-1 size: | 'No' |
| Card present in reader: | No |
| Card powered: | No |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 33 | 00 | 82 | 02 | 82 | 81 | 83 | 01 |
| | 00 | A0 | 01 | 11 | | | | | | | |

TERMINAL RESPONSE : GET CARD READER STATUS 1.3.1c

Logically:

| | |
|--------------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | GET CARD READER STATUS |
| Command qualifier: | card reader status |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Card reader status | |
| Identity of card reader: | '1' |
| Card reader removable: | 'Yes' |
| Card reader present: | Yes |
| Card reader ID-1 size: | 'Yes' |
| Card present in reader: | No |
| Card powered: | No |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 33 | 00 | 82 | 02 | 82 | 81 | 83 | 01 |
| | 00 | A0 | 01 | 39 | | | | | | | |

TERMINAL RESPONSE : GET CARD READER STATUS 1.3.1d

Logically:

| | |
|--------------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | GET CARD READER STATUS |
| Command qualifier: | Card reader status |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Card reader status | |
| Identity of card reader: | '1' |
| Card reader removable: | 'Yes' |
| Card reader present: | Yes |
| Card reader ID-1 size: | 'No' |
| Card present in reader: | No |
| Card powered: | No |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 33 | 00 | 82 | 02 | 82 | 81 | 83 | 01 |
| | 00 | A0 | 01 | | 19 | | | | | | |

27.22.4.20.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences

27.22.4.20.2 GET CARD READER STATUS (detachable card reader)**27.22.4.20.2.1 Definition and applicability**

See Section 3.2.2.

27.22.4.20.2.2 Conformance requirement**27.22.4.20.2.3 Test Purpose**

To verify that the ME closes a session with the additional card identified in the GET CARD READER STATUS proactive SIM command, and successfully returns result in the TERMINAL RESPONSE command send to the SIM.

27.22.4.20.2.4 Method of test**27.22.4.20.2.4.1 Initial Conditions**

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default with the following exceptions.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

Prior to this test the ME shall have powered on the second SIM Simulator (SIM2).

The card reader shall be detached from the ME.

27.22.4.20.2.4.2 Procedure

Expected Sequence 2.1 (GET CARD READER STATUS, no card reader attached)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET CARD READER STATUS 2.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET CARD READER STATUS 2.1.1 | [Get Card Reader Status] |
| 4 | ME → SIM | TERMINAL RESPONSE : GET CARD READER STATUS 2.1.1a or TERMINAL RESPONSE : GET CARD READER STATUS 2.1.1b | [Successful] [Successful] |

PROACTIVE COMMAND : GET CARD READER STATUS 2.1.1

Logically:

Command details

| | |
|--------------------|------------------------|
| Command number: | 1 |
| Command type: | GET CARD READER STATUS |
| Command qualifier: | Card Reader Status |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Coding:

BER-TLV: D0 09 81 03 01 33 00 82 02 81 82

TERMINAL RESPONSE : GET CARD READER STATUS 2.1.1a

Logically:

Command details

| | |
|--------------------|------------------------|
| Command number: | 1 |
| Command type: | GET CARD READER STATUS |
| Command qualifier: | Card reader status |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|--------------------------------|
| General Result: | Command performed successfully |
|-----------------|--------------------------------|

Card reader status

| | |
|--------------------------|-----|
| Identity of card reader: | 01 |
| Card reader removable: | Yes |
| Card reader present: | No |
| Card reader ID-1 size: | Yes |
| Card present in reader: | No |
| Card powered: | No |

Coding:

BER-TLV: 81 03 01 33 00 82 02 82 81 83 01
00 A0 01 29

TERMINAL RESPONSE : GET CARD READER STATUS 2.1.1b

Logically:

| | |
|--------------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | GET CARD READER STATUS |
| Command qualifier: | Card reader status |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Card reader status | |
| Identity of card reader: | 01 |
| Card reader removable: | Yes |
| Card reader present: | No |
| Card reader ID-1 size: | No |
| Card present in reader: | No |
| Card powered: | No |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 33 | 00 | 82 | 02 | 82 | 81 | 83 | 01 |
| | 00 | A0 | 01 | 09 | | | | | | | |

27.22.4.20.2.5 Test Requirement

The ME shall operate in the manner defined in expected sequences

27.22.4.21 TIMER MANAGEMENT and ENVELOPE TIMER EXPIRATION

27.22.4.21.1 TIMER MANAGEMENT (normal)

27.22.4.21.1.1 Definition and applicability

See Section 3.2.2.

27.22.4.21.1.2 Conformance Requirement

The ME shall support the TIMER MANAGEMENT as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.21 (Timer Management), clause 6.8 (Terminal Response), clause 12.6 (Commands details), clause 12.7 (Device Identities), clause 12.37 (Timer Identifier), clause 12.38 (Timer Value).

27.22.4.21.1.3 Test Purpose

To verify that the ME manages correctly its internal timers, start a timer, deactivate a timer or return the current value of a timer according to the Timer Identifier defined in the TIMER MANAGEMENT proactive SIM command.

27.22.4.21.1.4 Method of Test

27.22.4.21.1.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default with the following exceptions.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.4.21.1.4.2 Procedure

Expected Sequence 1.1 (TIMER MANAGEMENT, start timer 1 several times, get the current value of the timer and deactivate the timer successfully)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.1.1 | [start timer 1] |
| 4 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.1.1 | [command performed successfully] |
| 5 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.1.2 | After 1 minute following reception of Terminal Response |
| 6 | ME → SIM | FETCH | |
| 7 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.1.2 | [ask value of timer 1] |
| 8 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.1.2 | [command performed successfully] |
| 9 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.1.3 | Before timer expires! |
| 10 | ME → SIM | FETCH | |
| 11 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.1.3 | [reinitialise timer 1] |
| 12 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.1.3 | [command performed successfully] |
| 13 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.1.4 | After 30 seconds following reception of the Terminal Response |
| 14 | ME → SIM | FETCH | |
| 15 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.1.4 | [deactivate timer 1] |
| 16 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.1.4 | [command performed successfully] |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.1.1

Logically:

Command details

| | |
|--------------------|------------------|
| Command number: | 1 |
| Command type: | TIMER MANAGEMENT |
| Command qualifier: | start the Timer |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Timer identifier:

| | |
|----------------------|---|
| Identifier of timer: | 1 |
|----------------------|---|

Timer value:

| | |
|-----------------|-------|
| Value of timer: | 5 min |
|-----------------|-------|

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 11 | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 01 | A5 | 03 | 00 | 50 | 00 | | | | | |

PROACTIVE COMMAND : TIMER MANAGEMENT 1.1.2

Logically:

Command details

| | |
|--------------------|------------------------------------|
| Command number: | 1 |
| Command type: | TIMER MANAGEMENT |
| Command qualifier: | get the current value of the Timer |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Timer identifier:

| | |
|----------------------|---|
| Identifier of timer: | 1 |
|----------------------|---|

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 27 | 10 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 01 | | | | | | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.1.3

Logically:

Command details
 Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer
 Device identities
 Source device: SIM
 Destination device: ME
 Timer identifier:
 Identifier of timer: 1
 Timer value:
 Value of timer: 1min 30sec

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 11 | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 01 | A5 | 03 | 00 | 10 | 03 | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.1.4

Logically:

Command details
 Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: deactivate the Timer
 Device identities
 Source device: SIM
 Destination device: ME
 Timer identifier:
 Identifier of timer: 1

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 01 | | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.1.1 and 1.1.3

Logically:

Command details

| | |
|--------------------|------------------|
| Command number: | 1 |
| Command type: | TIMER MANAGEMENT |
| Command qualifier: | start the Timer |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|--------------------------------|
| General Result: | Command performed successfully |
|-----------------|--------------------------------|

Timer identifier:

| | |
|----------------------|---|
| Identifier of timer: | 1 |
|----------------------|---|

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A4 | 01 | 01 | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.1.2

Logically:

Command details

| | |
|--------------------|------------------------------------|
| Command number: | 1 |
| Command type: | TIMER MANAGEMENT |
| Command qualifier: | get the current value of the Timer |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|--------------------------------|
| General Result: | Command performed successfully |
|-----------------|--------------------------------|

Timer identifier:

| | |
|----------------------|---|
| Identifier of timer: | 1 |
|----------------------|---|

Timer value:

| | |
|-----------------|---|
| value of timer: | value < to the timer value of command 1.1.1 |
|-----------------|---|

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 10 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A4 | 01 | 01 | A5 | 03 | xx | xx | xx | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.1.4

Logically:

| | |
|----------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | TIMER MANAGEMENT |
| Command qualifier: | deactivate the Timer |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Timer identifier: | |
| Identifier of timer: | 1 |
| Timer value: | |
| value of timer: | value < to the timer value of command 1.1.3 |

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A4 | 01 | 01 | A5 | 03 | xx | xx | xx | | | | |

Expected Sequence 1.2 (TIMER MANAGEMENT, start timer 2 several times, get the current value of the timer and deactivate the timer successfully)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.2.1 | [start timer 2] |
| 4 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.2.1 | [command performed successfully] |
| 5 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.2.2 | After 1 minute following reception of Terminal Response |
| 6 | ME → SIM | FETCH | |
| 7 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.2.2 | [ask value of timer 2] |
| 8 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.2.2 | [command performed successfully] |
| 9 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.2.3 | Before timer expires! |
| 10 | ME → SIM | FETCH | |
| 11 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.2.3 | [reinitialise timer 2] |
| 12 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.2.3 | [command performed successfully] |
| 13 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.2.4 | After 10 seconds following reception of Terminal Response |
| 14 | ME → SIM | FETCH | |
| 15 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.2.4 | [deactivate timer 2] |
| 16 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.2.4 | [command performed successfully] |

PROACTIVE COMMAND:TIMER MANAGEMENT 1.2.1

Logically:

Command details

| | |
|--------------------|------------------|
| Command number: | 1 |
| Command type: | TIMER MANAGEMENT |
| Command qualifier: | start the Timer |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Timer identifier:

| | |
|----------------------|---|
| Identifier of timer: | 2 |
|----------------------|---|

Timer value:

| | |
|-----------------|-----------------|
| Value of timer: | 23h 59min 59sec |
|-----------------|-----------------|

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 11 | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 02 | A5 | 03 | 32 | 95 | 95 | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.2.2

Logically:

Command details

| | |
|--------------------|------------------------------------|
| Command number: | 1 |
| Command type: | TIMER MANAGEMENT |
| Command qualifier: | get the current value of the Timer |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Timer identifier:

| | |
|----------------------|---|
| Identifier of timer: | 2 |
|----------------------|---|

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 27 | 10 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 02 | | | | | | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.2.3

Logically:

Command details
 Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer
 Device identities
 Source device: SIM
 Destination device: ME
 Timer identifier:
 Identifier of timer: 2
 Timer value:
 Value of timer: 40 sec

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 11 | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 02 | A5 | 03 | 00 | 00 | 04 | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.2.4

Logically:

Command details
 Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: deactivate the Timer
 Device identities
 Source device: SIM
 Destination device: ME
 Timer identifier:
 Identifier of timer: 2

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 02 | | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.2.1 and 1.2.3

Logically:

Command details

| | |
|--------------------|------------------|
| Command number: | 1 |
| Command type: | TIMER MANAGEMENT |
| Command qualifier: | start the Timer |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|--------------------------------|
| General Result: | Command performed successfully |
|-----------------|--------------------------------|

Timer identifier:

| | |
|----------------------|---|
| Identifier of timer: | 2 |
|----------------------|---|

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A4 | 01 | 02 | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.2.2

Logically:

Command details

| | |
|--------------------|------------------------------------|
| Command number: | 1 |
| Command type: | TIMER MANAGEMENT |
| Command qualifier: | get the current value of the Timer |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|--------------------------------|
| General Result: | Command performed successfully |
|-----------------|--------------------------------|

Timer identifier:

| | |
|----------------------|---|
| Identifier of timer: | 2 |
|----------------------|---|

Timer value:

| | |
|-----------------|---|
| value of timer: | value < to the timer value of command 1.2.1 |
|-----------------|---|

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 10 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A4 | 01 | 02 | A5 | 03 | xx | xx | xx | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.2.4

Logically:

| | |
|----------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | TIMER MANAGEMENT |
| Command qualifier: | deactivate the Timer |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Timer identifier: | |
| Identifier of timer: | 2 |
| Timer value: | |
| value of timer: | value < to the timer value of command 1.2.3 |

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A4 | 01 | 02 | A5 | 03 | xx | xx | xx | | | | |

Expected Sequence 1.3 (TIMER MANAGEMENT, start timer 8 several times, get the current value of the timer and deactivate the timer successfully)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.3.1 | [start timer 8] |
| 4 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.3.1 | [command performed successfully] |
| 5 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.3.2 | After 1 minute following reception of Terminal Response |
| 6 | ME → SIM | FETCH | |
| 7 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.3.2 | [ask value of timer 8] |
| 8 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.3.2 | [command performed successfully] |
| 9 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.3.3 | Before timer expires! |
| 10 | ME → SIM | FETCH | |
| 11 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.3.3 | [reinitialise timer 8] |
| 12 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.3.3 | [command performed successfully] |
| 13 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.3.4 | After 30 seconds following reception of Terminal Response |
| 14 | ME → SIM | FETCH | |
| 15 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.3.4 | [deactivate timer 8] |
| 16 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.3.4 | [command performed successfully] |

PROACTIVE COMMAND:TIMER MANAGEMENT 1.3.1

Logically:

Command details
 Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer
 Device identities
 Source device: SIM
 Destination device: ME
 Timer identifier:
 Identifier of timer: 8
 Timer value:
 Value of timer: 20min

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 11 | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 08 | A5 | 03 | 00 | 02 | 00 | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.3.2

Logically:

Command details
 Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: get the current value of the Timer
 Device identities
 Source device: SIM
 Destination device: ME
 Timer identifier:
 Identifier of timer: 8

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 27 | 10 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 08 | | | | | | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.3.3

Logically:

Command details
 Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer
 Device identities
 Source device: SIM
 Destination device: ME
 Timer identifier:
 Identifier of timer: 8
 Timer value:
 Value of timer: 01h 00min 00sec

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 11 | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 08 | A5 | 03 | 10 | 00 | 00 | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.3.4

Logically:

Command details
 Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: deactivate the Timer
 Device identities
 Source device: SIM
 Destination device: ME
 Timer identifier:
 Identifier of timer: 8

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 08 | | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.3.1 and 1.3.3

Logically:

Command details

| | |
|--------------------|------------------|
| Command number: | 1 |
| Command type: | TIMER MANAGEMENT |
| Command qualifier: | start the Timer |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|--------------------------------|
| General Result: | Command performed successfully |
|-----------------|--------------------------------|

Timer identifier:

| | |
|----------------------|---|
| Identifier of timer: | 8 |
|----------------------|---|

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A4 | 01 | 08 | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.3.2

Logically:

Command details

| | |
|--------------------|------------------------------------|
| Command number: | 1 |
| Command type: | TIMER MANAGEMENT |
| Command qualifier: | get the current value of the Timer |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|--------------------------------|
| General Result: | Command performed successfully |
|-----------------|--------------------------------|

Timer identifier:

| | |
|----------------------|---|
| Identifier of timer: | 8 |
|----------------------|---|

Timer value:

| | |
|-----------------|---|
| value of timer: | value < to the timer value of command 1.3.1 |
|-----------------|---|

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 10 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A4 | 01 | 08 | A5 | 03 | xx | xx | xx | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.3.4

Logically:

| | |
|----------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | TIMER MANAGEMENT |
| Command qualifier: | deactivate the Timer |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Timer identifier: | |
| Identifier of timer: | 8 |
| Timer value: | |
| value of timer: | value < to the timer value of command 1.3.3 |

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A4 | 01 | 08 | A5 | 03 | xx | xx | xx | | | | |

Expected Sequence1.4 (TIMER MANAGEMENT, try to get the current value of a timer which is not started:
action in contradiction with the current timer state)

| Step | Direction | MESSAGE / Action | Comments |
|-------------|------------------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.4.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.1 | [get current value from timer 1] |
| 4 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.1 | [action in contradiction with the current timer state] |
| 5 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.4.2 | |
| 6 | ME → SIM | FETCH | |
| 7 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.2 | [get current value from timer 2] |
| 8 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.2 | [action in contradiction with the current timer state] |
| 9 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.4.3 | |
| 10 | ME → SIM | FETCH | |
| 11 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.3 | [get current value from timer 3] |
| 12 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.3 | [action in contradiction with the current timer state] |
| 13 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.4.4 | |
| 14 | ME → SIM | FETCH | |
| 15 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.4 | [get current value from timer 4] |
| 16 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.4 | [action in contradiction with the current timer state] |
| 13 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.4.5 | |
| 14 | ME → SIM | FETCH | |
| 15 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.5 | [get current value from timer 5] |
| 16 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.5 | [action in contradiction with the current timer state] |
| 13 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.4.6 | |
| 14 | ME → SIM | FETCH | |
| 15 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.6 | [get current value from timer 6] |
| 16 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.6 | [action in contradiction with the current timer state] |
| 13 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.4.7 | |
| 14 | ME → SIM | FETCH | |
| 15 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.7 | [get current value from timer 7] |
| 16 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.7 | [action in contradiction with the current timer state] |
| 13 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.4.8 | |
| 14 | ME → SIM | FETCH | |
| 15 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.8 | [get current value from timer 8] |
| 16 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.8 | [action in contradiction with the current timer state] |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.1

Logically:

Command details

| | |
|--------------------|------------------------------------|
| Command number: | 1 |
| Command type: | TIMER MANAGEMENT |
| Command qualifier: | get the current value of the Timer |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Timer identifier:

| | |
|----------------------|---|
| Identifier of timer: | 1 |
|----------------------|---|

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 27 | 10 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 01 | | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.1

Logically:

Command details

| | |
|--------------------|----------------------------------|
| Command number: | 1 |
| Command type: | TIMER MANAGEMENT |
| Command qualifier: | get current value from the Timer |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|--|
| General Result: | Action in contradiction with the current timer state |
|-----------------|--|

Timer identifier:

| | |
|----------------------|---|
| Identifier of timer: | 1 |
|----------------------|---|

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 10 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
| | A4 | 01 | 01 | | | | | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.2

Logically:

| | | | | | | | | | | | | |
|----------------------|----|----|----|----|----|----|----|----|----|----|------------------------------------|----|
| Command details | | | | | | | | | | | | |
| Command number: | | | | | | | | | | | 1 | |
| Command type: | | | | | | | | | | | TIMER MANAGEMENT | |
| Command qualifier: | | | | | | | | | | | get the current value of the Timer | |
| Device identities | | | | | | | | | | | | |
| Source device: | | | | | | | | | | | SIM | |
| Destination device: | | | | | | | | | | | ME | |
| Timer identifier: | | | | | | | | | | | | |
| Identifier of timer: | | | | | | | | | | | 2 | |
| Coding : | | | | | | | | | | | | |
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 27 | 10 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 02 | | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.2

Logically:

| | | | | | | | | | | | | |
|----------------------|----|----|----|----|----|----|----|----|----|----|--|----|
| Command details | | | | | | | | | | | | |
| Command number: | | | | | | | | | | | 1 | |
| Command type: | | | | | | | | | | | TIMER MANAGEMENT | |
| Command qualifier: | | | | | | | | | | | get current value from the Timer | |
| Device identities | | | | | | | | | | | | |
| Source device: | | | | | | | | | | | ME | |
| Destination device: | | | | | | | | | | | SIM | |
| Result | | | | | | | | | | | | |
| General Result: | | | | | | | | | | | Action in contradiction with the current timer state | |
| Timer identifier: | | | | | | | | | | | | |
| Identifier of timer: | | | | | | | | | | | 2 | |
| Coding : | | | | | | | | | | | | |
| BER-TLV: | 81 | 03 | 01 | 27 | 10 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
| | A4 | 01 | 02 | | | | | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.3

Logically:

| | | | | | | | | | | | | |
|----------------------|----|----|----|----|----|----|----|----|----|----|------------------------------------|----|
| Command details | | | | | | | | | | | | |
| Command number: | | | | | | | | | | | 1 | |
| Command type: | | | | | | | | | | | TIMER MANAGEMENT | |
| Command qualifier: | | | | | | | | | | | get the current value of the Timer | |
| Device identities | | | | | | | | | | | | |
| Source device: | | | | | | | | | | | SIM | |
| Destination device: | | | | | | | | | | | ME | |
| Timer identifier: | | | | | | | | | | | | |
| Identifier of timer: | | | | | | | | | | | 3 | |
| Coding : | | | | | | | | | | | | |
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 27 | 10 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 03 | | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.3

Logically:

| | |
|----------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | TIMER MANAGEMENT |
| Command qualifier: | get current value from the Timer |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Action in contradiction with the current timer state |
| Timer identifier: | |
| Identifier of timer: | 3 |

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 10 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
| | A4 | 01 | 03 | | | | | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.4

Logically:

| | |
|----------------------|------------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | TIMER MANAGEMENT |
| Command qualifier: | get the current value of the Timer |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| Timer identifier: | |
| Identifier of timer: | 4 |

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 27 | 10 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 04 | | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.4

Logically:

| | |
|----------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | TIMER MANAGEMENT |
| Command qualifier: | get current value from the Timer |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Action in contradiction with the current timer state |
| Timer identifier: | |
| Identifier of timer: | 4 |

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 10 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
| | A4 | 01 | 04 | | | | | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.5

Logically:

| | |
|----------------------|------------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | TIMER MANAGEMENT |
| Command qualifier: | get the current value of the Timer |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| Timer identifier: | |
| Identifier of timer: | 5 |

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 27 | 10 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 05 | | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.5

Logically:

| | |
|----------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | TIMER MANAGEMENT |
| Command qualifier: | get current value from the Timer |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Action in contradiction with the current timer state |
| Timer identifier: | |
| Identifier of timer: | 5 |

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 10 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
| | A4 | 01 | 05 | | | | | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.6

Logically:

| | |
|----------------------|------------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | TIMER MANAGEMENT |
| Command qualifier: | get the current value of the Timer |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| Timer identifier: | |
| Identifier of timer: | 6 |

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 27 | 10 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 06 | | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.6

Logically:

Command details

| | |
|--------------------|----------------------------------|
| Command number: | 1 |
| Command type: | TIMER MANAGEMENT |
| Command qualifier: | get current value from the Timer |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|--|
| General Result: | Action in contradiction with the current timer state |
|-----------------|--|

Timer identifier:

| | |
|----------------------|---|
| Identifier of timer: | 6 |
|----------------------|---|

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 10 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
| | A4 | 01 | 06 | | | | | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.7

Logically:

Command details

| | |
|--------------------|------------------------------------|
| Command number: | 1 |
| Command type: | TIMER MANAGEMENT |
| Command qualifier: | get the current value of the Timer |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Timer identifier:

| | |
|----------------------|---|
| Identifier of timer: | 7 |
|----------------------|---|

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 27 | 10 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 07 | | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.7

Logically:

| | |
|----------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | TIMER MANAGEMENT |
| Command qualifier: | get current value from the Timer |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Action in contradiction with the current timer state |
| Timer identifier: | |
| Identifier of timer: | 7 |

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 10 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
| | A4 | 01 | 07 | | | | | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.4.8

Logically:

| | |
|----------------------|------------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | TIMER MANAGEMENT |
| Command qualifier: | get the current value of the Timer |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| Timer identifier: | |
| Identifier of timer: | 8 |

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 27 | 10 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 08 | | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.4.8

Logically:

| | |
|----------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | TIMER MANAGEMENT |
| Command qualifier: | get current value from the Timer |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Action in contradiction with the current timer state |
| Timer identifier: | |
| Identifier of timer: | 8 |

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 10 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
| | A4 | 01 | 08 | | | | | | | | | |

Expected Sequence 1.5 (TIMER MANAGEMENT, try to deactivate a timer which is not started: action in contradiction with the current timer state)

| Step | Direction | MESSAGE / Action | Comments |
|-------------|------------------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.5.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.1 | [deactivate timer 1] |
| 4 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.1 | [action in contradiction with the current timer state] |
| 5 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.5.2 | |
| 6 | ME → SIM | FETCH | |
| 7 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.2 | [deactivate timer 2] |
| 8 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.2 | [action in contradiction with the current timer state] |
| 9 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.5.3 | |
| 10 | ME → SIM | FETCH | |
| 11 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.3 | [deactivate timer 3] |
| 12 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.3 | [action in contradiction with the current timer state] |
| 13 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.5.4 | |
| 14 | ME → SIM | FETCH | |
| 15 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.4 | [deactivate timer 4] |
| 16 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.4 | [action in contradiction with the current timer state] |
| 13 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.5.5 | |
| 14 | ME → SIM | FETCH | |
| 15 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.5 | [deactivate timer 5] |
| 16 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.5 | [action in contradiction with the current timer state] |
| 13 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.5.6 | |
| 14 | ME → SIM | FETCH | |
| 15 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.6 | [deactivate timer 6] |
| 16 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.6 | [action in contradiction with the current timer state] |
| 13 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.5.7 | |
| 14 | ME → SIM | FETCH | |
| 15 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.7 | [deactivate timer 7] |
| 16 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.7 | [action in contradiction with the current timer state] |
| 13 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.5.8 | |
| 14 | ME → SIM | FETCH | |
| 15 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.8 | [deactivate timer 8] |
| 16 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.8 | [action in contradiction with the current timer state] |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.1

Logically:

Command details
 Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: deactivate the Timer
 Device identities
 Source device: SIM
 Destination device: ME
 Timer identifier:
 Identifier of timer: 1

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 01 | | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.1

Logically:

Command details
 Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: Deactivate Timer
 Device identities
 Source device: ME
 Destination device: SIM
 Result
 General Result: Action in contradiction with the current timer state
 Timer identifier:
 Identifier of timer: 1

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
| | A4 | 01 | 01 | | | | | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.2

Logically:

Command details
 Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: deactivate the Timer
 Device identities
 Source device: SIM
 Destination device: ME
 Timer identifier:
 Identifier of timer: 2

Coding :
 BER-TLV: D0 0C 81 03 01 27 01 82 02 81 82 A4
 01 02

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.2

Logically:

Command details
 Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: Deactivate Timer
 Device identities
 Source device: ME
 Destination device: SIM
 Result
 General Result: Action in contradiction with the current timer state
 Timer identifier:
 Identifier of timer: 2

Coding :
 BER-TLV: 81 03 01 27 01 82 02 82 81 83 01 24
 A4 01 02

PROACTIVE COMMAND3: TIMER MANAGEMENT 1.5.3

Logically:

Command details
 Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: deactivate the Timer
 Device identities
 Source device: SIM
 Destination device: ME
 Timer identifier:
 Identifier of timer: 3

Coding :
 BER-TLV: D0 0C 81 03 01 27 01 82 02 81 82 A4
 01 03

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.3

Logically:

| | |
|----------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | TIMER MANAGEMENT |
| Command qualifier: | Deactivate Timer |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Action in contradiction with the current timer state |
| Timer identifier: | |
| Identifier of timer: | 3 |

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
| | A4 | 01 | 03 | | | | | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.4

Logically:

| | |
|----------------------|----------------------|
| Command details | |
| Command number: | 1 |
| Command type: | TIMER MANAGEMENT |
| Command qualifier: | deactivate the Timer |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| Timer identifier: | |
| Identifier of timer: | 4 |

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 04 | | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.4

Logically:

| | |
|----------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | TIMER MANAGEMENT |
| Command qualifier: | Deactivate Timer |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Action in contradiction with the current timer state |
| Timer identifier: | |
| Identifier of timer: | 4 |

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
| | A4 | 01 | 04 | | | | | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.5

Logically:

| | |
|----------------------|----------------------|
| Command details | |
| Command number: | 1 |
| Command type: | TIMER MANAGEMENT |
| Command qualifier: | deactivate the Timer |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| Timer identifier: | |
| Identifier of timer: | 5 |

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 05 | | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.5

Logically:

| | |
|----------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | TIMER MANAGEMENT |
| Command qualifier: | Deactivate Timer |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Action in contradiction with the current timer state |
| Timer identifier: | |
| Identifier of timer: | 5 |

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
| | A4 | 01 | 05 | | | | | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.6

Logically:

| | |
|----------------------|----------------------|
| Command details | |
| Command number: | 1 |
| Command type: | TIMER MANAGEMENT |
| Command qualifier: | deactivate the Timer |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| Timer identifier: | |
| Identifier of timer: | 6 |

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 06 | | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.6

Logically:

| | |
|----------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | TIMER MANAGEMENT |
| Command qualifier: | Deactivate Timer |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Action in contradiction with the current timer state |
| Timer identifier: | |
| Identifier of timer: | 6 |

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
| | A4 | 01 | 06 | | | | | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.7

Logically:

| | |
|----------------------|----------------------|
| Command details | |
| Command number: | 1 |
| Command type: | TIMER MANAGEMENT |
| Command qualifier: | deactivate the Timer |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| Timer identifier: | |
| Identifier of timer: | 7 |

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 07 | | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.7

Logically:

| | |
|----------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | TIMER MANAGEMENT |
| Command qualifier: | Deactivate Timer |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Action in contradiction with the current timer state |
| Timer identifier: | |
| Identifier of timer: | 7 |

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
| | A4 | 01 | 07 | | | | | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.5.8

Logically:

| | |
|----------------------|----------------------|
| Command details | |
| Command number: | 1 |
| Command type: | TIMER MANAGEMENT |
| Command qualifier: | deactivate the Timer |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| Timer identifier: | |
| Identifier of timer: | 8 |

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 08 | | | | | | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.5.8

Logically:

| | |
|----------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | TIMER MANAGEMENT |
| Command qualifier: | Deactivate Timer |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Action in contradiction with the current timer state |
| Timer identifier: | |
| Identifier of timer: | 8 |

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 24 |
| | A4 | 01 | 08 | | | | | | | | | |

Expected Sequence 1.6 (TIMER MANAGEMENT, start 8 timers successfully)

| Step | Direction | MESSAGE / Action | Comments |
|-------------|------------------|---|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.1 | [timer 1] |
| 4 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.1 | [command performed successfully] |
| 5 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.2 | |
| 6 | ME → SIM | FETCH | |
| 7 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.2 | [timer 2] |
| 8 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.2 | [command performed successfully] |
| 9 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.3 | |
| 10 | ME → SIM | FETCH | |
| 11 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.3 | [timer 3] |
| 12 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.3 | [command performed successfully] |
| 13 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.4 | |
| 14 | ME → SIM | FETCH | |
| 15 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.4 | [timer 4] |
| 16 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.4 | [command performed successfully] |
| 17 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.5 | |
| 18 | ME → SIM | FETCH | |
| 19 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.5 | [timer 5] |
| 20 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.5 | [command performed successfully] |
| 21 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.6 | |
| 22 | ME → SIM | FETCH | |
| 23 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.6 | [timer 6] |
| 24 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.6 | [command performed successfully] |
| 25 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.7 | |
| 26 | ME → SIM | FETCH | |
| 27 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.6 | [timer 7] |
| 28 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7 | [command performed successfully] |
| 29 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 1.6.8 | |
| 30 | ME → SIM | FETCH | |
| 31 | | PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.8 | [timer 8] |
| 32 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.8 | [command performed successfully] |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.1

Logically:

| | | | | | | | | | | | | |
|----------------------|------------------|----|----|----|----|----|----|----|----|----|----|----|
| Command details | | | | | | | | | | | | |
| Command number: | 1 | | | | | | | | | | | |
| Command type: | TIMER MANAGEMENT | | | | | | | | | | | |
| Command qualifier: | start the Timer | | | | | | | | | | | |
| Device identities | | | | | | | | | | | | |
| Source device: | SIM | | | | | | | | | | | |
| Destination device: | ME | | | | | | | | | | | |
| Timer identifier: | | | | | | | | | | | | |
| Identifier of timer: | 1 | | | | | | | | | | | |
| Timer value: | | | | | | | | | | | | |
| Value of timer: | 5 sec | | | | | | | | | | | |
| Coding : | | | | | | | | | | | | |
| BER-TLV: | D0 | 11 | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 01 | A5 | 03 | 00 | 00 | 50 | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.1

Logically:

| | | | | | | | | | | | |
|----------------------|--------------------------------|--|--|--|--|--|--|--|--|--|--|
| Command details | | | | | | | | | | | |
| Command number: | 1 | | | | | | | | | | |
| Command type: | TIMER MANAGEMENT | | | | | | | | | | |
| Command qualifier: | start the Timer | | | | | | | | | | |
| Device identities | | | | | | | | | | | |
| Source device: | ME | | | | | | | | | | |
| Destination device: | SIM | | | | | | | | | | |
| Result | | | | | | | | | | | |
| General Result: | Command performed successfully | | | | | | | | | | |
| Timer identifier: | | | | | | | | | | | |
| Identifier of timer: | 1 | | | | | | | | | | |

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| Coding : | | | | | | | | | | | | |
| BER-TLV: | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A4 | 01 | 01 | | | | | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.2

Logically:

Command details
 Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer
 Device identities
 Source device: SIM
 Destination device: ME
 Timer identifier:
 Identifier of timer: 2
 Timer value:
 Value of timer: 5sec

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 11 | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 02 | A5 | 03 | 00 | 00 | 50 | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.2

Logically:

Command details
 Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer
 Device identities
 Source device: ME
 Destination device: SIM
 Result
 General Result: Command performed successfully
 Timer identifier:
 Identifier of timer: 2

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A4 | 01 | 02 | | | | | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.3

Logically:

Command details
 Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer
 Device identities
 Source device: SIM
 Destination device: ME
 Timer identifier:
 Identifier of timer: 3
 Timer value:
 Value of timer: 5sec

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 11 | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 03 | A5 | 03 | 00 | 00 | 50 | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.3

Logically:

Command details
 Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer
 Device identities
 Source device: ME
 Destination device: SIM
 Result
 General Result: Command performed successfully
 Timer identifier:
 Identifier of timer: 3

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A4 | 01 | 03 | | | | | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.4

Logically:

Command details
 Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer
 Device identities
 Source device: SIM
 Destination device: ME
 Timer identifier:
 Identifier of timer: 4
 Timer value:
 Value of timer: 5sec

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 11 | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 04 | A5 | 03 | 00 | 00 | 50 | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.4

Logically:

Command details
 Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer
 Device identities
 Source device: ME
 Destination device: SIM
 Result
 General Result: Command performed successfully
 Timer identifier:
 Identifier of timer: 4

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A4 | 01 | 04 | | | | | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.5

Logically:

Command details
 Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer
 Device identities
 Source device: SIM
 Destination device: ME
 Timer identifier:
 Identifier of timer: 5
 Timer value:
 Value of timer: 5sec

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 11 | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 05 | A5 | 03 | 00 | 00 | 50 | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.5

Logically:

| | |
|----------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | TIMER MANAGEMENT |
| Command qualifier: | start the Timer |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Timer identifier: | |
| Identifier of timer: | 5 |

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A4 | 01 | 05 | | | | | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.6

Logically:

| | |
|----------------------|------------------|
| Command details | |
| Command number: | 1 |
| Command type: | TIMER MANAGEMENT |
| Command qualifier: | start the Timer |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| Timer identifier: | |
| Identifier of timer: | 6 |
| Timer value: | |
| Value of timer: | 5sec |

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 11 | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 06 | A5 | 03 | 00 | 00 | 50 | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.6

Logically:

Command details
 Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer

Device identities
 Source device: ME
 Destination device: SIM

Result
 General Result: Command performed successfully

Timer identifier:
 Identifier of timer: 6

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A4 | 01 | 06 | | | | | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.7

Logically:

Command details
 Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer

Device identities
 Source device: SIM
 Destination device: ME

Timer identifier:
 Identifier of timer: 7

Timer value:
 Value of timer: 5sec

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 11 | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 07 | A5 | 03 | 00 | 00 | 50 | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.7

Logically:

Command details
 Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer

Device identities
 Source device: ME
 Destination device: SIM

Result
 General Result: Command performed successfully

Timer identifier:
 Identifier of timer: 7

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A4 | 01 | 07 | | | | | | | | | |

PROACTIVE COMMAND: TIMER MANAGEMENT 1.6.8

Logically:

Command details
 Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer

Device identities
 Source device: SIM
 Destination device: ME

Timer identifier:
 Identifier of timer: 8

Timer value:
 Value of timer: 5sec

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 11 | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 08 | A5 | 03 | 00 | 00 | 50 | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 1.6.8

Logically:

| | |
|----------------------|-------------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | TIMER MANAGEMENT |
| Command qualifier: | start the Timer |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Timer identifier: | |
| Identifier of timer: | 8 |
| Coding : | |
| BER-TLV: | 81 03 01 27 00 82 02 82 81 83 01 00 |
| | A4 01 08 |

27.22.4.21.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences

27.22.4.21.2 ENVELOPE TIMER EXPIRATION (normal)

27.22.4.21.2.1 Definition and applicability

See Section 3.2.2.

27.22.4.21.2.2 Conformance requirement

The ME shall support the ENVELOPE (TIMER EXPIRATION) command as defined in the following technical specifications:

3GPP TS 11.14 clause 4.10, 10.1 and 10.2.

The ME shall support the TIMER MANAGEMENT as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.21 (Timer Management), clause 6.8 (Terminal Response), clause 12.6 (Commands details), clause 12.7 (Device Identities), clause 12.37 (Timer Identifier), clause 12.38 (Timer Value).

27.22.4.21.2.3 Test Purpose

To verify that the ME shall pass the identifier of the timer that has expired and its value using the ENVELOPE (TIMER EXPIRATION) command, when a timer previously started in a TIMER MANAGEMENT proactive command expires.

27.22.4.21.2.4 Method of test

27.22.4.21.2.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default with the following exceptions.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The timer 1 is not started.

When the SIM is busy when the envelope TIMER EXPIRATION is sent, either the ME retries periodically to send the envelope, either it waits for a TERMINAL RESPONSE processed by the SIM with status '90 00'.

If the ME waits for a TR with status '90 00', the ME manufacturer shall specify how many TERMINAL RESPONSES with status '90 00' are expected before sending the TIMER EXPIRATION envelope.

27.22.4.21.2.4.2 Procedure

Expected Sequence 2.1 (TIMER EXPIRATION, pending proactive SIM command)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|-----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 2.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | | PROACTIVE COMMAND: TIMER MANAGEMENT 2.1.1 | [timer 1] |
| 4 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 2.1.1 | [command performed successfully] |
| 5 | ME → SIM | ENVELOPE: TIMER EXPIRATION 2.1.1 | |
| 6 | SIM → ME | PROACTIVE COMMAND PENDING: MORE TIME X.1(or an other SAT command tested before to ensure it is properly supported by the mobile). | [response to envelope is "91 xx"] |
| 7 | ME → SIM | FETCH | |

PROACTIVE COMMAND: TIMER MANAGEMENT 2.1.1

Logically:

| | |
|----------------------|------------------|
| Command details | |
| Command number: | 1 |
| Command type: | TIMER MANAGEMENT |
| Command qualifier: | start the Timer |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| Timer identifier: | |
| Identifier of timer: | 1 |
| Timer value: | |
| Value of timer: | 0h 0min 10sec |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 11 | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 01 | A5 | 03 | 00 | 00 | 01 | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 2.1.1

Logically:

Command details

| | |
|--------------------|------------------|
| Command number: | 1 |
| Command type: | TIMER MANAGEMENT |
| Command qualifier: | start the Timer |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|--------------------------------|
| General Result: | Command performed successfully |
|-----------------|--------------------------------|

Timer identifier:

| | |
|----------------------|---|
| Identifier of timer: | 1 |
|----------------------|---|

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A4 | 01 | 01 | | | | | | | | | |

ENVELOPE: TIMER EXPIRATION 2.1.1

Logically:

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Timer identifier:

| | |
|-------------------|---------|
| Timer identifier: | Timer 1 |
|-------------------|---------|

Timer value

| | |
|---------|----------------|
| Hour: | '00' |
| Minute: | '00' |
| Second: | '10' +/- 1 sec |

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D7 | 0C | 82 | 02 | 82 | 81 | A4 | 01 | 01 | A5 | 03 | 00 |
| | 00 | xx | | | | | | | | | | |

Expected Sequence 2.2A (TIMER EXPIRATION, SIM application toolkit busy)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 2.2.1 | [timer 1] [command performed successfully] |
| 2 | ME → SIM | FETCH | |
| 3 | | PROACTIVE COMMAND: TIMER MANAGEMENT 2.2.1 | |
| 4 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 2.2.1 | |
| 5 | ME → SIM | ENVELOPE: TIMER EXPIRATION 2.2.1A | |
| 6 | SIM → ME | PROACTIVE SIM SESSION BUSY | |
| ... | | | |
| 7 | ME → SIM | ENVELOPE: TIMER EXPIRATION 2.2.1B | |
| 8 | SIM → ME | PROACTIVE SIM SESSION BUSY | |
| 9 | ME → SIM | ENVELOPE: TIMER EXPIRATION 2.2.1C | |
| 10 | SIM → ME | PROACTIVE SIM SESSION ENDED | [SIM is not busy] |

Or :

Expected Sequence 2.2B (TIMER EXPIRATION, SIM application toolkit busy)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: TIMER MANAGEMENT 2.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | | PROACTIVE COMMAND: TIMER MANAGEMENT 2.2.1 | [timer 1] |
| 4 | ME → SIM | TERMINAL RESPONSE: TIMER MANAGEMENT 2.2.1 | [command performed successfully] |
| 5 | ME → SIM | ENVELOPE: TIMER EXPIRATION 2.2.1A | |
| 6 | SIM → ME | RESPONSE TO THE ENVELOPE | [SIM is busy; response to the envelope = "93 00"] [SIM is busy during 10 sec, the ME may retry to send the envelope. After one (or several) answer(s) 93 00, the ME waits for a TERMINAL RESPONSE processed by the SIM with status "90 00"] [SIM is not busy] [SW1/SW2=91 xx] |
| 7 | ME → SIM | STATUS | |
| 8 | SIM → ME | Response to the STATUS command | |
| 9 | ME → SIM | PROACTIVE COMMAND PENDING | |
| 10 | SIM → ME | FETCH | |
| | | PROACTIVE COMMAND: e.g. MORE TIME 2.2.2 | |
| 11 | ME → SIM | TERMINAL RESPONSE: e.g. TIMER MANAGEMENT 2.2.2 | [command performed successfully] |
| 12 | SIM → ME | | [SW1/SW2 = 90 00] Steps 7->12 shall be repeated (X-1) times if the ME manufacturers specifies that the ME waits for X TERMINAL RESPONSES with status 90 00 to send the TIMER EXPIRATION envelope. |
| 13 | ME → SIM | ENVELOPE: TIMER EXPIRATION 2.2.1B | |
| 14 | | PROACTIVE SIM SESSION ENDED | |

PROACTIVE COMMAND: TIMER MANAGEMENT 2.2.1

Logically:

Command details
 Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer

Device identities
 Source device: SIM
 Destination device: ME

Timer identifier:
 Identifier of timer: 1

Timer value:
 Value of timer: 0h 0min 30sec

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 11 | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 81 | 82 | A4 |
| | 01 | 01 | A5 | 03 | 00 | 00 | 03 | | | | | |

TERMINAL RESPONSE: TIMER MANAGEMENT 2.2.1

Logically:

Command details
 Command number: 1
 Command type: TIMER MANAGEMENT
 Command qualifier: start the Timer

Device identities
 Source device: ME
 Destination device: SIM

Result
 General Result: Command performed successfully

Timer identifier:
 Identifier of timer: 1

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 27 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A4 | 01 | 01 | | | | | | | | | |

ENVELOPE: TIMER EXPIRATION 2.2.1A

Logically:

Device identities
 Source device: ME
 Destination device: SIM

Timer identifier: Timer 1

Timer value
 Hour: '00'
 Minute: '00'
 Second: '30' +/- 1 sec

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D7 | 0C | 82 | 02 | 82 | 81 | A4 | 01 | 01 | A5 | 03 | 00 |
| | 00 | xx | | | | | | | | | | |

ENVELOPE: TIMER EXPIRATION 2.2.1B

Logically:

| | |
|---------------------|--------------------|
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Timer identifier: | Timer 1 |
| Timer value | |
| Hour: | '00' |
| Minute: | '00' |
| Second: | >= timer in 2.2.1A |

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D7 | 0C | 82 | 02 | 82 | 81 | A4 | 01 | 01 | A5 | 03 | 00 |
| | 00 | xx | | | | | | | | | | |

ENVELOPE: TIMER EXPIRATION 2.2.1C

Logically:

| | |
|---------------------|--------------------|
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Timer identifier: | Timer 1 |
| Timer value | |
| Hour: | '00' |
| Minute: | '00' |
| Second: | >= timer in 2.2.1B |

Coding :

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D7 | 0C | 82 | 02 | 82 | 81 | A4 | 01 | 01 | A5 | 03 | 00 |
| | 00 | xx | | | | | | | | | | |

PROACTIVE COMMAND : MORE TIME 2.2.2

Logically:

| | |
|---------------------|-----------|
| Command details | |
| Command number: | 1 |
| Command type: | MORE TIME |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 09 | 81 | 03 | 01 | 02 | 00 | 82 | 02 | 81 | 82 |
|----------|----|----|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE : MORE TIME 2.2.2

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | MORE TIME |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 02 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

27.22.4.21.2.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 1 and 2.

27.22.4.22 SET UP IDLE MODE TEXT

27.22.4.22.1 SET UP IDLE MODE TEXT (normal)

27.22.4.22.1.1 Definition and applicability

See Section 3.2.2.

27.22.4.22.1.2 Conformance requirement

3GPP TS 11.14 [15] clause 4.7, 5.2 (Terminal Profile), 6.4.22, 6.6.22, 6.4.16, 6.6.16, 11.6, 6.8 (Terminal Response), 11, 11.1, 12.25, 6.4.7, 6.6.13

Additionally the ME shall support the REFRESH proactive SIM facility as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 5.2, 6.1, 6.4.7, 6.6.13, 6.11, 12.6, 12.12, 13.4 and 14.

27.22.4.22.1.3 Test Purpose

To verify that the text passed to the ME is displayed as idle mode text.

27.22.4.22.1.4 Method of test

27.22.4.22.1.4.1 Initial Conditions

The ME is connected to the SIM Simulator and the System Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The following events shall have been set up in the ME.

Event List

Logically:

Event 1: Idle screen available

27.22.4.22.1.4.2 Procedure

Expected Sequence 1.1 (SET UP IDLE MODE TEXT, display idle mode text)

| Step | Direction | Message / Action | Comments |
|-------------|------------------|--|--------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1 | With the event Idle Screen available |
| 2 | ME → SIM | TERMINAL RESPONSE : SET UP EVENT LIST 1.1.1 | [Command performed successfully] |
| 3 | USER → ME | Wait for the mobile returns to idle mode. | |
| 4 | ME → SIM | ENVELOPE: EVENT DOWNLOAD IDLE SCREEN AVAILABLE 1.1.1 | |
| 5 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 1.1.2 | [Idle Mode Text] |
| 6 | ME → SIM | FETCH | |
| 7 | SIM → ME | PROACTIVE COMMAND : SET UP IDLE MODE TEXT 1.1.2 | |
| 8 | ME → USER | Display "Idle Mode Text" | |
| 9 | ME → SIM | TERMINAL RESPONSE : SET UP IDLE MODE TEXT 1.1.2 | [Command performed successfully] |
| 10 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

PROACTIVE COMMAND : SET UP EVENT LIST 1.1.1

Logically:

Command details
 Command number: 1
 Command type: SET UP EVENT LIST
 Command qualifier: '00'

Device identities
 Source device: SIM
 Destination device: ME

Event list
 Event 1: Idle screen available

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 81 | 82 | 99 |
| | 01 | 05 | | | | | | | | | | |

TERMINAL RESPONSE : SET UP EVENT LIST 1.1.1

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP EVENT LIST |
| Command qualifier: | '00' |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

ENVELOPE: EVENT DOWNLOAD IDLE SCREEN AVAILABLE 1.1.1

Logically:

| | |
|---------------------|-----------------------|
| Event list | |
| Event 1: | Idle screen available |
| Device identities | |
| Source device: | Display |
| Destination device: | SIM |

Coding:

| | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 07 | 99 | 01 | 05 | 82 | 02 | 02 | 81 |
|----------|----|----|----|----|----|----|----|----|----|

PROACTIVE COMMAND : SET UP IDLE MODE TEXT 1.1.2

Logically:

| | |
|---------------------|-----------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP IDLE MODE TEXT |
| Command qualifier: | RFU |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| Text string | |
| Data coding scheme: | unpacked, 8 bit data |
| Text: | "Idle Mode Text" |

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1A | 81 | 03 | 01 | 28 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 0F | 04 | 49 | 64 | 6C | 65 | 20 | 4D | 6F | 64 | 65 | 20 |
| | 56 | 65 | 78 | 74 | | | | | | | | |

TERMINAL RESPONSE : SET UP IDLE MODE TEXT 1.1.2

Logically:

| Command details | |
|---------------------|--------------------------------|
| Command number: | 1 |
| Command type: | SET UP IDLE MODE TEXT |
| Command qualifier: | RFU |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 28 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 1.2 (SET UP IDLE MODE TEXT, replace idle mode text)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1 | With the event Idle Screen available |
| 2 | ME → SIM | TERMINAL RESPONSE : SET UP EVENT LIST 1.1.1 | [Command performed successfully] |
| 3 | USER → ME | Wait for the mobile returns to idle mode. | |
| 4 | ME → SIM | ENVELOPE: EVENT DOWNLOAD IDLE SCREEN AVAILABLE 1.1.1 | |
| 5 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 1.1.2 | |
| 6 | ME → SIM | FETCH | |
| 7 | SIM → ME | PROACTIVE COMMAND : SET UP IDLE MODE TEXT 1.1.2 | [Idle Mode Text] |
| 8 | ME → USER | Display "Idle Mode Text" | |
| 9 | ME → SIM | TERMINAL RESPONSE : SET UP IDLE MODE TEXT 1.1.2 | |
| 10 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 1.2.1 | [Idle Mode Text] |
| 11 | ME → USER | Display "Toolkit Test" | |
| 12 | ME → SIM | TERMINAL RESPONSE : SET UP IDLE MODE TEXT 1.2.1 | |
| 13 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

PROACTIVE COMMAND : SETUP IDLE MODE TEXT 1.2.1

Logically:

| | |
|---------------------|----------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SETUP IDLE MODE TEXT |
| Command qualifier: | RFU |
| Device identities | |
| Source device: | SIM |
| Destination device: | Display |
| Text String | |
| Data coding scheme: | unpacked, 8 bit data |
| Text: | "Toolkit Test" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 18 | 81 | 03 | 01 | 28 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 0D | 04 | 54 | 6F | 6F | 6C | 6B | 69 | 74 | 20 | 54 | 65 |
| | 73 | 74 | | | | | | | | | | |

TERMINAL RESPONSE : SET UP IDLE MODE TEXT 1.2.1

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP IDLE MODE TEXT |
| Command qualifier: | RFU |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 28 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 1.3 (SET UP IDLE MODE TEXT, remove idle mode text)

| Step | Direction | MESSAGE / Action | Comments |
|------|--------------|--|--------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1 | With the event Idle Screen available |
| 2 | ME → SIM | TERMINAL RESPONSE : SET UP EVENT LIST 1.1.1 | [Command performed successfully] |
| 3 | USER → ME | Wait for the user returns to idle mode. Select idle screen | |
| 4 | ME → SIM | ENVELOPE: EVENT DOWNLOAD IDLE SCREEN AVAILABLE 1.1.1 | |
| 5 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 1.1.2 | |
| 6 | ME → SIM | FETCH | |
| 7 | SIM → ME | PROACTIVE COMMAND : SET UP IDLE MODE TEXT 1.1.2 | [“Idle Mode Text”] |
| 8 | ME → USER | Display “Idle Mode Text” | |
| 9 | ME → SIM | TERMINAL RESPONSE : SET UP IDLE MODE TEXT 1.1.2 | |
| 10 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 1.3.1 | |
| 11 | ME → SIM | FETCH | |
| 12 | SIM → ME | PROACTIVE COMMAND : SET UP IDLE MODE TEXT 1.3.1 | [Remove idle mode text] |
| 13 | ME → USER | Display idle screen / “Idle Mode Text” not to be displayed | |
| 14 | ME → SIM | TERMINAL RESPONSE : SET UP IDLE MODE TEXT 1.3.1 | |
| 15 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

PROACTIVE COMMAND: SETUP IDLE MODE TEXT 1.3.1

Logically:

Command details

| | |
|--------------------|----------------------|
| Command number: | 1 |
| Command type: | SETUP IDLE MODE TEXT |
| Command qualifier: | RFU |

Device identities

| | |
|---------------------|-----------------|
| Source device: | SIM |
| Destination device: | ME |
| Text String: | zero length TLV |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0B | 81 | 03 | 01 | 28 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 00 | | | | | | | | | | | |

TERMINAL RESPONSE : SET UP IDLE MODE TEXT 1.3.1 Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP IDLE MODE TEXT |
| Command qualifier: | RFU |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

BER-TLV: 81 03 01 28 00 82 02 82 81 83 01 00

Expected Sequence 1.4 (SET UP IDLE MODE TEXT, competing information on ME display)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1 | With the event Idle Screen available |
| 2 | ME → SIM | TERMINAL RESPONSE : SET UP EVENT LIST 1.1.1 | [Command performed successfully] |
| 3 | USER → ME | Wait for the mobile returns to idle mode. Select idle screen | |
| 4 | ME → SIM | ENVELOPE: EVENT DOWNLOAD IDLE SCREEN AVAILABLE 1.1.2 | |
| 5 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 1.1/2 | |
| 6 | ME → SIM | FETCH | |
| 7 | SIM → ME | PROACTIVE COMMAND : SET UP IDLE MODE TEXT 1.1.2 | ["Idle Mode Text"] |
| 8 | ME → USER | Display "Idle Mode Text" | |
| 9 | ME → SIM | TERMINAL RESPONSE : SET UP IDLE MODE TEXT 1.12 | [Command performed successfully] |
| 10 | SS → ME | SMS PP 1.4.1 | |
| 11 | ME → USER | Display "Short Message" | [Display immediate SMS] |
| 12 | USER → ME | Clear display and select idle screen | |
| 13 | ME → USER | Display "Idle Mode Text" | |

SMS-PP 1.4.1

Logically:

| | |
|----------------|--|
| SMS TPDU | |
| TP-MTI | SMS-SUBMIT |
| TP-RD | Instruct the SC to accept an SMS-SUBMIT for a SM |
| TP-VPF | TP-VP field not present |
| TP-RP | TP-Reply-Path is not set in this SMS-SUBMIT |
| TP-UDHI | The TP-UD field contains only the short message |
| TP-SRR | A status report is not requested |
| TP-MR | "00" |
| TP-DA | |
| TON | International number |
| NPI | "ISDN / telephone numbering plan" |
| Address value | "012345678" |
| TP-PID | Short message type 0 |
| TP-DCS | |
| Message coding | 8-bit data |
| Message class | class 0 |
| TP-UDL | 12 |
| TP-UD | "Test Message" |
| Coding: | 01 00 09 91 10 32 54 76 F8 40 F4 0C 54 65 73 74 20 4D 65 73 73 61 67 65 |

Expected Sequence 1.5 (SET UP IDLE MODE TEXT, ME power cycled)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1 | With the event Idle Screen available |
| 2 | ME → SIM | TERMINAL RESPONSE : SET UP EVENT LIST 1.1.1 | [Command performed successfully] |
| 3 | USER → ME | Wait for the mobile returns into idle mode. | |
| 4 | ME → SIM | Select idle screen ENVELOPE: EVENT DOWNLOAD IDLE SCREEN AVAILABLE 1.1.1 | |
| 5 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 1.1.2 | |
| 6 | ME → SIM | FETCH | |
| 7 | SIM → ME | PROACTIVE COMMAND : SET UP IDLE MODE TEXT 1.1.2 | ["Idle Mode Text"] |
| 8 | ME → USER | Display "Idle Mode Text" | |
| 9 | ME → SIM | TERMINAL RESPONSE : SET UP IDLE MODE TEXT 1.1.2 | [command performed successfully] |
| 10 | USER → ME | Power off ME | |
| 11 | ME ↔ SIM | GSM TERMINATION PROCEDURE | |
| 12 | USER → ME | Power on ME | |
| 13 | ME ↔ SIM | GSM ACTIVATION PROCEDURE | |
| 14 | ME ↔ SIM | SIM INITIALISATION | |
| 14 | ME → USER | Display idle screen / "Idle Mode Text" not to be displayed | |

Expected Sequence 1.6 (SET UP IDLE MODE TEXT, REFRESH with SIM Initialisation)

| Step | Direction | MESSAGE / Action | Comments |
|-------------|------------------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1 | With the event Idle Screen available |
| 2 | ME → SIM | TERMINAL RESPONSE : SET UP EVENT LIST 1.1.1 | [Command performed successfully] |
| 3 | USER → ME | Wait for the mobile returns to idle mode. Select idle screen | |
| 4 | ME → SIM | ENVELOPE: EVENT DOWNLOAD IDLE SCREEN AVAILABLE 1.1.1 | |
| 5 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 1.1.1 | [Idle Mode Text] |
| 6 | ME → SIM | FETCH | |
| 7 | SIM → ME | PROACTIVE COMMAND : SET UP IDLE MODE TEXT 1.1.2 | |
| 8 | ME → USER | Display "Idle Mode Text" | |
| 9 | ME → SIM | TERMINAL RESPONSE : SET UP IDLE MODE TEXT 1.1.2 | |
| 10 | SIM → ME | PROACTIVE COMMAND PENDING: REFRESH 1.6.1 | |
| 11 | ME → SIM | FETCH | |
| 12 | SIM → ME | PROACTIVE COMMAND : REFRESH 1.6.1 | [SIM Initialisation] |
| 13 | ME ↔ SIM | SIM INITIALISATION | |
| 14 | ME → USER | Display idle screen / "Idle Mode Text" not to be displayed | |
| 15 | ME → SIM | TERMINAL RESPONSE : REFRESH 1.6.1 or TERMINAL RESPONSE : REFRESH 1.6.1 | [Command performed successfully] |
| 16 | SIM → ME | PROACTIVE SIM SESSION ENDED | [Command performed successfully with additional files read] |

PROACTIVE COMMAND : REFRESH 1.6.1

Logically:

| | |
|---------------------|--------------------|
| Command details | |
| Command number: | 1 |
| Command type: | REFRESH |
| Command qualifier: | SIM Initialisation |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |

Coding:

BER-TLV: D0 09 81 03 01 01 03 82 02 81 82

TERMINAL RESPONSE : REFRESH 1.61A

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | REFRESH |
| Command qualifier: | SIM Initialisation |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

BER-TLV: 81 03 01 01 03 82 02 82 81 83 01 00

TERMINAL RESPONSE : REFRESH 1.61B

Logically:

| | |
|---------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | REFRESH |
| Command qualifier: | SIM Initialisation |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | REFRESH performed with additional EFs read |

Coding:

BER-TLV: 81 03 01 01 03 82 02 82 81 83 01 03

Expected Sequence 1.7 (SET UP IDLE MODE TEXT, large text string)

| Step | Direction | MESSAGE / Action | Comments |
|-------------|------------------|--|--------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1 | With the event Idle Screen available |
| 2 | ME → SIM | TERMINAL RESPONSE : SET UP EVENT LIST 1.1.1 | [Command performed successfully] |
| 3 | USER → ME | Wait for the mobile returns to idle mode. Select idle screen | |
| 4 | ME → SIM | ENVELOPE: EVENT DOWNLOAD IDLE SCREEN AVAILABLE 1.1.1 | |
| 5 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 1.7.1 | [large text string] |
| 6 | ME → SIM | FETCH | |
| 7 | SIM → ME | PROACTIVE COMMAND : SET UP IDLE MODE TEXT 1.7.1 | |
| 8 | ME → USER | Display "The SIM shall supply a text string, which shall be displayed by the ME as an idle mode text if the ME is able to do it. The presentation style is left as an implementation decision to the ME manufacturer. The idle mode text shall be displayed in a manner that ensures that" | |
| 9 | ME → SIM | TERMINAL RESPONSE : SET UP IDLE MODE TEXT 1.7.1 | [command performed successfully] |
| 10 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

ENVELOPE: EVENT DOWNLOAD IDLE SCREEN AVAILABLE 1.7.1

Logically:

| | |
|---------------------|-----------------------|
| Event list | |
| Event 1: | Idle screen available |
| Device identities | |
| Source device: | Display |
| Destination device: | SIM |

Coding:

BER-TLV: D6 07 99 01 05 82 02 02 81

PROACTIVE COMMAND : SET UP IDLE MODE TEXT 1.7.1

Logically:

| | | | | | | | | | | | | |
|---------------------|--|--|--|--|--|--|--|--|--|--|--|--|
| Command details | | | | | | | | | | | | |
| Command number: | | | | | | | | | | | | 1 |
| Command type: | | | | | | | | | | | | SET UP IDLE MODE TEXT |
| Command qualifier: | | | | | | | | | | | | RFU |
| Device identities | | | | | | | | | | | | |
| Source device: | | | | | | | | | | | | SIM |
| Destination device: | | | | | | | | | | | | ME |
| Text string | | | | | | | | | | | | |
| Data coding scheme: | | | | | | | | | | | | packed, SMS default alphabet |
| Text: | | | | | | | | | | | | "The SIM shall supply a text string, which shall be displayed by the ME as an idle mode text if the ME is able to do it. The presentation style is left as an implementation decision to the ME manufacturer. The idle mode text shall be displayed in a manner that ensures that" |

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 81 | FB | 81 | 03 | 01 | 28 | 00 | 82 | 02 | 81 | 82 |
| | 8D | 81 | EF | 00 | 54 | 74 | 19 | 34 | 4D | 36 | 41 | 73 |
| | 74 | 98 | CD | 06 | CD | EB | 70 | 38 | 3B | 0F | 0A | 83 |
| | E8 | 65 | 3C | 1D | 34 | A7 | CB | D3 | EE | 33 | 0B | 74 |
| | 47 | A7 | C7 | 68 | D0 | 1C | 1D | 66 | B3 | 41 | E2 | 32 |
| | 88 | 9C | 9E | C3 | D9 | E1 | 7C | 99 | 0C | 12 | E7 | 01 |
| | 74 | 74 | 19 | D4 | 2C | 82 | C2 | 73 | 50 | D8 | 0D | 4A |
| | 93 | D9 | 65 | 50 | FB | 4D | 2E | 83 | E8 | 65 | 3C | 1D |
| | 94 | 36 | 83 | E8 | E8 | 32 | A8 | 59 | 04 | A5 | E7 | A0 |
| | B0 | 98 | 5D | 06 | D1 | DF | 20 | F2 | 1B | 94 | A6 | BB |
| | 40 | 54 | 74 | 19 | 04 | 97 | 03 | E5 | 79 | D9 | 4D | 0F |
| | D3 | D3 | 6F | 37 | 68 | 4E | CF | B3 | CB | A0 | F4 | 1C |
| | C4 | 2E | 9B | E9 | A0 | F0 | 1C | 14 | 76 | 83 | D2 | 6D |
| | 38 | BB | DC | 2E | BB | E9 | 61 | 7A | FA | ED | 06 | 91 |
| | CB | E3 | F4 | 3C | FD | 76 | 83 | E8 | 6F | 10 | 1D | 5D |
| | 06 | 35 | 8B | ED | B0 | BB | 6E | 0E | 8F | E9 | 75 | 79 |
| | 59 | EE | 02 | 51 | D1 | 65 | 50 | 9A | CC | 2E | 83 | DA |
| | 6F | 72 | 19 | 44 | 2F | E3 | 01 | 74 | D0 | 1C | 1D | 66 |
| | B3 | 41 | E2 | 32 | 88 | 9C | 9E | C3 | D9 | E1 | 7C | 99 |
| | 0C | 4A | BB | 41 | 61 | 50 | 3B | EC | 76 | 97 | E5 | 74 |
| | 74 | 98 | 0E | 2A | BB | E7 | 75 | 79 | 79 | 0E | A2 | A3 |
| | C3 | 74 | | | | | | | | | | |

TERMINAL RESPONSE : SET UP IDLE MODE TEXT 1.7.1

Logically:

| | | | | | | | | | | | | |
|---------------------|--|--|--|--|--|--|--|--|--|--|--|--------------------------------|
| Command details | | | | | | | | | | | | |
| Command number: | | | | | | | | | | | | 1 |
| Command type: | | | | | | | | | | | | SET UP IDLE MODE TEXT |
| Command qualifier: | | | | | | | | | | | | RFU |
| Device identities | | | | | | | | | | | | |
| Source device: | | | | | | | | | | | | ME |
| Destination device: | | | | | | | | | | | | SIM |
| Result | | | | | | | | | | | | |
| General Result: | | | | | | | | | | | | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 28 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 1.8 (SET UP IDLE MODE TEXT, display idle mode text followed by a display text)

| Step | Direction | Message / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1 | With the event Idle Screen available |
| 2 | ME → SIM | TERMINAL RESPONSE : SET UP EVENT LIST 1.1.1 | [Command performed successfully] |
| 3 | USER → ME | Wait for the mobile returns to idle mode. | |
| 4 | ME → SIM | Select idle screen ENVELOPE: EVENT DOWNLOAD IDLE SCREEN AVAILABLE 1.1.1 | |
| 5 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 1.1.2 | [Idle Mode Text] |
| 6 | ME → SIM | FETCH | |
| 7 | SIM → ME | PROACTIVE COMMAND : SET UP IDLE MODE TEXT 1.1.2 | |
| 8 | ME → USER | Display "Idle Mode Text" | |
| 9 | ME → SIM | TERMINAL RESPONSE : SET UP IDLE MODE TEXT 1.1.2 | [Command performed successfully] |
| 10 | SIM → ME | PROACTIVE COMMAND PENDING: DISPLAY TEXT 1.8.1 | |
| 11 | ME → SIM | FETCH | |
| 12 | SIM → ME | PROACTIVE COMMAND : DISPLAY TEXT 1.8.1 | [Normal priority, wait for user to clear message, unpacked, 8 bit data] |
| 13 | ME → USER | Display " Toolkit Test 1" | |
| 14 | USER → ME | Clear Message | |
| 15 | ME → SIM | TERMINAL RESPONSE : DISPLAY TEXT 1.8.1 | [Command performed successfully] |
| 16 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 17 | ME → USER | Display "Idle Mode Text" | |

PROACTIVE COMMAND : DISPLAY TEXT 1.8.1

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | DISPLAY TEXT |
| Command qualifier: | normal priority, wait for user to clear message |
| Device identities | |
| Source device: | SIM |
| Destination device: | Display |
| Text String | |
| Data coding scheme: | unpacked, 8 bit data |
| Text: | "Toolkit Test 1" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1A | 81 | 03 | 01 | 21 | 80 | 82 | 02 | 81 | 02 | 8D |
| | 0F | 04 | 54 | 6F | 6F | 6C | 6B | 69 | 74 | 20 | 54 | 65 |
| | 73 | 74 | 20 | 31 | | | | | | | | |

TERMINAL RESPONSE : DISPLAY TEXT 1.8.1

Logically:

| Command details | |
|---------------------|---|
| Command number: | 1 |
| Command type: | DISPLAY TEXT |
| Command qualifier: | normal priority, wait for user to clear message |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

BER-TLV: 81 03 01 21 80 82 02 82 81 83 01 00

Expected Sequence 1.9 (SET UP IDLE MODE TEXT, display idle mode text followed by a play tone command)

| Step | Direction | Message / Action | Comments |
|------|-----------|---|--------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1 | With the event Idle Screen available |
| 2 | ME → SIM | TERMINAL RESPONSE : SET UP EVENT LIST 1.1.1 | [Command performed successfully] |
| 3 | USER → ME | Wait for the mobile returns to idle mode. | |
| 4 | ME → SIM | ENVELOPE: EVENT DOWNLOAD IDLE SCREEN AVAILABLE 1.1.1 | |
| 5 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 1.1.2 | [Idle Mode Text] |
| 6 | ME → SIM | FETCH | |
| 7 | SIM → ME | PROACTIVE COMMAND : SET UP IDLE MODE TEXT 1.1.2 | |
| 8 | ME → USER | Display "Idle Mode Text" | |
| 9 | ME → SIM | TERMINAL RESPONSE : SET UP IDLE MODE TEXT 1.1.2 | [Command performed successfully] |
| 10 | SIM → ME | PROACTIVE COMMAND PENDING: PLAY TONE 1.9.1 | |
| 11 | ME → SIM | FETCH | |
| 12 | SIM → ME | PROACTIVE COMMAND : PLAY TONE 1.9.1 | |
| 13 | ME → USER | Display "Dial Tone" | |
| | | Play a standard supervisory dial tone through the external ringer for a duration of 5 seconds | |
| 14 | ME → SIM | TERMINAL RESPONSE : PLAY TONE 1.9.1 | [Command performed successfully] |
| 15 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 16 | ME → USER | Display "Idle Mode Text" | |

PROACTIVE COMMAND : PLAY TONE 1.9.1

Logically:

Command details

| | |
|--------------------|-----------|
| Command number: | 1 |
| Command type: | PLAY TONE |
| Command qualifier: | "00" |

Device identities

| | |
|---------------------|---------------------------------------|
| Source device: | SIM |
| Destination device: | Earpiece |
| Alpha identifier: | "Dial Tone" |
| Tone: | Standard supervisory tones: dial tone |

Duration

| | |
|----------------|---------|
| Time unit: | Seconds |
| Time interval: | 5 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1B | 81 | 03 | 01 | 20 | 00 | 82 | 02 | 81 | 03 | 85 |
| | 09 | 44 | 69 | 61 | 6C | 20 | 54 | 6F | 6E | 65 | 8E | 01 |
| | 01 | 84 | 02 | 01 | 05 | | | | | | | |

TERMINAL RESPONSE : PLAY TONE 1.9.1

Logically:

Command details

| | |
|--------------------|-----------|
| Command number: | 1 |
| Command type: | PLAY TONE |
| Command qualifier: | "00" |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|--------------------------------|
| General Result: | Command performed successfully |
|-----------------|--------------------------------|

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 20 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

27.22.4.22.3.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 1, 2, 3, 4, 5, 6 and 7.

27.22.4.22.2 SET UP IDLE MODE TEXT (Icon support)

27.22.4.22.2.1 Definition and applicability

See Section 3.2.2.

27.22.4.22.2.2 Conformance requirement

27.22.4.22.2.3 Test Purpose

To verify that the ME text and / or icon passed to the ME is displayed by the ME as an idle mode text.

To verify that the icon identifier provided with the text string can replace the text string or accompany it.

To verify that if both an alpha identifier or text string, and an icon are provided with a proactive command, and both are requested to be displayed, but the ME is not able to display both together on the screen, then the alpha identifier or text string takes precedence over the icon.

To verify that if the SIM provides an icon identifier with a proactive command, then the ME shall inform the SIM if the icon could not be displayed by sending the general result "Command performed successfully, but requested icon could not be displayed".

To verify that if the ME receives an icon qualifier with bit 1 set to 0, meaning "an alpha identifier or text string related to the icon may be displayed together with the icon by the ME", and no alpha identifier / text string is given by the SIM, than the ME shall reject the command with general result "Command data not understood by ME".

27.22.4.22.2.4 Method of test

27.22.4.22.2.4.1 Initial Conditions

The ME is connected to both the SIM Simulator and the System Simulator.

The elementary files are coded as SIM Application Toolkit default with the following exceptions.

EF IMG

Logically:

Record 1
<small icon>

Record 2
<tall icon (line)>

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The following events shall have been set up in the ME.

Event List

Logically:

Event 1: Idle screen available

27.22.4.22.2.4.2 Procedure

Expected Sequence 2.1A (SET UP IDLE MODE TEXT, Icon is self-explanatory, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|----------------------------------|
| 1 | USER → ME | Select idle screen | |
| 2 | ME → SIM | ENVELOPE: EVENT DOWNLOAD IDLE SCREEN AVAILABLE 2.1.1 | |
| 3 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 2.1.1 | [Icon is self-explanatory] |
| 4 | ME → SIM | FETCH | |
| 5 | SIM → ME | PROACTIVE COMMAND : SET UP IDLE MODE TEXT 2.1.1 | |
| 6 | ME → USER | Display the icon | |
| 7 | ME → SIM | TERMINAL RESPONSE : SET UP IDLE MODE TEXT 2.1.1A | [command performed successfully] |
| 8 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

ENVELOPE: EVENT DOWNLOAD IDLE SCREEN AVAILABLE 2.1.1

Logically:

Event list
 Event 1: Idle screen available
 Device identities
 Source device: Display
 Destination device: SIM

Coding:

BER-TLV: D6 07 99 01 05 82 02 02 81

PROACTIVE COMMAND : SET UP IDLE MODE TEXT 2.1.1

Logically:

Command details
 Command number: 1
 Command type: SET UP IDLE MODE TEXT
 Command qualifier: RFU
 Device identities
 Source device: SIM
 Destination device: ME
 Text string: “Idle text”
 Icon identifier
 Icon qualifier: icon is self-explanatory
 Icon identifier: <record 1 in EF IMG>

Coding:

BER-TLV: D0 19 81 03 01 28 00 82 02 81 82 8D
0F 04 49 64 6C 65 20 56 65 78 74 9E
02 00 01

TERMINAL RESPONSE : SET UP IDLE MODE LIST 2.1.1A

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP IDLE MODE TEXT |
| Command qualifier: | RFU |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

BER-TLV: 81 03 01 28 00 82 02 82 81 83 01 00

Expected Sequence 2.1B (SET UP IDLE MODE TEXT, Icon is self-explanatory, requested icon could not be displayed)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | USER → ME | Select idle screen | |
| 2 | ME → SIM | ENVELOPE: EVENT DOWNLOAD IDLE SCREEN AVAILABLE 2.1.1 | |
| 3 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 2.1.1 | [Icon is self-explanatory] |
| 4 | ME → SIM | FETCH | |
| 5 | SIM → ME | PROACTIVE COMMAND : SET UP IDLE MODE TEXT 2.1.1 | |
| 6 | ME → USER | Display "Idle text" without the icon | |
| 7 | ME → SIM | TERMINAL RESPONSE : SET UP IDLE MODE TEXT 2.1.1B | [Command performed successfully, but requested icon could not be displayed] |
| 8 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

TERMINAL RESPONSE : SET UP IDLE MODE LIST 2.1.1B

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP IDLE MODE TEXT |
| Command qualifier: | RFU |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully, but requested icon could not be displayed |

Coding:

BER-TLV: 81 03 01 28 00 82 02 82 81 83 01 04

Expected Sequence 2.2A (SET UP IDLE MODE TEXT, Icon is not self-explanatory, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|----------------------------------|
| 1 | USER → ME | Select idle screen | |
| 2 | ME → SIM | ENVELOPE: EVENT DOWNLOAD IDLE SCREEN AVAILABLE 2.2.1 | |
| 3 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 2.2.1 | [Icon is not self-explanatory] |
| 4 | ME → SIM | FETCH | |
| 5 | SIM → ME | PROACTIVE COMMAND : SET UP IDLE MODE TEXT 2.2.1 | |
| 6 | ME → USER | Display icon #1 and "Idle text" | |
| 7 | ME → SIM | TERMINAL RESPONSE : SET UP IDLE MODE TEXT 2.2.1A | [command performed successfully] |
| 8 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

ENVELOPE: EVENT DOWNLOAD IDLE SCREEN AVAILABLE 2.2.1

Logically:

| | |
|---------------------|-----------------------|
| Event list | |
| Event 1: | Idle screen available |
| Device identities | |
| Source device: | Display |
| Destination device: | SIM |

Coding:

| | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 07 | 99 | 01 | 05 | 82 | 02 | 02 | 81 |
|----------|----|----|----|----|----|----|----|----|----|

PROACTIVE COMMAND : SET UP IDLE MODE TEXT 2.2.1 Logically:

| | |
|---------------------|------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP IDLE MODE TEXT |
| Command qualifier: | RFU |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| Text string: | "Idle text" |
| Icon identifier | |
| Icon qualifier: | icon is not self-explanatory |
| Icon identifier: | <record 1 in EF IMG> |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 19 | 81 | 03 | 01 | 28 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 0F | 04 | 49 | 64 | 6C | 65 | 20 | 56 | 65 | 78 | 74 | 9E |
| | 02 | 01 | 01 | | | | | | | | | |

TERMINAL RESPONSE : SET UP IDLE MODE LIST 2.2.1

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP IDLE MODE TEXT |
| Command qualifier: | RFU |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

BER-TLV: 81 03 01 28 00 82 02 82 81 83 01 00

Expected Sequence 2.2B (SET UP IDLE MODE TEXT, Icon is not self-explanatory, requested icon could not be displayed)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | USER → ME | Select idle screen | |
| 2 | ME → SIM | ENVELOPE: EVENT DOWNLOAD IDLE SCREEN AVAILABLE 2.2.1 | |
| 3 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 2.2.1 | [Icon is not self-explanatory] |
| 4 | ME → SIM | FETCH | |
| 5 | SIM → ME | PROACTIVE COMMAND : SET UP IDLE MODE TEXT 2.2.1 | |
| 6 | ME → USER | Display "Idle text" without the icon | |
| 7 | ME → SIM | TERMINAL RESPONSE : SET UP IDLE MODE TEXT 2.2.1B | [Command performed successfully, but requested icon could not be displayed] |
| 8 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

TERMINAL RESPONSE : SET UP IDLE MODE LIST 2.2.1B

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP IDLE MODE TEXT |
| Command qualifier: | RFU |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully, but requested icon could not be displayed |

Coding:

BER-TLV: 81 03 01 28 00 82 02 82 81 83 01 04

Expected Sequence 2.3 (SET UP IDLE MODE TEXT, Icon is self-explanatory, colour icon)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------------------|--|---|
| 1 | USER → ME | Select idle screen | |
| 2 | ME → SIM | ENVELOPE: EVENT DOWNLOAD IDLE SCREEN AVAILABLE 2.3.1 | |
| 3 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 2.3.1 | [Icon is self-explanatory] |
| 4 | ME → SIM | FETCH | |
| 5 | SIM → ME | PROACTIVE COMMAND : SET UP IDLE MODE TEXT 2.3.1 | |
| 7 | ME → USER ME → SIM | Display "Idle text" TERMINAL RESPONSE : SET UP IDLE MODE TEXT 2.3.1 | [command performed successfully] |
| 8 | SIM → ME | PROACTIVE SIM SESSION ENDED | [requested icon could not be displayed] |

ENVELOPE: EVENT DOWNLOAD IDLE SCREEN AVAILABLE 2.3.1

Logically:

| | |
|---------------------|-----------------------|
| Event list | |
| Event 1: | Idle screen available |
| Device identities | |
| Source device: | Display |
| Destination device: | SIM |

Coding:

BER-TLV: D6 07 99 01 05 82 02 02 81

PROACTIVE COMMAND : SET UP IDLE MODE TEXT 2.3.1

Logically:

| | |
|---------------------|--------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP IDLE MODE TEXT |
| Command qualifier: | RFU |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| Text string: | "Idle text" |
| Icon identifier | |
| Icon qualifier: | icon is self-explanatory |
| Icon identifier: | <record 2 in EF IMG> |

Coding:

BER-TLV: D0 19 81 03 01 28 00 82 02 81 82 8D
0F 04 49 64 6C 65 20 56 65 78 74 9E
02 00 02

TERMINAL RESPONSE : SET UP IDLE MODE LIST 2.3.1

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP IDLE MODE TEXT |
| Command qualifier: | RFU |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

BER-TLV: 81 03 01 28 00 82 02 82 81 83 01 00

TERMINAL RESPONSE: SET UP IDLE MODE LIST 2.3.2

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP IDLE MODE TEXT |
| Command qualifier: | RFU |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully, but requested icon could not be displayed |

Coding:

BER-TLV: 81 03 01 28 00 82 02 82 81 83 01 04

Expected Sequence 2.4 (SET UP IDLE MODE TEXT, Icon is not self-explanatory, no text string)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | USER → ME | Select idle screen | |
| 2 | ME → SIM | ENVELOPE: EVENT DOWNLOAD IDLE SCREEN AVAILABLE 2.4.1 | |
| 3 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 2.4.1 | [Icon is not self-explanatory, no text string] |
| 4 | ME → SIM | FETCH | |
| 5 | SIM → ME | PROACTIVE COMMAND : SET UP IDLE MODE TEXT 2.4.1 | |
| 6 | ME → SIM | TERMINAL RESPONSE : SET UP IDLE MODE TEXT 2.4.1 | |
| 7 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

ENVELOPE: EVENT DOWNLOAD IDLE SCREEN AVAILABLE 2.4.1

Logically:

| | |
|---------------------|-----------------------|
| Event list | |
| Event 1: | Idle screen available |
| Device identities | |
| Source device: | Display |
| Destination device: | SIM |

Coding:

| | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 07 | 99 | 01 | 05 | 82 | 02 | 02 | 81 |
|----------|----|----|----|----|----|----|----|----|----|

PROACTIVE COMMAND : SET UP IDLE MODE TEXT 2.4.1

Logically:

| | |
|---------------------|------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP IDLE MODE TEXT |
| Command qualifier: | RFU |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| Icon identifier | |
| Icon qualifier: | icon is not self-explanatory |
| Icon identifier: | <record 1 in EF IMG> |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 19 | 81 | 03 | 01 | 28 | 00 | 82 | 02 | 81 | 82 | 9E |
| | 02 | 01 | 01 | | | | | | | | | |

TERMINAL RESPONSE : SET UP IDLE MODE LIST 2.4.1

Logically:

| | |
|---------------------|-----------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP IDLE MODE TEXT |
| Command qualifier: | RFU |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command data not understood by ME |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 28 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 32 |
| | 02 | 01 | 01 | | | | | | | | | |

27.22.4.22.2.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 1, 2, 3 and 4.

27.22.4.22.3 SET UP IDLE MODE TEXT (UCS2 support)

27.22.4.22.3.1 Definition and applicability

See Section 3.2.2.

27.22.4.22.3.2 Conformance requirement

The ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in the following technical specifications: ISO/IEC 10646 [17], “Universal Multiple Octet Coded Character Set (UCS)”.

27.22.4.22.3.3 Test Purpose

To verify that the UCS2 coded text string is displayed by the ME as an idle mode text.

27.22.4.22.3.4 Method of test

27.22.4.22.3.4.1 Initial Conditions

The ME is connected to both the SIM Simulator and the System Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The following events shall have been set up in the ME.

Event List

Logically:

| | |
|----------|-----------------------|
| Event 1: | Idle screen available |
|----------|-----------------------|

27.22.4.22.3.4.2 Procedure

Expected Sequence 3.1 (SET UP IDLE MODE TEXT, UCS2 alphabet text)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|----------------------|
| 1 | USER → ME | Select idle screen | |
| 2 | ME → SIM | ENVELOPE: EVENT DOWNLOAD IDLE SCREEN AVAILABLE 3.1.1 | |
| 3 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP IDLE MODE TEXT 3.1.1 | [“Hello” in Russian] |
| 4 | ME → SIM | FETCH | |
| 5 | SIM → ME | PROACTIVE COMMAND : SET UP IDLE MODE TEXT 3.1.1 | |
| 6 | ME → USER | Display “ ЗДРАВСТВУЙТЕ ” | [“Hello” in Russian] |
| 7 | ME → SIM | TERMINAL RESPONSE : SET UP IDLE MODE TEXT 3.1.1 | |
| 8 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

ENVELOPE: EVENT DOWNLOAD IDLE SCREEN AVAILABLE 3.1.1

Logically:

| | |
|---------------------|-----------------------|
| Event list | |
| Event 1: | Idle screen available |
| Device identities | |
| Source device: | Display |
| Destination device: | SIM |

Coding:

| | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 07 | 99 | 01 | 05 | 82 | 02 | 02 | 81 |
|----------|----|----|----|----|----|----|----|----|----|

PROACTIVE COMMAND : SET UP IDLE MODE TEXT 3.1.1

Logically:

| | |
|---------------------|-----------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP IDLE MODE TEXT |
| Command qualifier: | RFU |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| Text string | |
| Data coding scheme: | UCS2 (16bit) |
| Text: | “ЗДРАВСТВУЙТЕ” |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 24 | 81 | 03 | 01 | 28 | 00 | 82 | 02 | 81 | 82 | 8D |
| | 19 | 08 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 | 04 | 12 |
| | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 | 04 | 22 |
| | 04 | 15 | | | | | | | | | | |

TERMINAL RESPONSE : SET UP IDLE MODE LIST 3.1.1

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP IDLE MODE TEXT |
| Command qualifier: | RFU |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 28 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

27.22.4.22.3.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 1.

27.22.4.23 RUN AT COMMAND

27.22.4.23.1 RUN AT COMMAND (normal)

27.22.4.23.1.1 Definition and applicability

See Section 3.2.2.

27.22.4.23.1.2 Conformance requirement

The ME shall support the Proactive SIM: RUN AT COMMAND facility as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 6.4.23 (Run AT Command), clause 6.6.23 (Run AT Command), clause 5.2 (Terminal Profile), , clause 6.8 (Terminal Response), clause 12.6 (Command Details), clause 12.7 (Device Identities), clause 12.2 (Alpha Identifier), clause 12.40 (AT Command), clause 12.31 (Icon Identifier), clause 12.41 (AT Response)

TS 27.007 [18]

27.22.4.23.1.3 Test Purpose

To verify that the ME responds to an AT Command contained within a RUN AT COMMAND as though it were initiated by an attached TE, and returns an AT Response within a TERMINAL RESPONSE to the SIM.

27.22.4.23.1.4 Method of test

27.22.4.23.1.4.1 Initial Conditions

The ME is connected to the SIM Simulator. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

Prior to the test the ME shall be connected to the TE.

The TA-TE interface is set to 8-bit operation.

27.22.4.23.1.4.2 Procedure

Expected Sequence 1.1(RUN AT COMMAND, no alpha identifier presented, request IMSI)

| Step | Direction | MESSAGE / Action | Comments |
|------|-------------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: RUN AT COMMAND 1.1.1 | [no alpha identifier, request IMSI] |
| 4 | ME (→ User) | The ME may give information to the user concerning what is happening | |
| 7 | ME → SIM | TERMINAL RESPONSE: RUN AT COMMAND 1.1.1 | [Command performed successfully, AT Response containing IMSI] |

PROACTIVE SIM COMMAND: RUN AT COMMAND 1.1.1

Logically:

| | |
|---------------------|----------------|
| Command details | |
| Command number: | 1 |
| Command type: | RUN AT COMMAND |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| AT Command | |
| AT Command string: | "AT+CIMI" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 12 | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | A8 |
| | 07 | 41 | 54 | 2B | 43 | 49 | 4D | 43 | | | | |

TERMINAL RESPONSE: RUN AT COMMAND 1.1.1

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | RUN AT COMMAND |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| AT Response | |
| AT Response string: | IMSI |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A9 | 08 | 08 | 09 | 10 | 10 | 32 | 54 | 76 | 98 | | |

Expected Sequence 1.2 (RUN AT COMMAND, null data alpha identifier presented, request IMSI)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 1.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: RUN AT COMMAND 1.2.1 | [null data alpha identifier, request IMSI] |
| 4 | ME | The ME should not give any information to user on the fact that the ME is performing an AT command | |
| 7 | ME → SIM | TERMINAL RESPONSE: RUN AT COMMAND 1.1.1 | [Command performed successfully, AT Response containing IMSI] |

PROACTIVE SIM COMMAND: RUN AT COMMAND 1.2.1

Logically:

Command details
 Command number: 1
 Command type: RUN AT COMMAND
 Command qualifier: "00"

Device identities
 Source device: SIM
 Destination device: ME

Alpha identifier
 AT Command
 AT Command string: "AT+CIMI"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 14 | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | 85 |
| | 00 | A8 | 07 | 41 | 54 | 2B | 43 | 49 | 4D | 49 | | |

Expected Sequence 1.3 (RUN AT COMMAND, alpha identifier presented, request IMSI)

| Step | Direction | MESSAGE / Action | Comments |
|------|--------------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 1.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: RUN AT COMMAND 1.3.1 | [alpha identifier, request IMSI] |
| 4 | ME → USER | Display "Run AT Command" | |
| 7 | ME → SIM | TERMINAL RESPONSE: RUN AT COMMAND 1.1.1 | [Command performed successfully, AT Response containing IMSI] |

PROACTIVE SIM COMMAND: RUN AT COMMAND 1.3.1

Logically:

Command details
 Command number: 1
 Command type: RUN AT COMMAND
 Command qualifier: "00"

Device identities
 Source device: SIM
 Destination device: ME

Alpha identifier
 Alpha identifier
 AT Command
 AT Command string: "AT+CIMI"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 22 | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | 85 |
| | 0E | 52 | 75 | 6E | 20 | 41 | 54 | 20 | 43 | 6F | 6D | 6D |
| | 61 | 6E | 64 | A8 | 07 | 41 | 54 | 2B | 43 | 49 | 4D | 49 |

27.22.4.23.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 1 to 3.

27.22.4.23.2 RUN AT COMMAND (Icon support)**27.22.4.23.2.1 Definition and applicability**

See Section 3.2.2.

27.22.4.23.2.2 Conformance requirement

The ME shall support the Proactive SIM: RUN AT COMMAND facility as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 6.4.23 (Run AT Command), clause 6.6.23 (Run AT Command), clause 5.2 (Terminal Profile), , clause 6.8 (Terminal Response), clause 12.6 (Command Details), clause 12.7 (Device Identities), clause 12.2 (Alpha Identifier), clause 12.40 (AT Command), clause 12.31 (Icon Identifier), clause 12.41 (AT Response)

TS 27.007 [18]

27.22.4.23.2.3 Test Purpose

To verify that the ME responds to an AT Command contained within a RUN AT COMMAND as though it were initiated by an attached TE, and returns an AT Response within a TERMINAL RESPONSE to the SIM.

In addition to verify that if an icon is provided by the SIM, the icon indicated in the command may be used by the ME to inform the user, in addition to, or instead of the alpha identifier, as indicated with the icon qualifier.

27.22.4.23.2.4 Method of test**27.22.4.23.2.4.1 Initial Conditions**

The ME is connected to the SIM Simulator. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

Prior to the test the ME shall be connected to the TE.

The TA-TE interface is set to 8-bit operation.

Initial Conditions for Icon Management according to Annex C are valid.

27.22.4.23.2.4.2 Procedure

Expected Sequence 2.1 (RUN AT COMMAND, basic icon self explanatory, request IMSI)

| Step | Direction | MESSAGE / Action | Comments |
|------|--------------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 2.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: RUN AT COMMAND 2.1.1 | [BASIC-ICON, self-explanatory, request IMSI] |
| 4 | ME → USER | Display BASIC ICON Or May give information to user concerning what is happening | |
| 5 | ME → SIM | TERMINAL RESPONSE: RUN AT COMMAND 2.1.1A Or TERMINAL RESPONSE: RUN AT COMMAND 2.1.1B | [Command performed successfully, AT response containing IMSI] or [Command performed but requested icon could not be displayed, AT response containing IMSI] |

PROACTIVE COMMAND: RUN AT COMMAND 2.1.1

Logically:

Command details

| | |
|--------------------|----------------|
| Command number: | 1 |
| Command type: | RUN AT COMMAND |
| Command qualifier: | “00” |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

AT Command

| | |
|--------------------|-----------|
| AT Command string: | “AT+CIMI” |
|--------------------|-----------|

Icon Identifier:

| | |
|------------------|---------------------------------|
| Icon qualifier: | icon is self-explanatory |
| Icon Identifier: | record 1 in EF _(IMG) |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 16 | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | A8 |
| | 07 | 41 | 54 | 2B | 43 | 49 | 4D | 43 | 9E | 02 | 00 | 01 |

TERMINAL RESPONSE: RUN AT COMMAND 2.1.1A

Logically:

Command details

| | |
|--------------------|----------------|
| Command number: | 1 |
| Command type: | RUN AT COMMAND |
| Command qualifier: | “00” |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|--------------------------------|
| General Result: | Command performed successfully |
|-----------------|--------------------------------|

AT Response

| | |
|---------------------|------|
| AT Response string: | IMSI |
|---------------------|------|

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | A9 | 08 | 08 | 09 | 10 | 10 | 32 | 54 | 76 | 98 | | |

TERMINAL RESPONSE: RUN AT COMMAND 2.1.1B

Logically:

| Command details | |
|---------------------|---|
| Command number: | 1 |
| Command type: | RUN AT COMMAND |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully, but requested icon could not be displayed |
| AT Response | |
| AT Response string: | IMSI |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 04 |
| | A9 | 08 | 08 | 09 | 10 | 10 | 32 | 54 | 76 | 98 | | |

Expected Sequence 2.2 (RUN AT COMMAND, colour icon self explanatory, request IMSI)

| Step | Direction | MESSAGE / Action | Comments |
|------|--------------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 2.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: RUN AT COMMAND 2.2.1 | [COLOUR-ICON, self-explanatory, request IMSI] |
| 4 | ME → USER | Display COLOUR-ICON Or May give information to user concerning what is happening | |
| 5 | ME → SIM | TERMINAL RESPONSE: RUN AT COMMAND 2.1.1A Or TERMINAL RESPONSE: RUN AT COMMAND 2.1.1B | [Command performed successfully, AT response containing IMSI] or [Command performed but requested icon could not be displayed, AT response containing IMSI] |

PROACTIVE COMMAND: RUN AT COMMAND 2.2.1

Logically:

| | |
|---------------------|---------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | RUN AT COMMAND |
| Command qualifier: | “00” |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| AT Command | |
| AT Command string: | “AT+CIMI” |
| Icon Identifier: | |
| Icon qualifier: | icon is self-explanatory |
| Icon Identifier: | record 2 in EF _(IMG) |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 6 | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | A8 |
| | 07 | 41 | 54 | 2B | 43 | 49 | 4D | 43 | 9E | 02 | 00 | 02 |

Expected Sequence 2.3 (RUN AT COMAND, basic icon non self-explanatory, request IMSI)

| Step | Direction | MESSAGE / Action | Comments |
|------|--------------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 2.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: RUN AT COMMAND 2.3.1 | [BASIC-ICON, non self-explanatory, request IMSI] |
| 4 | ME → USER | Display “Basic Icon” and BASIC- ICON Or Display “Basic Icon” | |
| 7 | ME → SIM | TERMINAL RESPONSE: RUN AT COMMAND 2.1.1A Or TERMINAL RESPONSE: RUN AT COMMAND 2.1.1B | [Command performed successfully, AT response containing IMSI] or [Command performed but requested icon could not be displayed, AT response containing IMSI] |

PROACTIVE COMMAND: RUN AT COMMAND 2.3.1

Logically:

| | |
|---------------------|---------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | RUN AT COMMAND |
| Command qualifier: | “00” |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| Alpha Identifier | |
| Alpha identifier: | “Basic Icon” |
| AT Command | |
| AT Command string: | “AT+CIMI” |
| Icon Identifier | |
| Icon qualifier: | icon is non self-explanatory |
| Icon Identifier: | record 1 in EF _(IMG) |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 22 | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | 85 |
| | 0A | 42 | 61 | 73 | 69 | 63 | 20 | 49 | 63 | 6F | 6D | A8 |
| | 07 | 41 | 54 | 2B | 43 | 49 | 4D | 43 | 9E | 02 | 01 | 01 |

Expected Sequence 2.4 (RUN AT COMMAND, colour icon non self-explanatory, request IMSI)

| Step | Direction | MESSAGE / Action | Comments |
|------|--------------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND 2.4.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: RUN AT COMMAND 2.4.1 | [COLOUR-ICON, non self-explanatory, request IMSI] |
| 4 | ME → USER | Display “Colour Icon” and COLOUR-ICON Or Display “Colour Icon” | |
| 5 | ME → SIM | TERMINAL RESPONSE: RUN AT COMMAND 2.1.1A Or TERMINAL RESPONSE: RUN AT COMMAND 2.1.1B | [Command performed successfully, AT response containing IMSI] or [Command performed but requested icon could not be displayed, AT response containing IMSI] |

PROACTIVE COMMAND: RUN AT COMMAND 2.4.1

Logically:

Command details

| | |
|--------------------|----------------|
| Command number: | 1 |
| Command type: | RUN AT COMMAND |
| Command qualifier: | "00" |

Device identities

Source device: SIM
Destination device: ME

Alpha Identifier

Alpha identifier: "Colour Icon"

Alpha Tech

AT Command string: "AT+CMII"

All Comma Icon Identifier:

Icon Identifier:
Icon qualifier:
Icon Identifier:

Coding:

Expected Sequence 2.5 (RUN AT COMMAND, basic icon non self-explanatory, no alpha identifier presented)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|-------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: RUN AT COMMAND SS 2.5.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: RUN AT COMMAND 2.5.1 | [BASIC-ICON, non self-explanatory] |
| 4 | ME → SIM | TERMINAL RESPONSE: RUN AT COMMAND 2.5.1 | [Command data not understood by ME] |

PROACTIVE COMMAND: RUN AT COMMAND 2.5.1

Logically:

Logically:

Command details

| | |
|--------------------|----------------|
| Command number: | 1 |
| Command type: | RUN AT COMMAND |
| Command qualifier: | “00” |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

AT Command

| | |
|--------------------|-----------|
| AT Command string: | “AT+CIMI” |
|--------------------|-----------|

Icon Identifier

| | |
|------------------|---------------------------------|
| Icon qualifier: | icon is non self-explanatory |
| Icon Identifier: | record 1 in EF _(IMG) |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 16 | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 81 | 82 | A8 |
| | 07 | 41 | 54 | 2B | 43 | 49 | 4D | 43 | 9E | 02 | 01 | 01 |

TERMINAL RESPONSE: RUN AT COMMAND 2.5.1

Logically:

Command details

| | |
|--------------------|----------------|
| Command number: | 1 |
| Command type: | RUN AT COMMAND |
| Command qualifier: | “00” |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Result

| | |
|-----------------|-----------------------------------|
| General Result: | Command data not understood by ME |
|-----------------|-----------------------------------|

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 34 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 32 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

27.22.4.23.2.5 Test Requirement

The ME shall operate in the manner defined in expected sequences 1 to 5.

27.22.4.24 SEND DTMF

27.22.4.24.1 SEND DTMF (Normal)

27.22.4.24.1.1 Definition and applicability

See Section 3.2.2.

27.22.4.24.1.2 Conformance requirement

The ME shall support the Proactive SIM: Send DTMF facility as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 6.1, clause 6.4.24 (Send DTMF), 6.6.24 (Send DTMF), clause 12.12.2 (Additional information for ME problem), clause 5.2 (Terminal Profile), clause 12.6 (Command Details), clause 12.7 (Device Identities), clause 12.2 (Alpa identifier), clause 12.44 (DTMF String).

27.22.4.24.1.3 Test Purpose

To verify that after a call has been successfully established the ME sends the DTMF string contained in the SEND DTMF proactive SIM command to the network, and returns a successful response in the TERMINAL RESPONSE command sent to the SIM.

To verify that the ME does not locally generate audible DTMF tones and play them to the user.

To verify that if the ME is in idle mode it informs the SIM using TERMINAL RESPONSE '20' with the additional information "Not in speech call".

To verify that the ME displays the text contained in the SEND DTMF proactive SIM command.

To verify that if an alpha identifier is provided by the SIM and is a null data object the ME does not give any information to the user on the fact that the ME is performing a SEND DTMF command.

27.22.4.24.1.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the System Simulator.

27.22.4.24.1.4.2 Procedure

Expected Sequence 1.1 (SEND DTMF, A call has been successfully established before the beginning of the test)

Some details of the DTMF protocol have been left out for clarity.

| Step | Direction | MESSAGE / Action | Comments |
|------|---------------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DTMF 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND DTMF 1.1.1 | |
| 4 | ME → USER | May give information to the user concerning what is happening. Do not locally generate audible DTMF tones and play them to the user. | |
| 5 | ME → SS ME | Start DTMF 1.1 | ["1"] No DTMF sending for 3 seconds +/-20% |
| 6 | ME → SS | Start DTMF 1.2 | ["2"] [Command performed successfully] |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND DTMF 1.1.1 | |
| 8 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

PROACTIVE COMMAND : SEND DTMF 1.1.1

Logically:

Command details

Command number: 1
 Command type: SEND DTMF
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: Network
 DTMF String: "1" pause "2"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0D | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 81 | 83 | AC |
| | 02 | C1 | F2 | | | | | | | | | |

Start DTMF 1.1

Logically:

DTMF String: "1"

Start DTMF 1.2

Logically:

DTMF String: "2"

TERMINAL RESPONSE : SEND DTMF 1.1.1

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SEND DTMF |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

BER-TLV: 81 03 01 14 00 82 02 82 81 83 01 00

Expected Sequence 1.2 (SEND DTMF, containing alpha identifier, a call has been successfully established before the beginning of the test)

Some details of the DTMF protocol have been left out for clarity.

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DTMF 1.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND DTMF 1.2.1 | |
| 4 | ME → USER | Display "Send DTMF" Do not locally generate audible DTMF tones and play them to the user. | Alpha identifier |
| 5 | ME → SS | Start DTMF 1.1 | ["1"] |
| 6 | ME → SS | Start DTMF 1.2 | ["2"] |
| 7 | ME → SS | Start DTMF 1.3 | ["3"] |
| 8 | ME → SS | Start DTMF 1.4 | ["4"] |
| 9 | ME → SS | Start DTMF 1.5 | ["5"] |
| 10 | ME → SS | Start DTMF 1.6 | ["6"] |
| 11 | ME → SS | Start DTMF 1.7 | ["7"] |
| 12 | ME → SS | Start DTMF 1.8 | ["8"] |
| 13 | ME → SS | Start DTMF 1.9 | ["9"] |
| 14 | ME → SS | Start DTMF 1.10 | ["0"] |
| 15 | ME → SIM | TERMINAL RESPONSE : SEND DTMF 1.1.1 | [Command performed successfully] |
| 16 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

PROACTIVE COMMAND : SEND DTMF 1.2.1

Logically:

| | |
|---------------------|--------------|
| Command details | |
| Command number: | 1 |
| Command type: | SEND DTMF |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | SIM |
| Destination device: | Network |
| Alpha identifier: | "Send DTMF" |
| DTMF String: | "1234567890" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1B | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 81 | 83 | 85 |
| | 09 | 53 | 65 | 6E | 64 | 20 | 44 | 54 | 4D | 46 | AC | 05 |
| | 21 | 43 | 65 | 87 | 09 | | | | | | | |

Start DTMF 1.3

Logically:

| | |
|--------------|-----|
| DTMF String: | "3" |
|--------------|-----|

Start DTMF 1.4

Logically:

| | |
|--------------|-----|
| DTMF String: | "4" |
|--------------|-----|

Start DTMF 1.5

Logically:

| | |
|--------------|-----|
| DTMF String: | "5" |
|--------------|-----|

Start DTMF 1.6

Logically:

| | |
|--------------|-----|
| DTMF String: | "6" |
|--------------|-----|

Start DTMF 1.7

Logically:

| | |
|--------------|-----|
| DTMF String: | "7" |
|--------------|-----|

Start DTMF 1.8

Logically:

| | |
|--------------|-----|
| DTMF String: | "8" |
|--------------|-----|

Start DTMF 1.9

Logically:

| | |
|--------------|-----|
| DTMF String: | "9" |
|--------------|-----|

Start DTMF 1.10

Logically:

| | |
|--------------|-----|
| DTMF String: | "0" |
|--------------|-----|

Expected Sequence 1.3 (SEND DTMF, containing alpha identifier with null data object, a call has been successfully established before the beginning of the test)

Some details of the DTMF protocol have been left out for clarity.

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DTMF 1.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND DTMF 1.3.1 | Alpha identifier with null data object |
| 4 | ME → USER | Do not give any information to the user on the fact that the ME is performing a SEND DTMF command. Do not locally generate audible DTMF tones and play them to the user. | |
| 5 | ME → SS | Start DTMF 1.1 | ["1"] |
| 6 | ME | | No DTMF sending for 30 seconds +/-20% |
| 7 | ME → SS | Start DTMF 1.2 | ["2"] |
| 8 | ME → SIM | TERMINAL RESPONSE : SEND DTMF 1.1.1 | [Command performed successfully] |
| 9 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

PROACTIVE COMMAND : SEND DTMF 1.3.1

Logically:

Command details

| | |
|--------------------|-----------|
| Command number: | 1 |
| Command type: | SEND DTMF |
| Command qualifier: | "00" |

Device identities

| | |
|----------------|-----|
| Source device: | SIM |
|----------------|-----|

| | |
|---------------------|---------|
| Destination device: | Network |
|---------------------|---------|

| | |
|-------------------|-----------------------|
| Alpha identifier: | "" (null data object) |
|-------------------|-----------------------|

| | |
|--------------|---|
| DTMF String: | "1" pause pause pause pause pause pause pause pause "2" |
|--------------|---|

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 13 | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 81 | 83 | 85 |
| | 00 | AC | 06 | C1 | CC | CC | CC | CC | 2C | | | |

Expected Sequence 1.4 (SEND DTMF, mobile is not in a speech call)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DTMF 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND DTMF 1.1.1 | |
| 4 | ME → SIM | TERMINAL RESPONSE : SEND DTMF 1.4.1 | [ME currently unable to process command, not in speech call] |
| 5 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

TERMINAL RESPONSE : SEND DTMF 1.4.1

Logically:

Command details

Command number: 1

Command type: SEND DTMF

Command qualifier: “00”

Device identities

Source device: ME

Destination device: SIM

Result

General Result: ME currently unable to process command

Additional information: Not in speech call

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 82 | 81 | 83 | 02 | 20 |
| | | | | | | | | | | | | 07 |

27.22.4.24.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences.

27.22.4.24.2 SEND DTMF (Display of icons)

27.22.4.24.2.1 Definition and applicability

See Section 3.2.2.

27.22.4.24.2.2 Conformance requirement

The ME shall support the Proactive SIM: Send DTMF facility as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 6.1, clause 6.4.24 (Send DTMF), 6.6.24 (Send DTMF), clause 12.12.2 (Additional information for ME problem), clause 5.2 (Terminal Profile), clause 12.6 (Command Details), clause 12.7 (Device Identities), clause 12.2 (Alpa identifier), clause 12.44 (DTMF String), clause 12.31 (Icon identifier), clause 6.5.4 (Icon identifiers).

27.22.4.24.2.3 Test Purpose

To verify that after a call has been successfully established the ME send the DTMF string contained in the SEND DTMF proactive SIM command to the network, and returns a successful response in the TERMINAL RESPONSE command sent to the SIM.

To verify that the ME do not locally generate audible DTMF tones and play them to the user.

To verify that the ME displays the text contained in the SEND DTMF proactive SIM command.

To verify that the ME displays the icons which are referred to in the contents of the SEND DTMF proactive SIM command.

27.22.4.24.2.4 Method of test

27.22.4.24.2.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

Prior to this test the ME shall have been powered on, performed the PROFILE DOWNLOAD procedure and be in updated idle mode on the System Simulator.

See Annex C for coding of the elementary files on SIM.

27.22.4.24.2.4.2 Procedure

Expected Sequence 2.1 (SEND DTMF, BASIC ICON self explanatory, successful)

Some details of the DTMF protocol have been left out for clarity.

| Step | Direction | MESSAGE / Action | Comments |
|------|---------------|---|--------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DTMF 2.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND DTMF 2.1.1 | [BASIC-ICON, self-explanatory] |
| 4 | ME → USER | Display the BASIC-ICON Do not locally generate audible DTMF tones and play them to the user. | |
| 5 | ME → SS ME | Start DTMF 1.1 | ["1"] |
| 6 | ME → SS | Start DTMF 1.2 | No DTMF sending for 3 seconds +/-20% |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND DTMF 2.1.1A | ["2"] |
| 8 | SIM → ME | PROACTIVE SIM SESSION ENDED | [Command performed successfully] |

PROACTIVE COMMAND : SEND DTMF 2.1.1

Logically:

| | |
|---------------------|---------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SEND DTMF |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | SIM |
| Destination device: | Network |
| Alpha identifier: | "Basic Icon" |
| DTMF String: | "1" pause "2" |
| Icon identifier | |
| Icon qualifier: | icon is self-explanatory |
| Icon Identifier: | record 1 in EF _(IMG) |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1B | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 81 | 83 | 85 |
| | 0A | 42 | 61 | 73 | 69 | 63 | 20 | 49 | 63 | 6F | 6E | AC |
| | 02 | C1 | F2 | 9E | 02 | 00 | 01 | | | | | |

DTMF Request 2.1.1

Logically:

| | |
|--------------|---|
| DTMF String: | \$DTMF_2.1\$ = "C1 F2" (given as example) |
|--------------|---|

TERMINAL RESPONSE : SEND DTMF 2.1.1A

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SEND DTMF |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 2.1B (SEND DTMF, BASIC ICON self explanatory, requested icon could not be displayed)

Some details of the DTMF protocol have been left out for clarity.

| Step | Direction | MESSAGE / Action | Comments |
|------|---------------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DTMF 2.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND DTMF 2.1.1 | [BASIC-ICON, self-explanatory] |
| 4 | ME → USER | Display "Basic Icon" without the icon Do not locally generate audible DTMF tones and play them to the user. | |
| 5 | ME → SS ME | Start DTMF 1.1 | ["1"] No DTMF sending for 3 seconds +/-20% |
| 6 | ME → SS | Start DTMF 1.2 | ["2"] |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND DTMF 2.1.1B | [Command performed successfully, but requested icon could not be displayed] |
| 8 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

TERMINAL RESPONSE : SEND DTMF 2.1.1B

Logically:

Command details

Command number: 1
 Command type: SEND DTMF
 Command qualifier: "00"

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully, but requested icon could not be displayed

Coding:

BER-TLV: 81 03 01 14 00 82 02 82 81 83 01 04

Expected Sequence 2.2 (SEND DTMF, COLOUR-ICON self explanatory, successful)

Some details of the DTMF protocol have been left out for clarity.

| Step | Direction | MESSAGE / Action | Comments |
|------|---------------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DTMF 2.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND DTMF 2.2.1 | [COLOUR-ICON] |
| 4 | ME → USER | Display the COLOUR-ICON Do not locally generate audible DTMF tones and play them to the user. | |
| 5 | ME → SS ME | Start DTMF 1.1 | ["1"] No DTMF sending for 3 seconds +/-20% |
| 6 | ME → SS | Start DTMF 1.2 | ["2"] |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND DTMF 2.1.1A | [Command performed successfully] |
| 8 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

PROACTIVE COMMAND : SEND DTMF 2.2.1

Logically:

| | |
|---------------------|---------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SEND DTMF |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | SIM |
| Destination device: | Network |
| Alpha identifier: | "Colour Icon" |
| DTMF String: | "1" pause "2" |
| Icon Identifier: | |
| Icon qualifier: | icon is self-explanatory |
| Icon Identifier: | record 2 in EF _(IMG) |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 11 | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 81 | 83 | AC |
| | 02 | C1 | F2 | 9E | 02 | 00 | 02 | | | | | |
| BER-TLV: | D0 | 1C | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 81 | 83 | 85 |
| | 0B | 43 | 6F | 6C | 6F | 75 | 72 | 20 | 49 | 63 | 6F | 6E |
| | AC | 02 | C1 | F2 | 9E | 02 | 00 | 02 | | | | |

Expected Sequence 2.2B (SEND DTMF, COLOUR-ICON self explanatory, requested icon could not be displayed)

Some details of the DTMF protocol have been left out for clarity.

| Step | Direction | MESSAGE / Action | Comments |
|------|---------------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DTMF 2.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND DTMF 2.2.1 | [COLOUR-ICON] |
| 4 | ME → USER | Display "Colour Icon" without the icon Do not locally generate audible DTMF tones and play them to the user. | |
| 5 | ME → SS ME | Start DTMF 1.1 | [1"] |
| 6 | ME → SS | Start DTMF 1.2 | No DTMF sending for 3 seconds +/-20% ["2"] |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND DTMF 2.1.1B | [Command performed successfully, but requested icon could not be displayed] |
| 9 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

Expected Sequence 2.3A (SEND DTMF, Alpha identifier & BASIC-ICON, not self-explanatory, successful)

Some details of the DTMF protocol have been left out for clarity.

| Step | Direction | MESSAGE / Action | Comments |
|------|---------------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DTMF 2.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND DTMF 2.3.1 | [Alpha identifier & BASIC-ICON, not self-explanatory] |
| 4 | ME → USER | Display the BASIC-ICON | |
| | | Do not locally generate audible DTMF tones and play them to the user. | |
| 5 | ME → SS ME | Start DTMF 1.1 | ["1"] No DTMF sending for 3 seconds +/-20% |
| 6 | ME → SS | Start DTMF 1.2 | ["2"] |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND DTMF 2.1.1A | [Command performed successfully] |
| 8 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

PROACTIVE COMMAND : SEND DTMF 2.3.1

Logically:

Command details

Command number: 1
 Command type: SEND DTMF
 Command qualifier: "00"

Device identities

Source device: SIM
 Destination device: Network
 Alpha identifier: "Send DTMF"
 DTMF String: "1" pause "2"
 Icon Identifier:
 Icon qualifier: icon is not self-explanatory
 Icon Identifier: record 1 in EF_(IMG)

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1C | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 81 | 83 | 85 |
| | 09 | 53 | 65 | 6E | 64 | 20 | 44 | 54 | 4D | 46 | AC | 02 |
| | C1 | F2 | 9E | 02 | 01 | 01 | | | | | | |

Expected Sequence 2.3B (SEND DTMF, Alpha identifier & BASIC-ICON, not self-explanatory, requested icon could not be displayed)

Some details of the DTMF protocol have been left out for clarity.

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DTMF 2.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND DTMF 2.3.1 | [Alpha identifier & BASIC-ICON, not self-explanatory] |
| 4 | ME → USER | Display "Send DTMF" without the icon | |
| | | Do not locally generate audible DTMF tones and play them to the user. | |

| | | | |
|---|---------------|---|--|
| 5 | ME → SS ME | Start DTMF 1.1 | ["1"] No DTMF sending for 3 seconds +/-20% |
| 7 | ME → SS | Start DTMF 1.2 | ["2"] [Command performed successfully, but requested icon could not be displayed] |
| 8 | ME → SIM | TERMINAL RESPONSE : SEND DTMF 2.1.1B | |
| 9 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

27.22.4.24.2.5 Test Requirement

The ME shall operate in the manner defined in expected sequences.

27.22.4.24.3 SEND DTMF (UCS2 support)

27.22.4.24.3.1 Definition and applicability

See Section 3.2.2.

27.22.4.24.3.2 Conformance requirement

The ME shall support the Proactive SIM: Send DTMF facility as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 6.1, clause 6.4.24 (Send DTMF), 6.6.24 (Send DTMF), clause 12.12.2 (Additional information for ME problem), clause 5.2 (Terminal Profile), clause 12.6 (Command Details), clause 12.7 (Device Identities), clause 12.2 (Alpa identifier), clause 12.44 (DTMF String).

Additionally the ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in the following technical specifications: ISO/IEC 10646. [17].

27.22.4.24.3.3 Test Purpose

To verify that the ME displays the UCS2 text contained in the SEND DTMF proactive SIM command, and returns a successful result in the TERMINAL RESPONSE command send to the SIM.

27.22.4.24.3.4 Method of test

27.22.4.24.3.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default with the following exceptions.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.24.3.4.2 Procedure

Expected Sequence 3.1 (SEND DTMF, successful, UCS2 text)

Some details of the DTMF protocol have been left out for clarity.

| Step | Direction | MESSAGE / Action | Comments |
|------|---------------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DTMF 3.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND DTMF 3.1.1 | |
| 4 | ME → USER | Display “ЗДРАВСТВУЙТЕ” | ["Hello" in Russian] |
| 5 | ME → SS ME | Start DTMF 1.1 | ["1"] No DTMF sending for 3 seconds +/-20% |
| 6 | ME → SS | Start DTMF 1.2 | ["2"] |
| 7 | ME → SIM | TERMINAL RESPONSE : SEND DTMF 3.1.1 | [Command performed successfully] |
| 8 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

PROACTIVE COMMAND : SEND DTMF 3.1.1

Logically:

Command details

| | |
|--------------------|-----------|
| Command number: | 1 |
| Command type: | SEND DTMF |
| Command qualifier: | "00" |

Device identities

| | |
|---------------------|---------|
| Source device: | SIM |
| Destination device: | Network |

Alpha Identifier

| | |
|---------------------|----------------|
| Data coding scheme: | UCS2 (16bit) |
| Text: | “ЗДРАВСТВУЙТЕ” |

DTMF String:

"1" pause "2"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 28 | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 81 | 83 | 8D |
| | 19 | 08 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 | 04 | 12 |
| | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 | 04 | 22 |
| | 04 | 15 | AC | 02 | C1 | F2 | | | | | | |

TERMINAL RESPONSE : SEND DTMF 3.1.1

Logically:

Command details

| | |
|--------------------|-----------|
| Command number: | 1 |
| Command type: | SEND DTMF |
| Command qualifier: | "00" |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|------------------------------|
| General Result: | Command performed successful |
|-----------------|------------------------------|

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 14 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

27.22.4.12.2.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 1.

27.22.4.25 LANGUAGE NOTIFICATION

27.22.4.25.1 Definition and applicability

See Section 3.2.2.

27.22.4.25.2 Conformance Requirement

The ME shall conclude the command by sending TERMINAL RESPONSE (OK) to the SIM, as soon as possible after receiving the LANGUAGE NOTIFICATION proactive SIM command.

3GPP TS 11.14 clause 6.4.25, 6.6.25.

27.22.4.25.3 Test Purpose

To verify that the ME shall send a TERMINAL RESPONSE (OK) to the SIM after the ME receives the LANGUAGE NOTIFICATION proactive SIM command.

27.22.4.25.4 Method of Test

27.22.4.25.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.25.4.2 Procedure

Expected Sequence 1.1 (LANGUAGE NOTIFICATION)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: LANGUAGE NOTIFICATION 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : LANGUAGE NOTIFICATION 1.1.1 | Language specified in the command is different from the one set on the mobile. [Command performed successfully] |
| 4 | ME → SIM | TERMINAL RESPONSE : LANGUAGE NOTIFICATION 1.1.1 | |
| 5 | SIM → ME | PROACTIVE SIM SESSION ENDED | Check that language of ME has been replaced by the one specified in LANGUAGE NOTIFICATION 1.1.1 |

PROACTIVE COMMAND : LANGUAGE NOTIFICATION 1.1.1

Logically:

| | | | | | | | | | | | |
|---------------------|--|--|--|--|-----|---|--|--|--|--|--|
| Command details | | | | | | | | | | | |
| Command number: | | | | | 1 | | | | | | |
| Command type: | | | | | | LANGUAGE NOTIFICATION | | | | | |
| Command qualifier: | | | | | | "01" (specific language notification) | | | | | |
| Device identities | | | | | | | | | | | |
| Source device: | | | | | SIM | | | | | | |
| Destination device: | | | | | ME | | | | | | |
| Language | | | | | | | | | | | |
| Language | | | | | | 'se'(spanish) -> 73 65 | | | | | |
| | | | | | | or 'de' → 64 65 (german) for instance : choose a language different from the one initially set on the ME to check the proper execution of the command | | | | | |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0D | 81 | 03 | 01 | 35 | 01 | 82 | 02 | 81 | 82 | AD |
| | 02 | 73 | 65 | | | | | | | | | |

TERMINAL RESPONSE : LANGUAGE NOTIFICATION 1.1.1

Logically:

| | | | | | | | | | | | |
|---------------------|--|--|--|--|-----|--------------------------------|--|--|--|--|--|
| Command details | | | | | | | | | | | |
| Command number: | | | | | 1 | | | | | | |
| Command type: | | | | | | LANGUAGE NOTIFICATION | | | | | |
| Command qualifier: | | | | | | "01" | | | | | |
| Device identities | | | | | | | | | | | |
| Source device: | | | | | ME | | | | | | |
| Destination device: | | | | | SIM | | | | | | |
| Result | | | | | | | | | | | |
| General Result: | | | | | | Command performed successfully | | | | | |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 35 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 1.2 (LANGUAGE NOTIFICATION)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: LANGUAGE NOTIFICATION 1.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : LANGUAGE NOTIFICATION 1.2.1 | |
| 4 | ME → SIM | TERMINAL RESPONSE : LANGUAGE NOTIFICATION 1.2.1 | [Command performed successfully] |
| 5 | SIM → ME | PROACTIVE SIM SESSION ENDED | Check that initial language is set again. |

PROACTIVE COMMAND : LANGUAGE NOTIFICATION 1.2.1

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | LANGUAGE NOTIFICATION |
| Command qualifier: | "00" (non specific language notification) |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 09 | 81 | 03 | 01 | 35 | 01 | 82 | 02 | 81 | 82 |
|----------|----|----|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE : LANGUAGE NOTIFICATION 1.2.1

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | LANGUAGE NOTIFICATION |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 35 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

27.22.4.25.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 1 and 2.

27.22.4.26 LAUNCH BROWSER**27.22.4.26.1 LAUNCH BROWSER (No session already launched)****27.22.4.26.1.1 Definition and applicability**

See Section 3.2.2.

27.22.4.26.1.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive SIM Command as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clauses 6.4.26 and 6.6.26 (Launch browser), clause 12.6 (Commands details), clause 12.7 (device identities), clause 12.48 (URL), clause 13.2 (command tag), clause 12.2 (Alpha

Identifier), clause 12.47 (Browser identity), clause 12.49 (Bearer), clause 112.50 (provisioning), clause 12.15 (Text String), clause 12.31 (icon identifier).

27.22.4.26.1.3 Test Purpose

To verify that when the ME is in idle state, it launches properly the Wap session required in LAUNCH BROWSER, and returns a successful result in the TERMINAL RESPONSE command.

27.22.4.26.1.4 Method of test

27.22.4.26.1.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

A valid access to 2 different Wap gateways is required:

- the default Wap parameters (IP address, gateway/proxy identity, called number, URL ...) of the tested mobile shall be properly filled to access one of the gateways (“default gateway”)

With that default gateway we shall be able to access to an URL different from the default one.

- another gateway with an IP address different from the one defined in default Wap parameters.

The mobile is in idle mode.

27.22.4.26.1.4.2 Procedure

Expected Sequence 1.1 (LAUNCH BROWSER, connect to the default URL)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 0 | ME | | |
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 1.1.1 | [the ME is in idle mode] |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : LAUNCH BROWSER 1.1.1 | [connect to the default URL, “launch browser, if not already launched”, no null alpha id.] |
| 4 | ME → USER | ME displays the alpha identifier | |
| 5 | USER → ME | The user may have to confirm the launch browser. | [option : user confirmation] |
| 6 | ME → SIM | TERMINAL RESPONSE : LAUNCH BROWSER 1.1.1 | [Command performed successfully] |
| 7 | ME->SS | The ME attempts to launch the session with the default Wap parameters and the default URL. | |
| 8 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

| | | | |
|---|-----------|---|--|
| 9 | USER → ME | The user verifies that the default Wap session is properly established. Then he/she ends the navigation. The ME returns in idle mode. | |
|---|-----------|---|--|

PROACTIVE COMMAND : LAUNCH BROWSER 1.1.1

Logically:

| | |
|---------------------|-------------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | LAUNCH BROWSER |
| Command qualifier: | launch browser, if not already used |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| URL | empty |
| Alpha identifier | "Default URL" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 18 | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 81 | 82 | 31 |
| | 00 | 05 | 0B | 44 | 65 | 66 | 61 | 76 | 6C | 74 | 20 | 55 |
| | 52 | 4C | | | | | | | | | | |

TERMINAL RESPONSE : LAUNCH BROWSER 1.1.1

Logically:

| | |
|---------------------|-------------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | LAUNCH BROWSER |
| Command qualifier: | launch browser, if not already used |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 1.2 (LAUNCH BROWSER, connect to the specified URL, alpha identifier length=0)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|------------------|----------|
|------|-----------|------------------|----------|

| | | | |
|--------|----------------------|--|--|
| 0 1 | ME SIM → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 1.2.1 | [the ME is in idle mode] |
| 2 3 | ME → SIM SIM → ME | FETCH PROACTIVE COMMAND : LAUNCH BROWSER 1.2.1 | [connect to defined URL, "launch browser, if not already launched, alpha identifier length=0"] |
| 4 | ME → USER | No information should be displayed. | |
| 5 | USER → ME | The user may have to confirm the launch browser. | [option : user confirmation] |
| 6 | ME → SIM | TERMINAL RESPONSE : LAUNCH BROWSER 1.2.1 | [Command performed successfully] |
| 7 | ME->SS | The ME attempts to connect the URL specified in the LAUNCH BROWSER command. | |
| 8 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 9 | USER → ME | The user verifies that the URL is properly connected. Then he/she ends the navigation. The ME returns in idle mode. | |

PROACTIVE COMMAND : LAUNCH BROWSER 1.2.1

Logically:

Command details

Command number:

1

Command type:

LAUNCH BROWSER

Command qualifier:

launch browser, if not already used

Device identities

Source device:

SIM

Destination device:

ME

URL

<http://xxx.yyy.zzz> (note: this URL shall be different from the default URL,
but it can be reached from the gateway defined by default in the Wap
parameters of the mobile)

Alpha identifier

empty

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1F | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 81 | 82 | 31 |
| | 12 | 68 | 74 | 74 | 70 | 3A | 2F | 2F | 78 | 78 | 78 | 2E |
| | 79 | 79 | 79 | 2E | 7A | 7A | 7A | 05 | 00 | | | |

TERMINAL RESPONSE : LAUNCH BROWSER 1.2.1

Logically:

| Command details | |
|---------------------|-------------------------------------|
| Command number: | 1 |
| Command type: | LAUNCH BROWSER |
| Command qualifier: | launch browser, if not already used |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

BER-TLV: 81 03 01 15 00 82 02 82 81 83 01 00

Expected Sequence 1.3 (LAUNCH BROWSER, Browser identity, no alpha identifier)

| Step | Direction | MESSAGE / Action | Comments |
|------|--------------|---|--|
| 0 | ME | | |
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 1.3.1 | [the ME is in idle mode] |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : LAUNCH BROWSER 1.3.1 | [connect to the default URL, “launch browser, if not already launched, browser identity”] |
| 4 | ME → USER | ME may display a default message of its own. | |
| 5 | USER → ME | The user may confirm the launch browser. | [option : user confirmation] |
| 6 | ME → SIM | TERMINAL RESPONSE : LAUNCH BROWSER 1.3.1 | [Command performed successfully] |
| 7 | ME->SS | The ME attempts to connect the default URL. | |
| 8 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 9 | USER → ME | The user verifies that the default Wap session is properly established. Then he/she ends the navigation. The ME returns in idle mode. | |

PROACTIVE COMMAND : LAUNCH BROWSER 1.3.1

Logically:

Command details

| | |
|--------------------|-------------------------------------|
| Command number: | 1 |
| Command type: | LAUNCH BROWSER |
| Command qualifier: | launch browser, if not already used |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

| | |
|------------------|---------|
| Browser Identity | default |
| URL | 0 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1F | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 81 | 82 | 30 |
| | 01 | 00 | 31 | 00 | | | | | | | | |

TERMINAL RESPONSE : LAUNCH BROWSER 1.3.1

Logically:

Command details

| | |
|--------------------|-------------------------------------|
| Command number: | 1 |
| Command type: | LAUNCH BROWSER |
| Command qualifier: | launch browser, if not already used |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|--------------------------------|
| General Result: | Command performed successfully |
|-----------------|--------------------------------|

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | | | | | | | | | | | | |

Expected Sequence 1.4 (LAUNCH BROWSER, one bearer specified and gateway/proxy identity)

| Step | Direction | MESSAGE / Action | Comments |
|------|--------------|---|--|
| 0 | ME | | |
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 1.4.1 | [the ME is in idle mode] |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : LAUNCH BROWSER 1.4.1 | [connect to the default URL, "launch browser, if not already launched, 1 bearer specified, gateway/proxy id specified] |
| 4 | ME → USER | ME may display a default message | |
| 5 | USER → ME | The user may confirm the launch browser. | [option : user confirmation] |
| 6 | ME → SIM | TERMINAL RESPONSE : LAUNCH BROWSER 1.4.1 A Or TERMINAL RESPONSE : LAUNCH BROWSER 1.4.1 B Or TERMINAL RESPONSE : LAUNCH BROWSER 1.4.1 C | [Command performed successfully] [Launch browser generic error code – bearer not available] [Command performed with partial comprehension] |

| | | | |
|---|-----------|---|--|
| 7 | ME->SS | The ME attempts to connect the default URL using the requested bearer and proxy identity | |
| 8 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 9 | USER → ME | If performed successfully: the user verifies that the Wap session is properly established with the required bearer. Then he/she ends the navigation. The ME returns in idle mode. | |

PROACTIVE COMMAND : LAUNCH BROWSER 1.4.1

Logically:

| Command details | |
|---------------------|---|
| Command number: | 1 |
| Command type: | LAUNCH BROWSER |
| Command qualifier: | launch browser, if not already used |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| URL | 0 |
| Bearer | GPRS |
| Gateway/Proxy id | |
| DCS | unpacked, 8 bits data |
| Text string | abc.def.ghi (different from the default IP address) |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1C | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 81 | 82 | 31 |
| | 00 | 32 | 01 | 03 | 0D | OC | 04 | 61 | 62 | 63 | 2E | 64 |
| | 65 | 66 | 2E | 67 | 68 | 69 | | | | | | |

TERMINAL RESPONSE : LAUNCH BROWSER 1.4.1 A

Logically:

| Command details | |
|---------------------|-------------------------------------|
| Command number: | 1 |
| Command type: | LAUNCH BROWSER |
| Command qualifier: | launch browser, if not already used |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE : LAUNCH BROWSER 1.4.1 B

Logically:

| | |
|------------------------|-------------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | LAUNCH BROWSER |
| Command qualifier: | launch browser, if not already used |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Launch browser generic error code |
| Additional information | Bearer not available |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 82 | 81 | 83 | 02 | 26 |
| | 01 | | | | | | | | | | | |

TERMINAL RESPONSE : LAUNCH BROWSER 1.4.1 C

Logically:

| | |
|---------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | LAUNCH BROWSER |
| Command qualifier: | launch browser, if not already used |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully, with partial comprehension |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 01 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 1.5 (LAUNCH BROWSER, several bearers specified, gateway/proxy id specified)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 0 | | | |
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 1.5.1 | [ME is in idle mode] |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : LAUNCH BROWSER 1.5.1 | [connect to the default URL, "launch browser, if not already launched, several bearers, gateway/proxy id specified] |

| | | | |
|---|-----------|--|--|
| 4 | ME → USER | ME may display a default message | |
| 5 | USER → ME | The user may confirm the launch browser. | [option : user confirmation] |
| 6 | ME → SIM | TERMINAL RESPONSE : LAUNCH BROWSER 1.5.1 A Or TERMINAL RESPONSE : LAUNCH BROWSER 1.5.1 B Or TERMINAL RESPONSE : LAUNCH BROWSER 1.5.1 C | [Command performed successfully] [Launch browser generic error code – bearer not available] [Command performed with partial comprehension] |
| 7 | ME->SS | The ME attempts to connect the default URL. | |
| 8 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 9 | USER → ME | If performed successfully: the user verifies that the Wap session is properly established with one of the required bearers. Then he/she ends the navigation. The ME returns in idle mode. | |

PROACTIVE COMMAND : LAUNCH BROWSER 1.5.1

Logically:

| Command details | |
|---------------------|---|
| Command number: | 1 |
| Command type: | LAUNCH BROWSER |
| Command qualifier: | launch browser, if not already used |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| URL | 0 |
| Bearer | GPRS, USSD, SMS |
| Gateway/Proxy id | |
| DCS | 7 bits default alphabet |
| Text string | abc.def.ghi (different from the default IP address) |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1D | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 81 | 82 | 31 |
| | 00 | 32 | 03 | 03 | 02 | 00 | 0D | 0C | 00 | 61 | F1 | D8 |
| | 45 | 2E | 9B | 5D | 67 | 74 | 1A | | | | | |

TERMINAL RESPONSE : LAUNCH BROWSER 1.5.1 A

Logically:

| | |
|---------------------|-------------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | LAUNCH BROWSER |
| Command qualifier: | launch browser, if not already used |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE : LAUNCH BROWSER 1.5.1 B

Logically:

| | |
|------------------------|-------------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | LAUNCH BROWSER |
| Command qualifier: | launch browser, if not already used |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Launch browser generic error code |
| Additional information | Bearer not available |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 82 | 81 | 83 | 02 | 26 |
| | 01 | | | | | | | | | | | |

TERMINAL RESPONSE : LAUNCH BROWSER 1.5.1 C

Logically:

| | |
|---------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | LAUNCH BROWSER |
| Command qualifier: | launch browser, if not already used |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully, with partial comprehension |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 01 |
| | 01 | | | | | | | | | | | |

27.22.4.26.2 LAUNCH BROWSER (Interaction with current session)

27.22.4.26.2.1 Definition and applicability

See Section 3.2.2.

27.22.4.26.2.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive SIM Command as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clauses 6.4.26 and 6.6.26 (Launch browser), clause 12.6 (Commands details), clause 12.7 (device identities), clause 12.48 (URL), clause 13.2 (command tag), clause 12.2 (Alpha Identifier), clause 12.47 (Browser identity), optional 12.49 (Bearer), optional 12.50 (provisioning), clause 12.15 (Text String), clause 12.31 (icon identifier).

27.22.4.26.2.3 Test Purpose

To verify that when the ME is already busy in a Wap session, it launches properly the Wap session required in LAUNCH BROWSER, and returns a successful result in the TERMINAL RESPONSE.

27.22.4.26.2.4 Method of test

27.22.4.26.2.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

A valid access to a Wap gateway is required. The default Wap parameters (IP address, gateway/proxy identity, called number ...) of the tested mobile shall be properly filled to access that gateway.

The mobile is busy in a Wap session, the user navigates in pages different from the URL defined by default in Wap parameters.

27.22.4.26.2.4.2 Procedure

Expected Sequence 2.1 (LAUNCH BROWSER, use the existing browser, connect to the default URL)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 0 | ME | The user is navigating in a Wap session (not default URL). | [Browser is in use, the current session is not secured] |
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 2.1.1 | |

| | | | |
|---|-----------|---|---|
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : LAUNCH BROWSER 2.1.1 | [connect to the default URL, "use the existing browser", no null alpha id.] |
| 4 | ME → USER | ME displays the alpha identifier | |
| 5 | USER → ME | The user confirms the launch browser. | [user confirmation] |
| 6 | ME → SIM | TERMINAL RESPONSE : LAUNCH BROWSER 2.1.1 | [Command performed successfully] |
| 7 | ME->SS | The ME does not close the existing session and attempts to connect the default URL. | |
| 8 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 9 | USER → ME | The user verifies that the default URL is connected; and the previous URL can be retrieved. Then he/she ends the navigation with the default URL. | |

PROACTIVE COMMAND : LAUNCH BROWSER 2.1.1

Logically:

Command details

| | |
|--------------------|--------------------------|
| Command number: | 1 |
| Command type: | LAUNCH BROWSER |
| Command qualifier: | use the existing browser |

Device identities

| | |
|---------------------|---------------|
| Source device: | SIM |
| Destination device: | ME |
| URL | empty |
| Alpha identifier | "Default URL" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 18 | 81 | 03 | 01 | 15 | 02 | 82 | 02 | 81 | 82 | 31 |
| | 00 | 05 | 0B | 44 | 65 | 66 | 61 | 76 | 6C | 74 | 20 | 55 |
| | 52 | 4C | | | | | | | | | | |

TERMINAL RESPONSE : LAUNCH BROWSER 2.1.1

Logically:

Command details

| | |
|--------------------|--------------------------|
| Command number: | 1 |
| Command type: | LAUNCH BROWSER |
| Command qualifier: | use the existing browser |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|--------------------------------|
| General Result: | Command performed successfully |
|-----------------|--------------------------------|

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 15 | 02 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 2.2 (LAUNCH BROWSER, close the existing browser session and launch new browser session, connect to the default URL)

| Step | Direction | MESSAGE / Action | Comments |
|-------------|------------------|---|--|
| 0 | ME | The user is navigating in a Wap session (not default URL).. | [Browser is in use, the current session is not secured] |
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 2.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : LAUNCH BROWSER 2.2.1 | [connect to the default URL, "close the existing browser session and launch new browser session", no null alpha id.] |
| 4 | ME → USER | ME displays the alpha identifier | |
| 5 | USER → ME | The user confirms the launch browser. | [user confirmation] |
| 6 | ME → SIM | TERMINAL RESPONSE : LAUNCH BROWSER 2.2.1 | [Command performed successfully] |
| 7 | ME->SS | The ME closes the existing session and attempts to launch the session with the default Wap parameters and the default URL. | |
| 8 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 9 | USER → ME | The user verifies that the default URL is connected; and the previous URL cannot be retrieved (to verify the previous session has been closed). Then he/she does not end the navigation. | |

PROACTIVE COMMAND : LAUNCH BROWSER 2.2.1

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | LAUNCH BROWSER |
| Command qualifier: | close the existing browser session and launch new browser session |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| URL | empty |
| Alpha identifier | "Default URL" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 18 | 81 | 03 | 01 | 15 | 03 | 82 | 02 | 81 | 82 | 31 |
| | 00 | 05 | 0B | 44 | 65 | 66 | 61 | 76 | 6C | 74 | 20 | 55 |
| | 52 | | 4C | | | | | | | | | |

TERMINAL RESPONSE : LAUNCH BROWSER 2.2.1

Logically:

| Command details | |
|---------------------|---|
| Command number: | 1 |
| Command type: | LAUNCH BROWSER |
| Command qualifier: | close the existing browser session and launch new browser session |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

BER-TLV: 81 03 01 15 03 82 02 82 81 83 01 00

Expected Sequence 2.3 (LAUNCH BROWSER, if not already launched)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 0 | ME | The user is navigating in a Wap session (not default URL).. | [Browser is in use, the current session is not secured] |
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 2.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : LAUNCH BROWSER 2.3.1 | [connect to the default URL, "launch browser, if not already launched"] |
| 8 | ME → SIM | TERMINAL RESPONSE : LAUNCH BROWSER 2.3.1 | [ME unable to process command – browser unavailable] |
| 9 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 10 | USER → ME | The user verifies that the default URL has not been connected. Then he/she ends the navigation. The ME returns in idle mode. | |

PROACTIVE COMMAND : LAUNCH BROWSER 2.3.1

Logically:

| Command details | |
|---------------------|-------------------------------------|
| Command number: | 1 |
| Command type: | LAUNCH BROWSER |
| Command qualifier: | launch browser, if not already used |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| URL | empty |

Coding:

BER-TLV: D0 0C 81 03 01 15 00 82 02 81 82 31
00

TERMINAL RESPONSE : LAUNCH BROWSER 2.3.1

Logically:

| | |
|---------------------|-------------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | LAUNCH BROWSER |
| Command qualifier: | launch browser, if not already used |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | ME unable to process command |
| Additional data | Browser unavailable |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 15 | 00 | 82 | 02 | 82 | 81 | 83 | 02 | 26 |
| | 02 | | | | | | | | | | | |

27.22.4.26.3 LAUNCH BROWSER (UCS2 support)

27.22.4.26.3.1 Definition and applicability

See Section 3.2.2.

27.22.4.26.3.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive SIM Command as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clauses 6.4.26 and 6.6.26 (Launch browser), clause 12.6 (Commands details), clause 12.7 (device identities), clause 12.48 (URL), clause 13.2 (command tag), clause 12.2 (Alpha Identifier), clause 12.47 (Browser identity), optional 12.49 (Bearer), optional 12.50 (provisioning), clause 12.15 (Text String), clause 12.31 (icon identifier)

Additionally the ME shall support the UCS2 facility for the coding of the Cyrillic alphabet, as defined in the following technical specifications: ISO/IEC 10646. [17].

27.22.4.26.2.3 Test Purpose

To verify that the ME performs a proper user confirmation with an USC2 alpha identifier, launches the Wap session required in LAUNCH BROWSER and returns a successful result in the TERMINAL RESPONSE command send to the SIM.

27.22.4.26.3.4 Method of test

27.22.4.26.3.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

A valid access to 2 different Wap gateways is required:

- the default Wap parameters (IP address, gateway/proxy identity, called number, URL ...) of the tested mobile shall be properly filled to access one of the gateways ("default gateway")
 - With that default gateway we shall be able to access to an URL different from the default one.
- another gateway with an IP address different from the one defined in default Wap parameters.

The mobile is busy in a Wap session, the user navigates in pages different from the URL defined by default in Wap parameters.

27.22.4.26.3.4.2 Procedure

Expected Sequence 3.1 (LAUNCH BROWSER, use the existing browser, connect to the default URL)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 0 | ME | The user is navigating in a Wap session (not default URL).. | [Browser is in use, the current session is not secured]] |
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 3.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : LAUNCH BROWSER 3.1.1 | [connect to the default URL, "use the existing browser", alpha id. In UCS2] |
| 4 | ME → USER | ME displays the alpha identifier "ЗДРАВСТВУЙТЕ" | ["Hello" in Russian] |
| 5 | USER → ME | The user confirms the launch browser. | [user confirmation] |
| 6 | ME → SIM | TERMINAL RESPONSE : LAUNCH BROWSER 3.1.1 | [Command performed successfully] |
| 7 | ME->SS | The ME does not close the existing session and attempts to connect the default URL. | |
| 8 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 9 | USER → ME | The user verifies that the default URL is connected; and the previous URL can be retrieved. Then he/she ends the navigation with the default URL. | |

PROACTIVE COMMAND : LAUNCH BROWSER 3.1.1

Logically:

| | |
|---------------------|--------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | LAUNCH BROWSER |
| Command qualifier: | use the existing browser |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| URL | empty |
| Alpha Identifier | |
| Data coding scheme: | UCS2 (16 bits) |
| Text: | “ЗДРАВСТВУЙТЕ” |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 26 | 81 | 03 | 01 | 15 | 02 | 82 | 02 | 81 | 82 | 31 |
| | 00 | 05 | 19 | 80 | 04 | 17 | 04 | 14 | 04 | 20 | 04 | 10 |
| | 04 | 12 | 04 | 21 | 04 | 22 | 04 | 12 | 04 | 23 | 04 | 19 |
| | 04 | 22 | 04 | 15 | | | | | | | | |

TERMINAL RESPONSE : LAUNCH BROWSER 3.1.1

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | LAUNCH BROWSER |
| Command qualifier: | use the existing browser |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 15 | 02 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

27.22.4.26.4 LAUNCH BROWSER (icons support)

27.22.4.26.4.1 Definition and applicability

See Section 3.2.2.

27.22.4.26.4.2 Conformance requirements

The ME shall support the LAUNCH BROWSER Proactive SIM Command as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clauses 6.4.26 and 6.6.26 (Launch browser), clause 12.6 (Commands details), clause 12.7 (device identities), clause 12.48 (URL), clause 13.2 (command tag), clause 12.2 (Alpha Identifier), clause 12.47 (Browser identity), optional 12.49 (Bearer), optional 12.50 (provisioning), clause 12.15 (Text String), clause 12.31 (icon identifier).

27.22.4.26.4.3 Test Purpose

To verify that the ME performs a proper user confirmation with an icon identifier, launches the Wap session required in LAUNCH BROWSER and returns a successful result in the TERMINAL RESPONSE command send to the SIM.

27.22.4.26.4.4 Method of test

27.22.4.26.4.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

A valid access to 2 different Wap gateways is required:

- the default Wap parameters (IP address, gateway/proxy identity, called number, URL ...) of the tested mobile shall be properly filled to access one of the gateways ("default gateway")
With that default gateway we shall be able to access to an URL different from the default one.
- another gateway with an IP address different from the one defined in default Wap parameters.

The mobile is busy in a Wap session, the user navigates in pages different from the URL defined by default in Wap parameters.

27.22.4.26.4.4.2 Procedure

Expected Sequence 4.1A (LAUNCH BROWSER, use the existing browser, icon not self explanatory, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 4.1.1 | [Browser is in use, the current session is not secured]] |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : LAUNCH BROWSER 4.1.1 | [connect to the default URL, "use the existing browser", no null alpha id.] |
| 4 | ME → USER | ME displays the alpha identifier and the icon | ["Not self explan."] |
| 5 | USER → ME | The user confirms the launch browser. | [user confirmation] |
| 6 | ME → SIM | TERMINAL RESPONSE : LAUNCH BROWSER 4.1.1 A | [Command performed successfully] |
| 7 | ME->SS | The ME does not close the existing session and attempts to connect the default URL. | |
| 8 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

| | | | |
|---|-----------|---|--|
| 9 | USER → ME | The user verifies that the default URL is connected; and the previous URL can be retrieved. Then he/she ends the navigation with the default URL. | |
|---|-----------|---|--|

PROACTIVE COMMAND : LAUNCH BROWSER 4.1.1

Logically:

| | |
|---------------------|---------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | LAUNCH BROWSER |
| Command qualifier: | use the existing browser |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| URL | empty |
| Alpha Identifier | “Not self explan.” |
| Icon Identifier: | |
| Icon qualifier: | not self-explanatory |
| Icon Identifier: | record 1 in EF _(IMG) |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 21 | 81 | 03 | 01 | 15 | 02 | 82 | 02 | 81 | 82 | 31 |
| | 00 | 05 | 10 | 4E | 6F | 74 | 20 | 73 | 65 | 6C | 66 | 20 |
| | 65 | 78 | 70 | 6C | 61 | 6E | 2E | 1E | 02 | 01 | 01 | |

TERMINAL RESPONSE : LAUNCH BROWSER 4.1.1 A

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | LAUNCH BROWSER |
| Command qualifier: | use the existing browser |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 15 | 02 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 4.1B (LAUNCH BROWSER, use the existing browser, icon not self explanatory, requested icon could not be displayed)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 4.1.1 | [Browser is in use, the current session is not secured]] |
| 2 | ME → SIM | FETCH | |

| | | | |
|---|-----------|---|---|
| 3 | SIM → ME | PROACTIVE COMMAND : LAUNCH BROWSER 4.1.1 | [connect to the default URL, "use the existing browser", no null alpha id.] ["Not self explan."] |
| 4 | ME → USER | ME displays the alpha identifier Without the icon | |
| 5 | USER → ME | The user confirms the launch browser. | [user confirmation] |
| 6 | ME → SIM | TERMINAL RESPONSE : LAUNCH BROWSER 4.1.1 B | [Command performed successfully but requested icon could not be displayed] |
| 7 | ME->SS | The ME does not close the existing session and attempts to connect the default URL. | |
| 8 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 9 | USER → ME | The user verifies that the default URL is connected; and the previous URL can be retrieved. Then he/she ends the navigation with the default URL. | |

TERMINAL RESPONSE : LAUNCH BROWSER 4.1.1 B

Logically:

Command details

Command number: 1
 Command type: LAUNCH BROWSER
 Command qualifier: use the existing browser

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully but requested icon could not be displayed

Coding:

BER-TLV: 81 03 01 15 02 82 02 82 81 83 01 06

Expected Sequence 4.2A (LAUNCH BROWSER, use the existing browser, icon self explanatory, successful)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 4.2.1 | [Browser is in use, the current session is not secured]] |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : LAUNCH BROWSER 4.2.1 | [connect to the default URL, "use the existing browser", alpha id. In UCS2] |
| 4 | ME → USER | ME displays only the icon | ["Self explan."] |
| 5 | USER → ME | The user confirms the launch browser. | [user confirmation] |

| | | | | |
|---|-----------|---|----------------------------------|--|
| 6 | ME → SIM | TERMINAL RESPONSE : LAUNCH BROWSER 4.2.1 A | [Command performed successfully] | |
| 7 | ME->SS | The ME does not close the existing session and attempts to connect the default URL. | | |
| 8 | SIM → ME | PROACTIVE SIM SESSION ENDED | | |
| 9 | USER → ME | The user verifies that the default URL is connected; and the previous URL can be retrieved. Then he/she ends the navigation with the default URL. | | |

PROACTIVE COMMAND : LAUNCH BROWSER 4.2.1

Logically:

| | |
|---------------------|---------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | LAUNCH BROWSER |
| Command qualifier: | use the existing browser |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| URL | empty |
| Alpha Identifier | “Self explan.” |
| Icon Identifier: | |
| Icon qualifier: | self-explanatory |
| Icon Identifier: | record 1 in EF _(IMG) |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1D | 81 | 03 | 01 | 15 | 02 | 82 | 02 | 81 | 82 | 31 |
| | 00 | 05 | 0C | 73 | 65 | 6C | 66 | 20 | 65 | 78 | 70 | 6C |
| | 61 | 6E | 2E | 1E | 02 | 00 | 01 | | | | | |

TERMINAL RESPONSE : LAUNCH BROWSER 4.2.1 A

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | LAUNCH BROWSER |
| Command qualifier: | use the existing browser |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 15 | 02 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 4.2B (LAUNCH BROWSER, use the existing browser, icon self explanatory, requested icon could not be displayed)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: LAUNCH BROWSER 4.2.1 | [Browser is in use, the current session is not secured]] |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : LAUNCH BROWSER 4.2.1 | [connect to the default URL, “use the existing browser”, alpha id. In UCS2] |
| 4 | ME → USER | ME displays only the alpha identifier | ["Self explan."] |
| 5 | USER → ME | The user confirms the launch browser. | [user confirmation] |
| 6 | ME → SIM | TERMINAL RESPONSE : LAUNCH BROWSER 4.2.1 B | [Command performed successfully] |
| 7 | ME->SS | The ME does not close the existing session and attempts to connect the default URL. | [Command performed successfully but requested icon could not be displayed] |
| 8 | SIM → ME | PROACTIVE SIM SESSION ENDED | |
| 9 | USER → ME | The user verifies that the default URL is connected; and the previous URL can be retrieved. Then he/she ends the navigation with the default URL. | |

TERMINAL RESPONSE : LAUNCH BROWSER 4.2.1 B

Logically:

Command details

| | |
|--------------------|--------------------------|
| Command number: | 1 |
| Command type: | LAUNCH BROWSER |
| Command qualifier: | use the existing browser |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|--|
| General Result: | Command performed successfully but requested icon could not be displayed |
|-----------------|--|

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 15 | 02 | 82 | 02 | 82 | 81 | 83 | 01 | 06 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

27.22.4.27 OPEN CHANNEL

27.22.4.27.1 Definition and applicability

See Section 3.2.2.

27.22.4.27.2 Conformance requirements

The ME shall support the class “e” commands as defined in the following technical specifications: 3GPP TS 11.14 [15]

27.22.4.27.3 Test Purpose

To verify that the ME shall send a

- TERMINAL RESPONSE (OK) or
- TERMINAL RESPONSE (Command performed with modification) or
- TERMINAL RESPONSE (Network currently unable to process command)

to the SIM after the ME receives the OPEN CHANNEL proactive command. The TERMINAL RESPONSE sent back to the SIM is function of the ME and the network capabilities against asked parameters by the SIM.

27.22.4.27.4 Method of test

27.22.4.27.4.1 Initial Conditions

The ME is connected to the SIM Simulator. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.27.4.2 Procedure

Expected Sequence 1.1 (OPEN CHANNEL, immediate link establishment, CSD, 9600bps V.32)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : OPEN CHANNEL (immediate) 1.1.1 | |
| 4 | ME → SS | SETUP CALL | |
| 5 | SS → ME | CONNECTED | |
| 6 | ME → SIM | TERMINAL RESPONSE : OPEN CHANNEL (immediate) 1.1.1 | [Command performed successfully] |

PROACTIVE COMMAND: OPEN CHANNEL 1.1.1

Logically:

| | |
|------------------------|---------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | OPEN CHANNEL |
| Command qualifier: | immediate link establishment |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| Address | |
| TON: | International number |
| NPI: | ISDN / telephone numbering plan |
| Dialling number string | "112233445566778" |
| Bearer description | |
| Bearer type: | CSD |
| Bearer parameter | |
| Data rate: | 9600bps V.32 |
| Bearer service: | data circuit asynchronous UDI |
| Connection element: | non-transparent |
| Buffer size | 42 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1E | 81 | 03 | 01 | 40 | 01 | 82 | 02 | 81 | 82 | 86 |
| | 09 | 91 | 11 | 22 | 33 | 44 | 55 | 66 | 77 | F8 | B5 | 04 |
| | 01 | 07 | 00 | 01 | B9 | 02 | 00 | 2A | | | | |

TERMINAL RESPONSE: OPEN CHANNEL 1.1.1

Logically:

| | |
|---------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | OPEN CHANNEL |
| Command qualifier: | immediate link establishment |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Channel status | Channel identifier 1 and link established |
| Bearer description | |
| Bearer type: | CSD |
| Bearer parameter | |
| Data rate: | 9600bps V.32 |
| Bearer service: | data circuit asynchronous |
| Connection element: | non-transparent |
| Buffer size | 42 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 40 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | B8 | 02 | 81 | 01 | B5 | 04 | 01 | 07 | 00 | 01 | B9 | 02 |
| | 00 | 2A | | | | | | | | | | |

Expected Sequence 1.2 (OPEN CHANNEL, immediate link establishment, CSD, 9600bps V.34)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : OPEN CHANNEL (immediate) 1.2.1 | |
| 4 | ME → SS | SETUP CALL | |
| 5 | SS → ME | CONNECTED | |
| 6 | ME → SIM | TERMINAL RESPONSE : OPEN CHANNEL (immediate) 1.2.1 | [Command performed successfully] |

PROACTIVE COMMAND: OPEN CHANNEL 1.2.1

Logically:

Command details

Command number: 1
 Command type: OPEN CHANNEL
 Command qualifier: immediate link establishment

Device identities

Source device: SIM
 Destination device: ME

Address

TON: International number
 NPI: ISDN / telephone numbering plan
 Dialling number string "112233445566778"

Bearer description

Bearer type: CSD
 Bearer parameter
 Data rate: 9600bps V.34
 Bearer service: data circuit asynchronous UDI
 Connection element: non-transparent

Buffer size 42

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1E | 81 | 03 | 01 | 40 | 01 | 82 | 02 | 81 | 82 | 86 |
| | 09 | 91 | 11 | 22 | 33 | 44 | 55 | 66 | 77 | F8 | B5 | 04 |
| | 01 | 07 | 00 | 01 | B9 | 02 | 00 | 2A | | | | |

TERMINAL RESPONSE: OPEN CHANNEL 1.2.1

Logically:

Command details

Command number: 1
 Command type: OPEN CHANNEL
 Command qualifier: immediate link establishment

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established

Bearer description

Bearer type: CSD

Bearer parameter

Data rate: 9600bps V.32

Bearer service: data circuit asynchronous

Connection element: non-transparent

Buffer size 42

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 40 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | B8 | 02 | 81 | 01 | B5 | 04 | 01 | 07 | 00 | 01 | B9 | 02 |
| | 00 | 2A | | | | | | | | | | |

Expected Sequence 1.3 (OPEN CHANNEL, immediate link establishment, CSD, 9600bps V.120)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : OPEN CHANNEL (immediate) 1.3.1 | |
| 4 | ME → SS | SETUP CALL | |
| 5 | SS → ME | CONNECTED | |
| 6 | ME → SIM | TERMINAL RESPONSE : OPEN CHANNEL (immediate) 1.3.1 | [Command performed successfully] |

PROACTIVE COMMAND: OPEN CHANNEL 1.3.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM

Destination device: ME

Address

TON: International number

NPI: ISDN / telephone numbering plan

Dialling number string "112233445566778"

Bearer description

Bearer type: CSD

Bearer parameter

Data rate: 9600bps V.34

Bearer service: data circuit asynchronous UDI

Connection element: non-transparent

Buffer size 42

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1E | 81 | 03 | 01 | 40 | 01 | 82 | 02 | 81 | 82 | 86 |
| | 09 | 91 | 11 | 22 | 33 | 44 | 55 | 66 | 77 | F8 | B5 | 04 |
| | 01 | 07 | 00 | 01 | B9 | 02 | 00 | 2A | | | | |

TERMINAL RESPONSE: OPEN CHANNEL 1.3.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established

Bearer description

Bearer type: CSD

Bearer parameter

Data rate: 9600bps V.32

Bearer service: data circuit asynchronous

Connection element: non-transparent

Buffer size 42

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 40 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | B8 | 02 | 81 | 01 | B5 | 04 | 01 | 07 | 00 | 01 | B9 | 02 |
| | 00 | 2A | | | | | | | | | | |

Expected Sequence 1.4 (OPEN CHANNEL, immediate link establishment, CSD, 9600bps V.110 or X.31 flag stuffing, bearer asynchronous UDI)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.4.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : OPEN CHANNEL (immediate) 1.4.1 | |
| 4 | ME → SS | SETUP CALL | |
| 5 | SS → ME | CONNECTED | |
| 6 | ME → SIM | TERMINAL RESPONSE : OPEN CHANNEL (immediate) 1.4.1 | [Command performed successfully] |

PROACTIVE COMMAND: OPEN CHANNEL 1.4.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM

Destination device: ME

Address

TON: International number

NPI: ISDN / telephone numbering plan

Dialling number string "112233445566778"

Bearer description

Bearer type: CSD

Bearer parameter

Data rate: 9600bps V.110 or X.31 flag stuffing

Bearer service: data circuit asynchronous UDI

Connection element: non-transparent

Buffer size 42

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1E | 81 | 03 | 01 | 40 | 01 | 82 | 02 | 81 | 82 | 86 |
| | 09 | 91 | 11 | 22 | 33 | 44 | 55 | 66 | 77 | F8 | B5 | 04 |
| | 01 | 71 | 00 | 01 | B9 | 02 | 00 | 2A | | | | |

TERMINAL RESPONSE: OPEN CHANNEL 1.4.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully

Bearer Description

Bearer Parameter

Data rate: 9600bps V.110 or X.31 flag stuffing

Bearer Service: data circuit asynchronous UDI

Connection Element: non-transparent

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 40 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | B8 | 02 | 81 | 01 | B5 | 04 | 01 | 71 | 00 | 01 | B9 | 02 |
| | 00 | 2A | | | | | | | | | | |

Expected Sequence 1.5 (OPEN CHANNEL, immediate link establishment, CSD, 9600bps V.32, bearer asynchronous RDI)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.5.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : OPEN CHANNEL (immediate) 1.5.1 | |
| 4 | ME → SS | SETUP CALL | |
| 5 | SS → ME | CONNECTED | |
| 6 | ME → SIM | TERMINAL RESPONSE : OPEN CHANNEL (immediate) 1.5.1 | [Command performed successfully] |

PROACTIVE COMMAND: OPEN CHANNEL 1.5.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM

Destination device: ME

Address

TON: International number

NPI: ISDN / telephone numbering plan

Dialling number string "112233445566778"

Bearer description

Bearer type: CSD

Bearer parameter

Data rate: 9600bps V.32

Bearer service: data circuit asynchronous RDI

Connection element: non-transparent

Buffer size 42

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1E | 81 | 03 | 01 | 40 | 01 | 82 | 02 | 81 | 82 | 86 |
| | 09 | 91 | 11 | 22 | 33 | 44 | 55 | 66 | 77 | F8 | B5 | 04 |
| | 01 | 07 | 04 | 01 | B9 | 02 | 00 | 2A | | | | |

TERMINAL RESPONSE: OPEN CHANNEL 1.5.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully

Bearer Description

Bearer Parameter

Data rate: 9600bps V.32

Bearer Service: data circuit asynchronous RDI

Connection Element:non-transparent

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 40 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | B8 | 02 | 81 | 01 | B5 | 04 | 01 | 07 | 04 | 01 | B9 | 02 |
| | 00 | 2A | | | | | | | | | | |

Expected Sequence 1.6 (OPEN CHANNEL, immediate link establishment, CSD, 9600bps V.32, bearer asynchronous)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.6.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : OPEN CHANNEL (immediate) 1.6.1 | |
| 4 | ME → SS | SETUP CALL | |
| 5 | SS → ME | CONNECTED | |
| 6 | ME → SIM | TERMINAL RESPONSE : OPEN CHANNEL (immediate) 1.6.1 | [Command performed successfully] |

PROACTIVE COMMAND: OPEN CHANNEL 1.6.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM

Destination device: ME

Address

TON: International number

NPI: ISDN / telephone numbering plan

Dialling number string "112233445566778"

Bearer description

Bearer type: CSD

Bearer parameter

Data rate: 9600bps V.32

Bearer service: data circuit asynchronous

Connection element: both, transparent preferred

Buffer size 42

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1E | 81 | 03 | 01 | 40 | 01 | 82 | 02 | 81 | 82 | 86 |
| | 09 | 91 | 11 | 22 | 33 | 44 | 55 | 66 | 77 | F8 | B5 | 04 |
| | 01 | 07 | 00 | 02 | B9 | 02 | 00 | 2A | | | | |

TERMINAL RESPONSE: OPEN CHANNEL 1.6.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully

Bearer Description

Bearer Parameter

Data rate: 9600bps V.32

Bearer Service: data circuit asynchronous

Connection Element:both, transparent preferred

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 40 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | B8 | 02 | 81 | 01 | B5 | 04 | 01 | 07 | 00 | 02 | B9 | 02 |
| | 00 | 2A | | | | | | | | | | |

Expected Sequence 1.7(OPEN CHANNEL, immediate link establishment, CSD, 9600 bps, performed with modification)

The system simulator shall be configured such that open channel requests will be accepted with modification

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.7.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : OPEN CHANNEL (immediate) 1.7.1 | |
| 4 | ME → SS | SETUP CALL | |
| 5 | SS → ME | CONNECTED | |
| 6 | ME → SIM | TERMINAL RESPONSE : OPEN CHANNEL (immediate) 1.7.1 | [Command performed with modification] |

PROACTIVE COMMAND: OPEN CHANNEL 1.7.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM

Destination device: ME

Address

TON: International number

NPI: ISDN / telephone numbering plan

Dialling number string "112233445566778"

Bearer description

Bearer type: CSD

Bearer parameter

Data rate: 64000bps X.31

Bearer service: data circuit asynchronous UDI

Connection element: non-transparent

Buffer size 42

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1E | 81 | 03 | 01 | 40 | 01 | 82 | 02 | 81 | 82 | 86 |
| | 09 | 91 | 11 | 22 | 33 | 44 | 55 | 66 | 77 | F8 | B5 | 04 |
| | 01 | 54 | 00 | 01 | B9 | 02 | 00 | 2A | | | | |

TERMINAL RESPONSE: OPEN CHANNEL 1.7.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed with modification

Channel status Channel identifier 1 and link established

Bearer description

Bearer type: CSD

Bearer parameter

Data rate: 9600bps V.32

Bearer service: data circuit asynchronous

Connection element: non-transparent

Buffer size 42

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 40 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 07 |
| | B8 | 02 | 81 | 01 | B5 | 04 | 01 | 07 | 00 | 01 | B9 | 02 |
| | 00 | 2A | | | | | | | | | | |

Expected Sequence 1.8 (OPEN CHANNEL, immediate link establishment, CSD, Network currently unable to process command)

The system simulator shall be configured such that open channel requests will be rejected with “No specific cause can be given”.

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.8.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : OPEN CHANNEL (immediate) 1.8.1 | |
| 4 | ME → SIM | TERMINAL RESPONSE : OPEN CHANNEL (immediate) 1.8.1 | [Network currently unable to process command] |

PROACTIVE COMMAND: OPEN CHANNEL 1.8.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM

Destination device: ME

Address

TON: International number

NPI: ISDN / telephone numbering plan

Dialling number string "112233445566778"

Bearer description

Bearer type: CSD

Bearer parameter

Data rate: 64000bps X.31

Bearer service: data circuit asynchronous UDI

Connection element: non-transparent

Buffer size 42

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1E | 81 | 03 | 01 | 40 | 01 | 82 | 02 | 81 | 82 | 86 |
| | 09 | 91 | 11 | 22 | 33 | 44 | 55 | 66 | 77 | F8 | B5 | 04 |
| | 01 | 54 | 00 | 01 | B9 | 02 | 00 | 2A | | | | |

TERMINAL RESPONSE: OPEN CHANNEL 1.8.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Network currently unable to process command

Additional info: No

Coding:

| | |
|----------|---|
| BER-TLV: | 81 03 01 40 01 82 02 82 81 83 02 21 00 |
|----------|---|

Expected Sequence 1.95 (OPEN CHANNEL, immediate link establishment, CSD, No channel available)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|-------------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.9.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : OPEN CHANNEL (immediate) 1.9.1 | |
| 4 | ME → SS | SETUP CALL | |
| 5 | SS → ME | CONNECTED | |
| 6 | ME → SIM | TERMINAL RESPONSE : OPEN CHANNEL (immediate) 1.9.1 | [Command performed successfully] |
| 7 | SIM → ME | PROACTIVE COMMAND : OPEN CHANNEL (immediate) 1.9.2 | |
| 8 | ME → SIM | TERMINAL RESPONSE : OPEN CHANNEL (immediate) 1.9.2 | [Bearer independent protocol error] |

PROACTIVE COMMAND: OPEN CHANNEL 1.9.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM

Destination device: ME

Address

TON: International number

NPI: ISDN / telephone numbering plan

Dialling number string "112233445566778"

Bearer description

Bearer type: CSD

Bearer parameter

Data rate: 56000bps V.120

Bearer service: data circuit asynchronous UDI

Connection element: non-transparent

Buffer size 42

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1E | 81 | 03 | 01 | 40 | 01 | 82 | 02 | 81 | 82 | 86 |
| | 09 | 91 | 11 | 22 | 33 | 44 | 55 | 66 | 77 | F8 | B5 | 04 |
| | 01 | 78 | 00 | 01 | B9 | 02 | 00 | 2A | | | | |

TERMINAL RESPONSE: OPEN CHANNEL 1.9.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Command performed successfully

Channel status Channel identifier 1 and link established

Bearer description

Bearer type: CSD

Bearer parameter

Data rate: 56000bps V.120

Bearer service: data circuit asynchronous

Connection element: non-transparent

Buffer size 42

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 40 | 01 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | B8 | 02 | 81 | 01 | B5 | 04 | 01 | 78 | 00 | 01 | B9 | 02 |
| | 00 | 2A | | | | | | | | | | |

PROACTIVE COMMAND: OPEN CHANNEL 1.9.2

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: SIM

Destination device: ME

Address

TON: International number

NPI: ISDN / telephone numbering plan

Dialling number string "112233445566778"

Bearer description

Bearer type: CSD

Bearer parameter

Data rate: 56000bps V.120

Bearer service: data circuit asynchronous UDI

Connection element: non-transparent

Buffer size 42

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1E | 81 | 03 | 01 | 40 | 01 | 82 | 02 | 81 | 82 | 86 |
| | 09 | 91 | 11 | 22 | 33 | 44 | 55 | 66 | 77 | F8 | B5 | 04 |
| | 01 | 78 | 00 | 01 | B9 | 02 | 00 | 2A | | | | |

TERMINAL RESPONSE: OPEN CHANNEL 1.9.2

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME

Destination device: SIM

Result

General Result: Bearer Independent Protocol error

Additional info: No channel available

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 40 | 01 | 82 | 02 | 82 | 81 | 83 | 02 | 3A |
| | 01 | | | | | | | | | | | |

Expected Sequence 1.10 (OPEN CHANNEL, ME is busy on another call related to CSD)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP CALL 1.10.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND: SET UP CALL 1.10.1 | |
| 4 | ME → USER | ME displays “Not busy” and prompts the user to set up a call to “+012340123456p1p2” | |
| 5 | USER → ME | The user confirms the call set up | [user confirmation] |
| 6 | ME->SS | The ME attempts to set up a call to “+012340123456p1p2” | |
| 7 | SS → ME | The ME receives the CONNECT message from the system simulator. | |

| | | | |
|----|----------|---|--|
| 8 | ME → SIM | TERMINAL RESPONSE: SET UP CALL 1.10.1 | [Command performed successfully] |
| 9 | SIM → ME | PROACTIVE COMMAND PENDING: OPEN CHANNEL 1.1.1 | |
| 10 | ME → SIM | FETCH | |
| 11 | SIM → ME | PROACTIVE COMMAND : OPEN CHANNEL (immediate) 1.1.1 | |
| 12 | ME → SIM | TERMINAL RESPONSE : OPEN CHANNEL (immediate) 1.10.1 | [ME currently unable to process command] |

PROACTIVE COMMAND: SET UP CALL 1.10.1

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call

Device identities

Source device: SIM

Destination device: Network

Alpha identifier: "Not busy"

Address

TON: International

NPI: ISDN / telephone numbering plan

Dialling number string "012340123456p1p2"

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 1E | 81 | 03 | 01 | 10 | 00 | 82 | 02 | 81 | 83 | 85 |
| | 08 | 4E | 6F | 74 | 20 | 62 | 75 | 73 | 79 | 86 | 09 | 91 |
| | 10 | 32 | 04 | 21 | 43 | 65 | 1C | 2C | | | | |

TERMINAL RESPONSE: SET UP CALL 1.10.1

Logically:

Command details

Command number: 1

Command type: SET UP CALL

Command qualifier: only if not currently busy on another call

Device identities

Source device: Network

Destination device: SIM

Result

General Result: Command performed successfully

Coding:

BER-TLV: 81 03 01 10 00 82 02 83 81 83 01 00

TERMINAL RESPONSE: OPEN CHANNEL 1.10.1

Logically:

Command details

Command number: 1

Command type: OPEN CHANNEL

Command qualifier: immediate link establishment

Device identities

Source device: ME

Destination device: SIM

Result

General Result: ME currently unable to process command

Additional info: ME currently busy on call

Coding:

BER-TLV: 81 03 01 40 01 82 02 82 81 83 02 20
02

27.22.4.28 CLOSE CHANNEL

27.22.4.28.1 Definition and applicability

See Section 3.2.2.

27.22.4.28.2 Conformance requirements

The ME shall support the class “e” commands as defined in the following technical specifications: 3GPP TS 11.14 [15]

27.22.4.28.3 Test Purpose

To verify that the ME shall send a

- TERMINAL RESPONSE (Command Performed Successfully) or
- TERMINAL RESPONSE (Bearer Independent Protocol Error)

to the SIM after the ME receives the CLOSE CHANNEL proactive command. The TERMINAL RESPONSE sent back to the SIM is function of the ME and the network capabilities against asked parameters by the SIM.

27.22.4.28.4 Method of Test

27.22.4.28.4.1 Initial Conditions

The ME is connected to the SIM Simulator. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.28.4.2 Procedure

Expected sequence 1.1 (CLOSE CHANNEL, successful)

For that test, it's mandatory to assume that an open channel proactive command has been successfully executed.

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: CLOSE CHANNEL 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : CLOSE CHANNEL 1.1.1 | |
| 4 | ME → SIM | TERMINAL RESPONSE CLOSE CHANNEL 1.1.1 | [Command performed successfully] |

PROACTIVE COMMAND: CLOSE CHANNEL 1.1.1

Logically:

Command details

| | |
|--------------------|---------------|
| Command number: | 1 |
| Command type: | CLOSE CHANNEL |
| Command qualifier: | RFU |

Device identities

| | |
|---------------------|-----------|
| Source device: | SIM |
| Destination device: | Channel 1 |

Coding:

BER-TLV: D0 09 81 03 01 41 00 82 02 81 21

TERMINAL RESPONSE: CLOSE CHANNEL 1.1.1

Logically:

Command details

| | |
|--------------------|---------------|
| Command number: | 1 |
| Command type: | CLOSE CHANNEL |
| Command qualifier: | RFU |

Device identities

| | |
|---------------------|-----------|
| Source device: | Channel 1 |
| Destination device: | SIM |

Result

| | |
|-----------------|--------------------------------|
| General Result: | Command performed successfully |
|-----------------|--------------------------------|

Coding:

BER-TLV: 81 03 01 41 00 82 02 21 81 83 01 00

Expected sequence 1.2 (CLOSE CHANNEL, with an invalid channel identifier)

For that test, it is assumed that an open channel proactive command has been successfully executed (channel 1).

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: CLOSE CHANNEL 1.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : CLOSE CHANNEL 1.2.1 | |
| 4 | ME → SIM | TERMINAL RESPONSE CLOSE CHANNEL 1.2.1 | [Invalide channel number] |

PROACTIVE COMMAND: CLOSE CHANNEL 1.2.1

Logically:

Command details

| | |
|--------------------|---------------|
| Command number: | 1 |
| Command type: | CLOSE CHANNEL |
| Command qualifier: | RFU |

Device identities

| | |
|---------------------|-----------|
| Source device: | SIM |
| Destination device: | Channel 2 |

Coding:

BER-TLV: D0 09 81 03 01 41 00 82 02 81 22

TERMINAL RESPONSE: CLOSE CHANNEL 1.2.1

Logically:

Command details

| | |
|--------------------|---------------|
| Command number: | 1 |
| Command type: | CLOSE CHANNEL |
| Command qualifier: | RFU |

Device identities

| | |
|---------------------|-----------|
| Source device: | Channel 1 |
| Destination device: | SIM |

Result

| | |
|--------------------|-----------------------------------|
| General Result: | Bearer Independent Protocol error |
| Additional Result: | Channel identifier not valid |

Coding:

BER-TLV: 81 03 01 41 00 82 02 21 81 83 02 3A
03

Expected sequence 1.3 (CLOSE CHANNEL, on an already closed channel)

For that test, it is assumed that an open channel proactive command has been successfully executed (channel 1).

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: CLOSE CHANNEL 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : CLOSE CHANNEL 1.1.1 | |
| 4 | ME → SIM | TERMINAL RESPONSE CLOSE CHANNEL 1.1.1 | [Command performed successfully] |
| 5 | SIM → ME | PROACTIVE COMMAND PENDING: CLOSE CHANNEL 1.3.1 | |
| 6 | ME → SIM | FETCH | |
| 7 | SIM → ME | PROACTIVE COMMAND : CLOSE CHANNEL 1.3.1 | |
| 8 | ME → SIM | TERMINAL RESPONSE CLOSE CHANNEL 1.3.1 | [Channel closed] |

PROACTIVE COMMAND: CLOSE CHANNEL 1.3.1

Logically:

Command details

| | |
|--------------------|---------------|
| Command number: | 1 |
| Command type: | CLOSE CHANNEL |
| Command qualifier: | RFU |

Device identities

| | |
|---------------------|-----------|
| Source device: | SIM |
| Destination device: | Channel 1 |

Coding:

BER-TLV: D0 09 81 03 01 41 00 82 02 81 21

TERMINAL RESPONSE: CLOSE CHANNEL 1.3.1

Logically:

Command details

| | |
|--------------------|---------------|
| Command number: | 1 |
| Command type: | CLOSE CHANNEL |
| Command qualifier: | RFU |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|--------------------|-----------------------------------|
| General Result: | Bearer Independent Protocol error |
| Additional Result: | Channel closed |

Coding:

BER-TLV: 81 03 01 41 00 82 02 82 81 83 02 3A
02

27.22.4.29 RECEIVE DATA

27.22.4.29.1 Definition and applicability

See Section 3.2.2.

27.22.4.29.2 Conformance requirements

The ME shall support the class “e” commands as defined in the following technical specifications: 3GPP TS 11.14 [15]

27.22.4.29.3 Test Purpose

To verify that the ME shall send a

- TERMINAL RESPONSE (Command Performed Successfully) or
- TERMINAL RESPONSE (ME currently unable to process command) or
- TERMINAL RESPONSE (Bearer Independent Protocol Error)

to the SIM after the ME receives the RECEIVE DATA proactive command. The TERMINAL RESPONSE sent back to the SIM is function of the ME and the network capabilities against asked parameters by the SIM.

27.22.4.29.4 Method of test

27.22.4.29.4.1 Initial Conditions

The ME is connected to the SIM Simulator. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure. The SIM must have sent the SET UP EVENT LIST to the ME to supply a set of events (event Data available).

27.22.4.29.4.2 Procedure

Expected sequence 1.1 (RECEIVE DATA, already opened channel)

For that test, it is assumed that an open channel proactive command has been successfully executed (with a SIM buffer size of at least 1kB).

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--------------------------------------|
| 1 | ME → SIM | ENVELOPPE (Data Available) | (1kB bytes of data in the ME buffer) |
| 2 | SIM → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.1.1 | |
| 3 | ME → SIM | FETCH | |
| 4 | SIM → ME | PROACTIVE COMMAND: RECEIVE DATA 1.1.1 | 200 Bytes |
| 5 | ME → SIM | TERMINAL RESPONSE: RECEIVE DATA 1.1.1 | |
| 6 | SIM → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.1.2 | |
| 7 | ME → SIM | FETCH | |
| 8 | SIM → ME | PROACTIVE COMMAND: RECEIVE DATA 1.1.2 | 200 Bytes |
| 9 | ME → SIM | TERMINAL RESPONSE: RECEIVE DATA 1.1.2 | |
| 10 | SIM → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.1.3 | |
| 11 | ME → SIM | FETCH | |
| 12 | SIM → ME | PROACTIVE COMMAND: RECEIVE DATA 1.1.3 | 200 Bytes |
| 13 | ME → SIM | TERMINAL RESPONSE: RECEIVE DATA 1.1.3 | |
| 14 | SIM → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.1.4 | |
| 15 | ME → SIM | FETCH | |
| 16 | SIM → ME | PROACTIVE COMMAND: RECEIVE DATA 1.1.4 | 200 Bytes |
| 17 | ME → SIM | TERMINAL RESPONSE: RECEIVE DATA 1.1.4 | |
| 18 | SIM → ME | PROACTIVE COMMAND PENDING: RECEIVE DATA 1.1.5 | |
| 19 | ME → SIM | FETCH | |
| 20 | SIM → ME | PROACTIVE COMMAND: RECEIVE DATA 1.1.5 | 200 Bytes |
| 21 | ME → SIM | TERMINAL RESPONSE: RECEIVE DATA 1.1.5 | |

PROACTIVE COMMAND: RECEIVE DATA 1.1.1

Logically:

| | |
|----------------------|--------------|
| Command details | |
| Command number: | 1 |
| Command type: | RECEIVE DATA |
| Command qualifier: | RFU |
| Device identities | |
| Source device: | SIM |
| Destination device: | Channel 1 |
| Channel Data Length | |
| Channel Data Length: | 200 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
| | 01 | C8 | | | | | | | | | | |

PROACTIVE COMMAND: RECEIVE DATA 1.1.2

Logically:

| | |
|----------------------|--------------|
| Command details | |
| Command number: | 2 |
| Command type: | RECEIVE DATA |
| Command qualifier: | RFU |
| Device identities | |
| Source device: | SIM |
| Destination device: | Channel 1 |
| Channel Data Length | |
| Channel Data Length: | 200 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 02 | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
| | 01 | C8 | | | | | | | | | | |

PROACTIVE COMMAND: RECEIVE DATA 1.1.3

Logically:

| | |
|----------------------|--------------|
| Command details | |
| Command number: | 3 |
| Command type: | RECEIVE DATA |
| Command qualifier: | RFU |
| Device identities | |
| Source device: | SIM |
| Destination device: | Channel 1 |
| Channel Data Length | |
| Channel Data Length: | 200 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 03 | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
| | 01 | C8 | | | | | | | | | | |

PROACTIVE COMMAND: RECEIVE DATA 1.1.4

Logically:

| | |
|------------------------|--------------|
| Command details | |
| Command number: | 4 |
| Command type: | RECEIVE DATA |
| Command qualifier: RFU | |
| Device identities | |
| Source device: | SIM |
| Destination device: | Channel 1 |
| Channel Data Length | |
| Channel Data Length: | 200 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 04 | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
| | 01 | C8 | | | | | | | | | | |

PROACTIVE COMMAND: RECEIVE DATA 1.1.5

Logically:

| | |
|----------------------|--------------|
| Command details | |
| Command number: | 5 |
| Command type: | RECEIVE DATA |
| Command qualifier: | RFU |
| Device identities | |
| Source device: | SIM |
| Destination device: | Channel 1 |
| Channel Data Length | |
| Channel Data Length: | 200 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 05 | 42 | 00 | 82 | 02 | 81 | 21 | B7 |
| | 01 | C8 | | | | | | | | | | |

TERMINAL RESPONSE: RECEIVE DATA 1.1.1

Logically:

| | |
|----------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | RECEIVE DATA |
| Command qualifier: | RFU |
| Device identities | |
| Source device: | Channel 1 |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Channel data length: | FF |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 21 | 81 | 83 | 01 | 00 |
| | B6 | C8 | xx | xx | xx | .. | | | | | | |
| | B7 | 01 | FF | | | | | | | | | |

TERMINAL RESPONSE: RECEIVE DATA 1.1.2

Logically:

| | |
|----------------------|--------------------------------|
| Command details | |
| Command number: | 2 |
| Command type: | RECEIVE DATA |
| Command qualifier: | RFU |
| Device identities | |
| Source device: | Channel 1 |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Channel data length: | FF |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 02 | 42 | 00 | 82 | 02 | 21 | 81 | 83 | 01 | 00 |
| | B6 | C8 | xx | xx | xx | .. | | | | | | |
| | B7 | 01 | FF | | | | | | | | | |

TERMINAL RESPONSE: RECEIVE DATA 1.1.3

Logically:

| | |
|----------------------|--------------------------------|
| Command details | |
| Command number: | 3 |
| Command type: | RECEIVE DATA |
| Command qualifier: | RFU |
| Device identities | |
| Source device: | Channel 1 |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Channel data length: | FF |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 03 | 42 | 00 | 82 | 02 | 21 | 81 | 83 | 01 | 00 |
| | B6 | C8 | xx | xx | xx | .. | | | | | | |
| | B7 | 01 | FF | | | | | | | | | |

TERMINAL RESPONSE: RECEIVE DATA 1.1.4

Logically:

| | |
|----------------------|--------------------------------|
| Command details | |
| Command number: | 4 |
| Device identities | |
| Source device: | Channel 1 |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Channel data length: | C8 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 04 | 42 | 00 | 82 | 02 | 21 | 81 | 83 | 01 | 00 |
| | B6 | C8 | xx | xx | xx | .. | | | | | | |
| | B7 | 01 | C8 | | | | | | | | | |

TERMINAL RESPONSE: RECEIVE DATA 1.1.5

Logically:

| | |
|----------------------|--------------------------------|
| Command details | |
| Command number: | 5 |
| Command type: | RECEIVE DATA |
| Command qualifier: | RFU |
| Device identities | |
| Source device: | Channel 1 |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Channel data length: | 00 |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 42 | 00 | 82 | 02 | 21 | 81 | 83 | 01 | 00 |
| | B6 | C8 | xx | xx | xx | .. | | | | | | |
| | B7 | 01 | 00 | | | | | | | | | |

27.22.4.30 SEND DATA

27.22.4.30.1 Definition and applicability

See Section 3.2.2.

27.22.4.30.2 Conformance requirements

The ME shall support the class “e” commands as defined in the following technical specifications: 3GPP TS 11.14 [15]

27.22.4.30.3 Test Purpose

To verify that the ME shall send a

- TERMINAL RESPONSE (Command Performed Successfully) or
- TERMINAL RESPONSE (ME currently unable to process command) or
- TERMINAL RESPONSE (Bearer Independent Protocol Error)

to the SIM after the ME receives the SEND DATA proactive command. The TERMINAL RESPONSE sent back to the SIM is function of the ME and the network capabilities against asked parameters by the SIM.

27.22.4.30.4 Method of test

27.22.4.30.4.1 Initial Conditions

The ME is connected to the SIM Simulator. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.30.4.2 Procedure

Expected sequence 1.1 (SEND DATA, immediate mode)

For that test, it is assumed that an open channel proactive command has been successfully executed (with a SIM buffer size of 1kB).

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND DATA (immediate) 1.1.1 | |
| 4 | ME → SIM | TERMINAL RESPONSE : SEND DATA (immediate) 1.1.1 | [Command performed successfully] |

PROACTIVE COMMAND: SEND DATA 1.1.1

Logically:

Command details

| | |
|--------------------|------------------|
| Command number: | 1 |
| Command type: | SEND DATA |
| Command qualifier: | Send Immediately |

Device identities

| | |
|---------------------|-----------|
| Source device: | SIM |
| Destination device: | Channel 1 |

Channel Data

| | |
|----------------|-----------------|
| Channel Data : | 8 Bytes of data |
|----------------|-----------------|

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 12 | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 81 | 21 | B6 |
| | 08 | xx | xx | xx | xx | .. | | | | | | |

TERMINAL RESPONSE: SEND DATA 1.1.1

Logically:

Command details

| | |
|--------------------|------------------|
| Command number: | 1 |
| Command type: | SEND DATA |
| Command qualifier: | Send Immediately |

Device identities

| | |
|---------------------|-----------|
| Source device: | Channel 1 |
| Destination device: | SIM |

Result

| | |
|----------------------|--------------------------------|
| General Result: | Command performed successfully |
| Channel data length: | 8 Bytes |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 21 | 81 | 83 | 01 | 00 |
| | B7 | 01 | 08 | | | | | | | | | |

Expected sequence 1.2 (SEND DATA, Store mode)

For that test, it is assumed that an open channel proactive command has been successfully executed (with a SIM buffer size of 1kB).

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND DATA (store mode) 1.2.1 | Send 500 Bytes of data (200 + 200 + 100) |
| 4 | ME → SIM | TERMINAL RESPONSE : SEND DATA (store mode) 1.2.1 | [Command performed successfully] |
| 5 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.2.2 | |
| 6 | ME → SIM | FETCH | |
| 7 | SIM → ME | PROACTIVE COMMAND : SEND DATA (store mode) 1.2.2 | |
| 8 | ME → SIM | TERMINAL RESPONSE : SEND DATA (store mode) 1.2.2 | [Command performed successfully] |
| 9 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.2.3 | |
| 10 | ME → SIM | FETCH | |
| 11 | SIM → ME | PROACTIVE COMMAND : SEND DATA (Immediate mode) 1.2.3 | |
| 12 | ME → SIM | TERMINAL RESPONSE : SEND DATA (Immediate mode) 1.2.3 | [Command performed successfully] |

PROACTIVE COMMAND: SEND DATA 1.2.1

Logically:

Command details

| | |
|--------------------|------------|
| Command number: | 1 |
| Command type: | SEND DATA |
| Command qualifier: | Store mode |

Device identities

| | |
|---------------------|-----------|
| Source device: | SIM |
| Destination device: | Channel 1 |

Channel Data

| | |
|----------------|-------------------|
| Channel Data : | 200 Bytes of data |
|----------------|-------------------|

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | D3 | 81 | 03 | 01 | 43 | 00 | 82 | 02 | 81 | 21 | B6 |
| | C8 | xx | xx | xx | xx | .. | | | | | | |

TERMINAL RESPONSE: SEND DATA 1.2.1

Logically:

Command details

| | |
|--------------------|------------|
| Command number: | 1 |
| Command type: | SEND DATA |
| Command qualifier: | Store mode |

Device identities

| | |
|---------------------|-----------|
| Source device: | Channel 1 |
| Destination device: | SIM |

Result

| | |
|----------------------|---|
| General Result: | Command performed successfully |
| Channel data length: | More than 255 bytes of space available in the Tx buffer |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 43 | 00 | 82 | 02 | 21 | 81 | 83 | 01 | 00 |
| | B7 | 01 | FF | | | | | | | | | |

PROACTIVE COMMAND: SEND DATA 1.2.2

Logically:

| | |
|---------------------|-------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SEND DATA |
| Command qualifier: | Store mode |
| Device identities | |
| Source device: | SIM |
| Destination device: | Channel 1 |
| Channel Data | |
| Channel Data : | 200 Bytes of data |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | D3 | 81 | 03 | 01 | 43 | 00 | 82 | 02 | 81 | 21 | B6 |
| | C8 | xx | xx | xx | xx | .. | | | | | | |

TERMINAL RESPONSE: SEND DATA 1.2.2

Logically:

| | |
|----------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | SEND DATA |
| Command qualifier: | Store mode |
| Device identities | |
| Source device: | Channel 1 |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Channel data length: | More than 255 bytes of space available in the Tx buffer |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 43 | 00 | 82 | 02 | 21 | 81 | 83 | 01 | 00 |
| | B7 | 01 | FF | | | | | | | | | |

PROACTIVE COMMAND: SEND DATA 1.2.3

Logically:

| | |
|---------------------|-------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SEND DATA |
| Command qualifier: | Immediate mode |
| Device identities | |
| Source device: | SIM |
| Destination device: | Channel 1 |
| Channel Data | |
| Channel Data : | 100 Bytes of data |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 6F | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 81 | 21 | B6 |
| | 64 | xx | xx | xx | xx | .. | | | | | | |

TERMINAL RESPONSE: SEND DATA 1.2.3

Logically:

| | |
|----------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | SEND DATA |
| Command qualifier: | Immediate mode |
| Device identities | |
| Source device: | Channel 1 |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Channel data length: | More than 255 bytes of space available in the Tx buffer |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 21 | 81 | 83 | 01 | 00 |
| | B7 | 01 | FF | | | | | | | | | |

Expected sequence 1.3 (SEND DATA, Store mode, Tx buffer fully used)

For that test, it is assumed that an open channel proactive command has been successfully executed (with a SIM buffer size of 1kB).

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND DATA (store mode) 1.3.1 | Send 1kByte of data by packet of 200 Bytes |
| 4 | ME → SIM | TERMINAL RESPONSE : SEND DATA (store mode) 1.3.1 | [Command performed successfully] |
| 5 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.3.2 | |
| 6 | ME → SIM | FETCH | |
| 7 | SIM → ME | PROACTIVE COMMAND : SEND DATA (store mode) 1.3.2 | [200 Bytes] |
| 8 | ME → SIM | TERMINAL RESPONSE : SEND DATA (store mode) 1.3.2 | [Command performed successfully] |
| 9 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.3.3 | |
| 10 | ME → SIM | FETCH | |
| 11 | SIM → ME | PROACTIVE COMMAND : SEND DATA (store mode) 1.3.3 | [200 Bytes] |
| 12 | ME → SIM | TERMINAL RESPONSE : SEND DATA (store mode) 1.3.3 | [Command performed successfully] |
| 13 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.3.4 | |
| 14 | ME → SIM | FETCH | |
| 15 | SIM → ME | PROACTIVE COMMAND : SEND DATA (store mode) 1.3.4 | [200 Bytes] |
| 16 | ME → SIM | TERMINAL RESPONSE : SEND DATA (store mode) 1.3.4 | [Command performed successfully] |
| 17 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.3.5 | |
| 18 | ME → SIM | FETCH | |
| 19 | SIM → ME | PROACTIVE COMMAND : SEND DATA (immediate) 1.3.5 | [200 Bytes] |
| 20 | ME → SIM | TERMINAL RESPONSE : SEND DATA (immediate) 1.3.5 | [Command performed successfully] |

PROACTIVE COMMAND: SEND DATA 1.3.1

Logically:

Command details

| | |
|--------------------|------------|
| Command number: | 1 |
| Command type: | SEND DATA |
| Command qualifier: | Store mode |

Device identities

| | |
|---------------------|-----------|
| Source device: | SIM |
| Destination device: | Channel 1 |

Channel Data

| | |
|----------------|-------------------|
| Channel Data : | 200 Bytes of data |
|----------------|-------------------|

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | D3 | 81 | 03 | 01 | 43 | 00 | 82 | 02 | 81 | 21 | B6 |
| | C8 | xx | xx | xx | xx | .. | | | | | | |

TERMINAL RESPONSE: SEND DATA 1.3.1

Logically:

| | |
|----------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | SEND DATA |
| Command qualifier: | Store mode |
| Device identities | |
| Source device: | Channel 1 |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Channel data length: | More than 255 bytes of space available in the Tx buffer |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 43 | 00 | 82 | 02 | 21 | 81 | 83 | 01 | 00 |
| | B7 | 01 | FF | | | | | | | | | |

PROACTIVE COMMAND: SEND DATA 1.3.2

Logically:

| | |
|---------------------|-------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SEND DATA |
| Command qualifier: | Store mode |
| Device identities | |
| Source device: | SIM |
| Destination device: | Channel 1 |
| Channel Data | |
| Channel Data : | 200 Bytes of data |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | D3 | 81 | 03 | 01 | 43 | 00 | 82 | 02 | 81 | 21 | B6 |
| | C8 | xx | xx | xx | xx | .. | | | | | | |

TERMINAL RESPONSE: SEND DATA 1.3.2

Logically:

| | |
|----------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | SEND DATA |
| Command qualifier: | Store mode |
| Device identities | |
| Source device: | Channel 1 |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Channel data length: | More than 255 bytes of space available in the Tx buffer |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 43 | 00 | 82 | 02 | 21 | 81 | 83 | 01 | 00 |
| | B7 | 01 | FF | | | | | | | | | |

PROACTIVE COMMAND: SEND DATA 1.3.3

Logically:

| | |
|---------------------|-------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SEND DATA |
| Command qualifier: | Store mode |
| Device identities | |
| Source device: | SIM |
| Destination device: | Channel 1 |
| Channel Data | |
| Channel Data : | 200 Bytes of data |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | D3 | 81 | 03 | 01 | 43 | 00 | 82 | 02 | 81 | 21 | B6 |
| | C8 | xx | xx | xx | xx | .. | | | | | | |

TERMINAL RESPONSE: SEND DATA 1.3.3

Logically:

| | |
|----------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | SEND DATA |
| Command qualifier: | Store mode |
| Device identities | |
| Source device: | Channel 1 |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Channel data length: | More than 255 bytes of space available in the Tx buffer |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 43 | 00 | 82 | 02 | 21 | 81 | 83 | 01 | 00 |
| | B7 | 01 | | FF | | | | | | | | |

PROACTIVE COMMAND: SEND DATA 1.3.4

Logically:

| | |
|---------------------|-------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SEND DATA |
| Command qualifier: | Store mode |
| Device identities | |
| Source device: | SIM |
| Destination device: | Channel 1 |
| Channel Data | |
| Channel Data : | 200 Bytes of data |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | D3 | 81 | 03 | 01 | 43 | 00 | 82 | 02 | 81 | 21 | B6 |
| | C8 | xx | xx | xx | xx | .. | | | | | | |

TERMINAL RESPONSE: SEND DATA 1.3.4

Logically:

| | |
|----------------------|---|
| Command details | |
| Command number: | 1 |
| Command type: | SEND DATA |
| Command qualifier: | Store mode |
| Device identities | |
| Source device: | Channel 1 |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Channel data length: | 200 bytes of space available in the Tx buffer |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 43 | 00 | 82 | 02 | 21 | 81 | 83 | 01 | 00 |
| | B7 | 01 | C8 | | | | | | | | | |

PROACTIVE COMMAND: SEND DATA 1.3.5

Logically:

Command details

| | |
|--------------------|------------------|
| Command number: | 1 |
| Command type: | SEND DATA |
| Command qualifier: | Send Immediately |

Device identities

| | |
|---------------------|-----------|
| Source device: | SIM |
| Destination device: | Channel 1 |

Channel Data

Channel Data : 200 Bytes of data

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | D3 | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 81 | 21 | B6 |
| | C8 | xx | xx | xx | xx | .. | | | | | | |

TERMINAL RESPONSE: SEND DATA 1.3.5

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: Channel 1

Destination device: SIM

Result

General Result: Command performed successfully

Channel data length: No space available in the Tx buffer

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 21 | 81 | 83 | 01 | 00 |
| | B7 | 01 | 00 | | | | | | | | | |

Expected sequence 1.4 SEND DATA, 2 consecutive SEND DATA Store mode)

For that test, it is assumed that an open channel proactive command has been successfully executed (with a SIM buffer size of 1kB).

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.3.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND DATA (store mode) 1.3.1 | Send 1kByte of data by packet of 200 Bytes |
| 4 | ME → SIM | TERMINAL RESPONSE : SEND DATA (store mode) 1.3.1 | [Command performed successfully] |
| ... | ... | ... | ... |
| 19 | SIM → ME | PROACTIVE COMMAND : SEND DATA (immediate) 1.3.5 | |
| 20 | ME → SIM | TERMINAL RESPONSE : SEND DATA (immediate) 1.3.5 | [Command performed successfully] |
| 21 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.3.1 | |
| 22 | ME → SIM | FETCH | |
| 23 | SIM → ME | PROACTIVE COMMAND : SEND DATA (store mode) 1.3.1 | Send 1kByte of data by packet of 200 Bytes |

| | | | |
|-----|----------|--|----------------------------------|
| 24 | ME → SIM | TERMINAL RESPONSE : SEND DATA (store mode) 1.3.1 | [Command performed successfully] |
| ... | ... | ... | ... |
| 39 | SIM → ME | PROACTIVE COMMAND : SEND DATA (immediate) 1.3.5 | |
| 40 | ME → SIM | TERMINAL RESPONSE : SEND DATA (immediate) 1.3.5 | [Command performed successfully] |

Expected sequence 1.5 (SEND DATA, immediate mode with a bad channel identifier)

For that test, it is assumed that an open channel proactive command has been successfully executed (channel 1).

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|---------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SEND DATA 1.5.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND DATA (immediate) 1.5.1 | |
| 4 | ME → SIM | TERMINAL RESPONSE : SEND DATA (immediate) 1.1.1 | [Invalide channel number] |

PROACTIVE COMMAND: SEND DATA 1.5.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: SIM

Destination device: Channel 1

Channel Data

Channel Data : 8 Bytes of data

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 12 | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 81 | 22 | B6 |
| | 08 | xx | xx | xx | xx | .. | | | | | | |

TERMINAL RESPONSE: SEND DATA 1.5.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: Channel 1

Destination device: SIM

Result

General Result: Bearer Independent Protocol error (3A)

Additional Result: Channel identifier not valid (03)

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 21 | 81 | 83 | 02 | 3A |
| | 03 | | | | | | | | | | | |

Expected sequence 1.6 (SEND DATA, immediate mode, Proactive SIM session terminated by the user)

For that test, it is assumed that an open channel proactive command has been successfully executed.

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING; SEND DATA 1.6.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : SEND DATA (immediate) 1.6.1 | |
| 4 | ME → SIM | TERMINAL RESPONSE : SEND DATA (immediate) 1.1.1 | [Proactive SIM session terminated by the user] |

PROACTIVE COMMAND: SEND DATA 1.6.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: SIM

Destination device: Channel 1

Channel Data

Channel Data : 8 Bytes of data

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 12 | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 81 | 22 | B6 |
| | 08 | xx | xx | xx | xx | | | .. | | | | |

TERMINAL RESPONSE: SEND DATA 1.6.1

Logically:

Command details

Command number: 1

Command type: SEND DATA

Command qualifier: Send Immediately

Device identities

Source device: Channel 1

Destination device: SIM

Result

General Result: Proactive SIM session terminated by the user

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 43 | 01 | 82 | 02 | 21 | 81 | 83 | 01 | 10 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

27.22.4.31 GET CHANNEL STATUS

27.22.4.31.1 Definition and applicability

See Section 3.2.2.

27.22.4.31.2 Conformance requirements

The ME shall support the class “e” commands as defined in the following technical specifications: 3GPP TS 11.14 [15]

27.22.4.31.3 Test Purpose

To verify that the ME shall send a TERMINAL RESPONSE (Command Performed Successfully) to the SIM after the ME receives the GET STATUS proactive command. The TERMINAL RESPONSE sent back to the SIM is function of the ME and the network capabilities against asked parameters by the SIM.

27.22.4.31.4 Method of test

27.22.4.31.4.1 Initial Conditions

The ME is connected to the SIM Simulator. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.4.31.4.2 Procedure

Expected sequence 1.1 (GET STATUS, without any BIP channel opened)

For that test, no channel has been opened.

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET CHANNEL STATUS 1.1.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET STATUS 1.1.1 | |
| 4 | ME → SIM | TERMINAL GET STATUS 1.1.1 | [Command performed successfully] |

PROACTIVE COMMAND: GET STATUS 1.1.1

Logically:

Command details

| | |
|--------------------|------------|
| Command number: | 1 |
| Command type: | GET STATUS |
| Command qualifier: | RFU |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Coding:

BER-TLV: D0 09 81 03 01 44 00 82 02 81 82

TERMINAL RESPONSE: GET STATUS 1.1.1

Logically:

Command details

| | |
|--------------------|------------|
| Command number: | 1 |
| Command type: | GET STATUS |
| Command qualifier: | RFU |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|--------------------------------|
| General Result: | Command performed successfully |
|-----------------|--------------------------------|

Channel status

| | |
|-----------------|----------------------------------|
| Channel status: | No Channel, link not established |
|-----------------|----------------------------------|

Coding:

BER-TLV: 81 03 01 44 00 82 02 82 81 83 01 00
B8 02 00 00

Expected sequence 1.2 (GET STATUS, with a BIP channel currently opened)

For that test, it is assumed that an OPEN CHANNEL proactive command has been successfully executed (Channel 1).

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|----------------------------------|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: GET CHANNEL STATUS 1.2.1 | |
| 2 | ME → SIM | FETCH | |
| 3 | SIM → ME | PROACTIVE COMMAND : GET STATUS 1.2.1 | |
| 4 | ME → SIM | TERMINAL GET STATUS 1.2.1 | [Command performed successfully] |

PROACTIVE COMMAND: GET STATUS 1.2.1

Logically:

Command details

Command number: 1
 Command type: GET STATUS
 Command qualifier: RFU

Device identities

Source device: SIM
 Destination device: ME

Coding:

BER-TLV: D0 09 81 03 01 44 00 82 02 81 82

TERMINAL RESPONSE: GET STATUS 1.2.1

Logically:

Command details

Command number: 1
 Command type: GET STATUS
 Command qualifier: RFU

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Command performed successfully

Channel status

Channel status: Channel 1 open, link established

Coding:

BER-TLV: 81 03 01 44 00 82 02 82 81 83 01 00
B8 02 81 00Expected sequence 1.3 (GET STATUS, after a link dropped)

For that test, it is assumed that an OPEN CHANNEL proactive command has been successfully executed (Channel 1).

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|----------------------------------|
| 1 | ME → SIM | ENVELOPE EVENT DOWNLOAD : CHANNEL STATUS 1.3.1 | [Link dropped] |
| 2 | SIM → ME | PROACTIVE COMMAND PENDING: GET STATUS 1.3.1 | |
| 3 | ME → SIM | FETCH | |
| 4 | SIM → ME | PROACTIVE COMMAND : GET STATUS 1.3.1 | |
| 5 | ME → SIM | TERMINAL GET STATUS 1.3.1 | [Command performed successfully] |

ENVELOPE EVENT DOWNLOAD : CHANNEL STATUS 1.3.1

Logically:

| | |
|---------------------|-------------------------|
| Event list | |
| Event list: | Channel Status |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Channel status | |
| Channel status: | Channel 1, link dropped |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 0B | 99 | 01 | 0A | 82 | 02 | 82 | 81 | B8 | 02 | 01 |
| | 05 | | | | | | | | | | | |

PROACTIVE COMMAND: GET STATUS 1.3.1

Logically:

| | |
|---------------------|------------|
| Command details | |
| Command number: | 1 |
| Command type: | GET STATUS |
| Command qualifier: | RFU |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 09 | 81 | 03 | 01 | 44 | 00 | 82 | 02 | 81 | 82 |
|----------|----|----|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE: GET STATUS 1.3.1

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | GET STATUS |
| Command qualifier: | RFU |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |
| Channel status | |
| Channel status: | Channel 1, link dropped |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 44 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
| | B8 | 02 | 01 | 05 | | | | | | | | |

27.22.5 DATA DOWNLOAD TO SIM

27.22.5 Data Download to SIM

27.22.5.1 SMS-PP Data Download

27.22.5.1.1 Definition and applicability

See Section 3.2.2.

27.22.5.1.2 Conformance requirement

The ME shall support the Proactive SIM: SMS-PP Data Download facility as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 4.3 (Data download to SIM), 5 (Profile Download), 7.1 (SMS-PP data download), clause 12.1 (Address) clause 12.7 (Device Identities), clause 12.13 (SMS TPDU).

27.22.5.1.3 Test Purpose

To verify that the ME transparently passes the "data download via SMS Point-to-point" messages to the SIM.

To verify that the ME returns the RP-ACK message back to the system Simulator, if the SIM responds with '90 00' or '91 XX'.

To verify that the ME returns the response data from the SIM back to the system Simulator in the TP-User-Data element of the RP-ACK message, if the SIM responds with '9F XX'.

27.22.5.1.4 Method of Test

27.22.5.1.4.1 Initial Conditions

The ME is connected to the system Simulator and the SIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.5.1.4.2 Procedure

Expected Sequence 1.1 (SMS-PP Data Download, General Data Coding, Default Alphabet)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|--|
| 1 | ME | The ME shall be in its normal idle mode | [Start a sequence to verify that the ME returns the RP-ACK message back to the system Simulator, if the SIM responds with '90 00'] |
| 2 | SS → ME | SMS-PP Data Download Message 1.1.1 | |
| 3 | ME → USER | The ME shall not display the message or alert the user of a short message waiting | |
| 4 | ME → SIM | ENVELOPE: SMS-PP DOWNLOAD 1.1.2 | |
| 5 | SIM → ME | SW1 / SW2 of '90 00' | |
| 6 | ME → SS | RP-ACK. | |

SMS-PP (Data Download) Message 1.1.1

Logically:

| | |
|---------------|---|
| SMS TPDU | SMS-DELIVER |
| TP-MTI | No more messages waiting for the MS in this SC |
| TP-MMS | TP-Reply-Path is not set in this SMS-DELIVER |
| TP-RP | TP-UD field contains only the short message |
| TP-UDHI | A status report will not be returned to the SME |
| TP-SRI | |
| TP-OA | |
| TON | International number |
| NPI | "ISDN / telephone numbering plan" |
| Address value | "1234" |
| TP-PID | SIM Data download |
| TP-DCS | |
| Coding Group | General Data Coding |
| Compression | Text is uncompressed |
| Message Class | Class 2 SIM Specific Message |
| Alphabet | Default Alphabet |
| TP-SCTS: | 01/01/98 00:00:00 +0 |
| TP-UDL | 13 |
| TP-UD | "Short Message" |

Coding:

| | | | | | | | | | | | | |
|---------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV | 04 | 03 | 91 | 21 | 43 | 7F | 12 | 89 | 10 | 10 | 00 | 00 |
| | 00 | 00 | 0D | 53 | F4 | 5B | 4E | 07 | 35 | CB | F3 | 79 |
| | F8 | 5C | 06 | | | | | | | | | |

ENVELOPE: SMS-PP DOWNLOAD 1.1.2

Logically:

| | |
|------------------------|---|
| SMS-PP Download | |
| Device identities | |
| Source device: | Network |
| Destination device: | SIM |
| Address | |
| TON | International number |
| NPI | "ISDN / telephone numbering plan" |
| Dialling number string | "112233445566778" |
| SMS TPDU | |
| TP-MTI | SMS-DELIVER |
| TP-MMS | No more messages waiting for the MS in this SC |
| TP-RP | TP-Reply-Path is not set in this SMS-DELIVER |
| TP-UDHI | TP-UD field contains only the short message |
| TP-SRI | A status report will not be returned to the SME |
| TP-OA | |
| TON | International number |
| NPI | "ISDN / telephone numbering plan" |
| Address value | "1234" |
| TP-PID | SIM Data download |
| TP-DCS | |
| Coding Group | General Data Coding |
| Compression | Text is uncompressed |
| Message Class | Class 2 SIM Specific Message |
| Alphabet | Default Alphabet |
| TP-SCTS: | 01/01/98 00:00:00 +0 |
| TP-UDL | 13 |
| TP-UD | "Short Message" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D1 | 2C | 82 | 02 | 83 | 81 | 06 | 09 | 91 | 11 | 22 | 33 |
| | 44 | 55 | 66 | 77 | F8 | 8B | 1B | 04 | 04 | 91 | 21 | 43 |
| | 7F | 12 | 89 | 10 | 10 | 00 | 00 | 00 | 00 | 0D | 53 | F4 |
| | 5B | 4E | 07 | 35 | CB | F3 | 79 | F8 | 5C | 06 | | |

Expected Sequence 1.2 (SMS-PP Data Download, General Data Coding, Default Alphabet, GET RESPONSE, Acknowledgement)

| Step | Direction | MESSAGE / Action | Comments |
|-------------|------------------|---|------------------------|
| 1 | SS → ME | SMS-PP Data Download Message 1.2.1 | |
| 2 | ME → USER | The ME shall not display the message or alert the user of a short message waiting. | |
| 3 | ME → SIM | ENVELOPE: SMS-PP DOWNLOAD 1.2.2 | |
| 4 | SIM → ME | RESPONSE DATA AVAILABLE | [SW1 / SW2 of '9F 0B'] |
| 5 | ME → SIM | GET RESPONSE | |
| 6 | SIM → ME | SMS-PP Data Download SIM Acknowledgement 1.2.3 | |
| 7 | ME → SS | SMS-PP Data Download SIM Acknowledgement 1.2.4 in the TP-User-Data element of the RP-ACK message. The values of protocol identifier and data coding scheme in RP-ACK shall be as in the original message. | |

Expected Sequence 1.3 (SMS-PP Data Download, General Data Coding, Default Alphabet, FETCH, MORE TIME)

| Step | Direction | MESSAGE / Action | Comments |
|-------------|------------------|---|------------------------|
| 1 | SS → ME | SMS-PP Data Download Message 1.3.1 | |
| 2 | ME → USER | The ME shall not display the message or alert the user of a short message waiting | |
| 3 | ME → SIM | ENVELOPE: SMS-PP DOWNLOAD 1.3.2 | |
| 4 | SIM → ME | PROACTIVE COMMAND PENDING: MORE TIME 1.3.3 | [SW1 / SW2 of '91 0B'] |
| 5 | ME → SS | RP-ACK | |
| 6 | ME → SIM | FETCH | |
| 7 | SIM → ME | PROACTIVE COMMAND: MORE TIME 1.3.4 | |
| 8 | ME → SIM | TERMINAL RESPONSE: MORE TIME 1.3.5 | |
| 9 | SIM → ME | PROACTIVE SIM SESSION ENDED | |

PROACTIVE COMMAND : MORE TIME 1.3.4

Logically:

Command details

| | |
|--------------------|-----------|
| Command number: | 1 |
| Command type: | MORE TIME |
| Command qualifier: | "00" |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 09 | 81 | 03 | 01 | 02 | 00 | 82 | 02 | 81 | 82 |
|----------|----|----|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE : MORE TIME 1.3.5

Logically:

Command details

| | |
|--------------------|-----------|
| Command number: | 1 |
| Command type: | MORE TIME |
| Command qualifier: | "00" |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|--------------------------------|
| General Result: | Command performed successfully |
|-----------------|--------------------------------|

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 02 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 1.4 (SMS-PP Data Download, General Data Coding, 8 Bit Alphabet)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|----------|
| 1 | SS → ME | SMS-PP Data Download Message 1.4.1 | |
| 2 | ME | The ME shall not display the message or alert the user of a short message waiting | |
| 3 | ME → SIM | ENVELOPE: SMS-PP DOWNLOAD 1.4.2 | |
| 4 | SIM → ME | SW1 / SW2 of '90 00' | |
| 5 | ME → SS | RP-ACK | |

SMS-PP (Data Download) Message 1.2.1 / 1.3.1 / 1.4.1

Logically:

| | |
|---------------|---|
| SMS TPDU | |
| TP-MTI | SMS-DELIVER |
| TP-MMS | No more messages waiting for the MS in this SC |
| TP-RP | TP-Reply-Path is not set in this SMS-DELIVER |
| TP-UDHI | TP-UD field contains only the short message |
| TP-SRI | A status report will not be returned to the SME |
| TP-OA | |
| TON | International number |
| NPI | "ISDN / telephone numbering plan" |
| Address value | "1234" |
| TP-PID | SIM Data download |
| TP-DCS | |
| Coding Group | General Data Coding |
| Compression | Text is uncompressed |
| Message Class | Class 2 SIM Specific Message |
| Alphabet | 8 bit |
| TP-SCTS: | 01/01/98 00:00:00 +0 |
| TP-UDL | 13 |
| TP-UD | "Short Message" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 04 | 03 | 91 | 21 | 43 | 7F | 16 | 89 | 10 | 10 | 00 | 00 |
| | 00 | 00 | 0D | 53 | 68 | 6F | 72 | 74 | 20 | 4D | 65 | 73 |
| | 73 | 61 | 67 | 65 | | | | | | | | |

ENVELOPE: SMS-PP DOWNLOAD 1.2.2 / 1.3.2 / 1.4.2,

Logically:

| | |
|------------------------|---|
| SMS-PP Download | |
| Device identities | |
| Source device: | Network |
| Destination device: | SIM |
| Address | |
| TON | International number |
| NPI | "ISDN / telephone numbering plan" |
| Dialling number string | "112233445566778" |
| SMS TPDU | |
| TP-MTI | SMS-DELIVER |
| TP-MMS | No more messages waiting for the MS in this SC |
| TP-RP | TP-Reply-Path is not set in this SMS-DELIVER |
| TP-UDHI | TP-UD field contains only the short message |
| TP-SRI | A status report will not be returned to the SME |
| TP-OA | |
| TON | International number |
| NPI | "ISDN / telephone numbering plan" |
| Address value | "1234" |
| TP-PID | SIM Data download |
| TP-DCS | |
| Coding Group | General Data Coding |
| Compression | Text is uncompressed |
| Message Class | Class 2 SIM Specific Message |
| Alphabet | 8 bit |
| TP-SCTS: | 01/01/98 00:00:00 +0 |
| TP-UDL | 13 |
| TP-UD | "Short Message" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D1 | 2D | 82 | 02 | 83 | 81 | 06 | 09 | 91 | 11 | 22 | 33 |
| | 44 | 55 | 66 | 77 | F8 | 8B | 1C | 04 | 04 | 91 | 21 | 43 |
| | 7F | 16 | 89 | 10 | 10 | 00 | 00 | 00 | 00 | 0D | 53 | 68 |
| | 6F | 72 | 74 | 20 | 4D | 65 | 73 | 73 | 61 | 67 | 65 | |

Expected Sequence 1.5 (SMS-PP Data Download, Data Coding / Message Class, Default Alphabet)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|---|----------|
| 1 | ME | The ME shall be in its normal idle mode. | |
| 2 | SS → ME | SMS-PP Data Download Message 1.5.1. | |
| 3 | ME | The ME shall not display the message or alert the user of a short message waiting | |
| 4 | ME → SIM | ENVELOPE: SMS-PP DOWNLOAD 1.5.2. | |
| 5 | SIM → ME | SW1 / SW2 of '90 00' | |
| 6 | ME → SS | RP-ACK | |

SMS-PP (Data Download) Message 1.5.1

Logically:

| | |
|----------------|---|
| SMS TPDU | |
| TP-MTI | SMS-DELIVER |
| TP-MMS | No more messages waiting for the MS in this SC |
| TP-RP | TP-Reply-Path is not set in this SMS-DELIVER |
| TP-UDHI | TP-UD field contains only the short message |
| TP-SRI | A status report will not be returned to the SME |
| TP-OA | |
| TON | International number |
| NPI | "ISDN / telephone numbering plan" |
| Address value | "1234" |
| TP-PID | SIM Data download |
| TP-DCS | |
| Coding Group | Data Coding / Message Class |
| Message Coding | Default Alphabet |
| Message Class | Class 2 SIM Specific Message |
| TP-SCTS: | 01/01/98 00:00:00 +0 |
| TP-UDL | 13 |
| TP-UD | "Short Message" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 04 | 03 | 91 | 21 | 43 | 7F | F2 | 89 | 10 | 10 | 00 | 00 |
| | 00 | 00 | 0D | 53 | F4 | 5B | 4E | 07 | 35 | CB | F3 | 79 |
| | F8 | 5C | 06 | | | | | | | | | |

ENVELOPE: SMS-PP DOWNLOAD 1.5.2

Logically:

| | |
|------------------------|---|
| SMS-PP Download | |
| Device identities | |
| Source device: | Network |
| Destination device: | SIM |
| Address | |
| TON | International number |
| NPI | "ISDN / telephone numbering plan" |
| Dialling number string | "112233445566778" |
| SMS TPDU | |
| TP-MTI | SMS-DELIVER |
| TP-MMS | No more messages waiting for the MS in this SC |
| TP-RP | TP-Reply-Path is not set in this SMS-DELIVER |
| TP-UDHI | TP-UD field contains only the short message |
| TP-SRI | A status report will not be returned to the SME |
| TP-OA | |
| TON | International number |
| NPI | "ISDN / telephone numbering plan" |
| Address value | "1234" |
| TP-PID | SIM Data download |
| TP-DCS | |
| Coding Group | Data Coding / Message Class |
| Message Coding | Default Alphabet |
| Message Class | Class 2 SIM Specific Message |
| TP-SCTS: | 01/01/98 00:00:00 +0 |
| TP-UDL | 13 |
| TP-UD | "Short Message" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D1 | 2C | 82 | 02 | 83 | 81 | 06 | 09 | 91 | 11 | 22 | 33 |
| | 44 | 55 | 66 | 77 | F8 | 8B | 1B | 04 | 04 | 91 | 21 | 43 |

| | | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|----|----|
| 7F | F2 | 89 | 10 | 10 | 00 | 00 | 00 | 0D | 53 | F4 |
| 5B | 4E | 07 | 35 | CB | F3 | 79 | F8 | 5C | 06 | |

Expected Sequence 1.6 (SMS-PP Data Download, with Data Coding / Message Class, 8 Bit Alphabet)

| Step | Direction | MESSAGE / Action | Comments |
|-------------|------------------|---|-----------------|
| 1 | SS → ME | SMS-PP Data Download Message 1.6.1 | |
| 2 | ME | The ME shall not display the message or alert the user of a short message waiting | |
| 3 | ME → SIM | ENVELOPE: SMS-PP DOWNLOAD 1.6.2 | |
| 4 | SIM → ME | SW1 / SW2 of '90 00' | |
| 5 | ME → SS | RP-ACK | |

SMS-PP (Data Download) Message 1.6.1

Logically:

| | |
|----------------|---|
| SMS TPDU | |
| TP-MTI | SMS-DELIVER |
| TP-MMS | No more messages waiting for the MS in this SC |
| TP-RP | TP-Reply-Path is not set in this SMS-DELIVER |
| TP-UDHI | TP-UD field contains only the short message |
| TP-SRI | A status report will not be returned to the SME |
| TP-OA | |
| TON | International number |
| NPI | "ISDN / telephone numbering plan" |
| Address value | "1234" |
| TP-PID | SIM Data download |
| TP-DCS | |
| Coding Group | Data Coding / Message Class |
| Message Coding | 8 bit |
| Message Class | Class 2 SIM Specific Message |
| TP-SCTS: | 01/01/98 00:00:00 +0 |
| TP-UDL | 13 |
| TP-UD | "Short Message" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 04 | 03 | 91 | 21 | 43 | 7F | F6 | 89 | 10 | 10 | 00 | 00 |
| | 00 | 00 | 0D | 53 | 68 | 6F | 72 | 74 | 20 | 4D | 65 | 73 |
| | 73 | 61 | 67 | 65 | | | | | | | | |

ENVELOPE: SMS-PP DOWNLOAD 1.6.2

Logically:

| | |
|------------------------|---|
| SMS-PP Download | |
| Device identities | |
| Source device: | Network |
| Destination device: | SIM |
| Address | |
| TON | International number |
| NPI | "ISDN / telephone numbering plan" |
| Dialling number string | "112233445566778" |
| SMS TPDU | |
| TP-MTI | SMS-DELIVER |
| TP-MMS | No more messages waiting for the MS in this SC |
| TP-RP | TP-Reply-Path is not set in this SMS-DELIVER |
| TP-UDHI | TP-UD field contains only the short message |
| TP-SRI | A status report will not be returned to the SME |
| TP-OA | |
| TON | International number |
| NPI | "ISDN / telephone numbering plan" |
| Address value | "1234" |
| TP-PID | SIM Data download |
| TP-DCS | |
| Coding Group | Data Coding / Message Class |
| Message Coding | 8 bit |
| Message Class | Class 2 SIM Specific Message |
| TP-SCTS: | 01/01/98 00:00:00 +0 |
| TP-UDL | 13 |
| TP-UD | "Short Message" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D1 | 2D | 82 | 02 | 83 | 81 | 06 | 09 | 91 | 11 | 22 | 33 |
| | 44 | 55 | 66 | 77 | F8 | 8B | 1C | 04 | 04 | 91 | 21 | 43 |
| | 7F | F6 | 89 | 10 | 10 | 00 | 00 | 00 | 00 | 0D | 53 | 68 |
| | 6F | 72 | 74 | 20 | 4D | 65 | 73 | 73 | 61 | 67 | 65 | |

SMS-PP Data Download SIM Acknowledgement 1.2.4

| | | | | | | | | | | | |
|---------|----|----|----|----|----|----|----|----|----|----|----|
| Coding: | 50 | 68 | 69 | 6C | 20 | 48 | 6F | 6F | 6B | 65 | 72 |
|---------|----|----|----|----|----|----|----|----|----|----|----|

27.22.5.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequences.

27.22.5.2 SMS-CB Data Download

27.22.5.2.1 Definition and applicability

See Section 3.2.2.

27.22.5.2.2 Conformance requirement

The ME shall support the Proactive SIM: SMS-CB Data Download facility as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 4.3 (Data download to SIM), 5 (Profile Download), clause 7.2 (Cell Broadcast data download), clause 12.5 (Cell Broadcast Page), clause 12.7 (Device Identities).

27.22.5.2.3 Test Purpose

To verify that the ME transparently passes the "data download via SMS Cell Broadcast" messages to the SIM, which contain a message identifier found in EF_{CBMID}.

27.22.5.2.4 Method of Test

27.22.5.2.4.1 Initial Conditions

The ME is connected to the system Simulator and the SIM Simulator.

The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.5.2.4.2 Procedure

Expected Sequence 1 (SMS-CB (Data Download), ENVELOPE(SMS-CB DOWNLOAD), ME does not display message)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--------------------------------|----------------------------|
| 1 | SS → ME | SMS-CB (DATA DOWNLOAD) 1.1 | Message identifier '10 01' |
| 2 | ME → SIM | ENVELOPE (SMS-CB DOWNLOAD) 1.1 | |
| 3 | SIM → ME | SW1, SW2 '90 00' | |

SMS-CB (Data Download) Message 1.1

Logically:

Message Content
 Serial Number
 Geographical scope: Cell wide, normal display mode
 Message code: 1
 Update number: 1
 Message Identifier: "1001"
 Data Coding Scheme
 Message coding: 8 bit data
 Message class: No message class
 Page Parameter
 Total number of pages: 1
 Page number: 1
 Content of message: "Cell Broadcast "..

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | C0 | 11 | 10 | 01 | F4 | 11 | 43 | 65 | 6C | 6C | 20 | 42 |
| | 72 | 6F | 61 | 64 | 63 | 61 | 73 | 74 | 20 | 20 | 20 | 20 |
| | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |

ENVELOPE: SMS-CB DOWNLOAD 1.1

Logically:

| | |
|-------------------------|--------------------------------|
| Cell Broadcast Download | |
| Device identities | |
| Source device: | Network |
| Destination device: | SIM |
| Cell Broadcast page | |
| Serial Number | |
| Geographical scope: | Cell wide, normal display mode |
| Message code: | 1 |
| Update number: | 1 |
| Message Identifier: | "1001" |
| Data Coding Scheme | |
| Message coding: | 8 bit data |
| Message class: | No message class |
| Page Parameter | |
| Number of pages: | 1 |
| Page number: | 1 |
| Content of message: | "Cell Broadcast" .. |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D2 | 5E | 82 | 02 | 83 | 81 | 8C | 58 | C0 | 11 | 10 | 01 |
| | F4 | 11 | 43 | 65 | 6C | 6C | 20 | 42 | 72 | 6F | 61 | 64 |
| | 63 | 61 | 73 | 74 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |

Expected Sequence 2 (SMS-CB(DATA DOWNLOAD), ENVELOPE(SMS-CB DATA DOWNLOAD), FETCH, MORE TIME, ME does not display message)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|------------------------------------|----------------------------|
| 1 | SS → ME | SMS-CB (DATA DOWNLOAD) 1.1 | Message identifier '10 01' |
| 2 | ME → SIM | ENVELOPE (SMS-CB DOWNLOAD) 1.1 | |
| 3 | SIM → ME | | SW1/SW2 '91 0B' |
| 4 | ME → SIM | FETCH 1.1 | |
| 5 | SIM → ME | PROACTIVE COMMAND:MORE TIME 1.1 | |
| 6 | ME → SIM | TERMINAL RESPONSE | |
| 7 | SIM → ME | SW1/SW2 '90 00' | SIM session ended |

PROACTIVE COMMAND : MORE TIME 1.1

Logically:

| | |
|---------------------|-----------|
| Command details | |
| Command number: | 1 |
| Command type: | MORE TIME |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 09 | 81 | 03 | 01 | 02 | 00 | 82 | 02 | 81 | 82 |
|----------|----|----|----|----|----|----|----|----|----|----|----|

TERMINAL RESPONSE : MORE TIME 1.1

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | MORE TIME |
| Command qualifier: | "00" |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 02 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 3 (SMS-CB (DATA DOWNLOAD), ME displays message)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|-------------------------------|----------------------------|
| 1 | SS → ME | SMS-CB (DATA DOWNLOAD) 1.2 | Message identifier '0C 0C' |

SMS-CB (Data Download) Message 1.2

Logically:

| | |
|------------------------|--------------------------------|
| Message Content | |
| Serial Number | |
| Geographical scope: | Cell wide, normal display mode |
| Message code: | 1 |
| Update number: | 1 |
| Message Identifier: | "0C0C" |
| Data Coding Scheme | |
| Message coding: | 8 bit data |
| Message class: | No message class |
| Page Parameter | |
| Total number of pages: | 1 |
| Page number: | 1 |
| Content of message: | "Cell Broadcast". |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | C0 | 11 | 0C | 0C | F4 | 11 | 43 | 65 | 6C | 6C | 20 | 42 |
| | 72 | 6F | 61 | 64 | 63 | 61 | 73 | 74 | 20 | 20 | 20 | 20 |
| | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |

ENVELOPE: SMS-CB DOWNLOAD 1.1

Logically:

| | |
|-------------------------|--------------------------------|
| Cell Broadcast Download | |
| Device identities | |
| Source device: | Network |
| Destination device: | SIM |
| Cell Broadcast page | |
| Serial Number | |
| Geographical scope: | Cell wide, normal display mode |
| Message code: | 1 |
| Update number: | 1 |
| Message Identifier: | "0C0C" |
| Data Coding Scheme | |
| Message coding: | 8 bit data |
| Message class: | No message class |
| Page Parameter | |
| Number of pages: | 1 |
| Page number: | 1 |
| Content of message: | "Cell Broadcast ".. |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D2 | 5E | 82 | 02 | 83 | 81 | 8C | 58 | C0 | 11 | 0C | 0C |
| | F4 | 11 | 43 | 65 | 6C | 6C | 20 | 42 | 72 | 6F | 61 | 64 |
| | 63 | 61 | 73 | 74 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |

27.22.5.2.5 Test Requirement

The ME shall operate in the manner defined in expected sequences.

27.22.6 CALL CONTROL BY SIM

27.22.6.1 Procedure for Mobile Originated calls

27.22.6.1.1 Definition and applicability

See Section 3.2.2.

27.22.6.1.2 Conformance requirement

The ME shall support the CALL CONTROL facility as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 9.1.1

27.22.6.1.3 Test Purpose

To verify that for all call set-up attempts , even those resulting from a SET UP CALL proactive SIM command, the ME shall first pass the call set-up details (dialled digits and associated parameters) to the SIM, using the ENVELOPE (CALL CONTROL)

To verify that if the SIM responds with '90 00', the ME shall set up the call with the dialled digits and other parameters as sent to the SIM.

To verify that if the SIM responds with '9F XX', the ME shall use the GET RESPONSE command to get the response data. The response data from the SIM shall indicate to the ME whether to set up the call as proposed, not set up the call, set up a call using the data supplied by the SIM

To verify that, in the case where the initial call set-up request results from a proactive SET UP CALL, if the call control result is "not allowed" or "allowed with modifications", the ME shall inform the SIM using TERMINAL RESPONSE "interaction with call control by SIM or MO short message control by SIM, action not allowed".

To verify that it is possible for the SIM to request the ME to set up an emergency call by supplying the number "112" as the response data.

27.22.6.1.4 method of tests

27.22.6.1.4.1 Initial Conditions

The ME is connected to the System Simulator and has performed the location update procedure.

The GSM parameters of the system simulator are :

Mobile country Code (MCC) = 1,

Mobile network code (MNC) = 1,

Location Area code (LAC) = 1,

Cell Identity value = 1,

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The call control service is allocated and activated in the SIM Service Table.

27.22.6.1.4.2 Procedure

Expected Sequence 1.1 (CALL CONTROL BY SIM , set up call attempt by user, the SIM responds with '90 00')

| Step | Direction | Message / Action | Comments |
|-------------|------------------|---|---|
| 1 | User -> ME | Set up a call to "+01234567890123456789" | |
| 2 | ME -> SIM | ENVELOPE CALL CONTROL 1.1.1 | |
| 3 | SIM -> ME | 90 00 | |
| 4 | ME | The ME sets up the call without modification | [Set up call to "+01234567890123456789"] |

ENVELOPE CALL CONTROL 1.1.1

Logically:

| | |
|------------------------|--|
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Address | |
| TON: | International |
| NPI: | “ISDN / telephone numbering plan” or “unknown” |
| Dialling number string | “01234567890123456789” |
| Location Information | |
| MCC & MNC | the mobile country and network code (F110) |
| LAC | the location Area Code (1) |
| Cell ID | Cell Identity Value (0001) |

Coding

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D4 | 1A | 82 | 02 | 82 | 81 | 86 | 0B | 91 | 10 | 32 | 54 |
| | 76 | 98 | 10 | 32 | 54 | 76 | 98 | 13 | 07 | 00 | F1 | 10 |
| | 00 | 01 | 00 | 01 | | | | | | | | |

Expected Sequence 1.2 (CALL CONTROL BY SIM , set up call attempt by user, allowed without modification)

| Step | Direction | Message / Action | Comments |
|------|------------|---|---|
| 1 | User -> ME | Set up a call to “+01234567890123456789” | |
| 2 | ME -> SIM | ENVELOPE CALL CONTROL 1.2.1 | |
| 3 | SIM -> ME | 9F 02 | |
| 4 | ME -> SIM | GET RESPONSE | |
| 5 | SIM -> ME | CALL CONTROL RESULT 1.2.1 | [Call control result : “Allowed, no modification”] |
| 6 | ME | The ME sets up the call without modification | [Set up call to “+01234567890123456789”] |

ENVELOPE CALL CONTROL 1.2.1

Logically:

| | |
|------------------------|--|
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Address | |
| TON: | International |
| NPI: | “ISDN / telephone numbering plan” or “unknown” |
| Dialling number string | “01234567890123456789” |
| Location Information | |
| MCC & MNC | the mobile country and network code (F110) |
| LAC | the location Area Code (1) |
| Cell ID | Cell Identity Value (0001) |

Coding

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D4 | 1A | 82 | 02 | 82 | 81 | 86 | 0B | 91 | 10 | 32 | 54 |
| | 76 | 98 | 10 | 32 | 54 | 76 | 98 | 13 | 07 | 00 | F1 | 10 |
| | 00 | 01 | 00 | 01 | | | | | | | | |

CALL CONTROL RESULT 1.2.1

Logically:

Call control result : '00' = Allowed, no modification

Coding

BER-TLV: 00 00

Expected Sequence 1.3 (CALL CONTROL BY SIM , set up call attempt resulting from a set up call proactive command, allowed without modification)

| Step | Direction | Message / Action | Comments |
|------|-----------|--|--|
| 1 | SIM -> ME | PROACTIVE COMMAND PENDING | |
| 2 | ME->SIM | FETCH | |
| 3 | SIM -> ME | PROACTIVE COMMAND: SET UP CALL 1.3.1 | [Set up call to "+012340123456"] |
| 4 | ME -> SIM | ENVELOPE CALL CONTROL 1.3.1 | |
| 5 | SIM -> ME | 9F 02 | |
| 6 | ME -> SIM | GET RESPONSE | |
| 7 | SIM -> ME | CALL CONTROL RESULT 1.3.1 | [Call control result : "Allowed, no modification"] |
| 8 | ME -> SIM | TERMINAL RESPONSE: SET UP CALL 1.3.1 | [command performed successfully] |
| 9 | ME | The ME sets up the call without modification | [Set up call to "+012340123456"] |

PROACTIVE COMMAND : SET UP CALL 1.3.1

Logically:

Command details

| | |
|--------------------|--|
| Command number: | 1 |
| Command type: | SET UP CALL |
| Command qualifier: | Only if not currently busy on another call |

Device identities

| | |
|---------------------|--|
| Source device: | SIM |
| Destination device: | Network |
| Alpha identifier: | the initial phone number ("+012340123456") |

Address

| | |
|------------------------|-----------------------------------|
| TON: | International |
| NPI: | "ISDN / telephone numbering plan" |
| Dialling number string | "012340123456" |

Coding

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 21 | 81 | 03 | 01 | 10 | 00 | 82 | 02 | 81 | 83 |
| | 05 | 0D | 2B | 30 | 31 | 32 | 33 | 34 | 30 | 31 | 32 |
| | 33 | 34 | 35 | 36 | 86 | 07 | 91 | 10 | 32 | 04 | 21 |
| | 43 | 65 | | | | | | | | | |

ENVELOPE CALL CONTROL 1.3.1

Logically:

| | |
|------------------------|--|
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Address | |
| TON: | International |
| NPI: | "ISDN / telephone numbering plan" or "unknown" |
| Dialling number string | "012340123456" |
| Location Information | |
| MCC & MNC | the mobile country and network code (F110) |
| LAC | the location Area Code (1) |
| Cell ID | Cell Identity Value (0001) |

Coding

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D4 | 16 | 02 | 02 | 82 | 81 | 06 | 07 | 91 | 10 | 32 |
| | 04 | 21 | 43 | 65 | 13 | 07 | 00 | F1 | 10 | 00 | 01 |
| | 00 | 01 | | | | | | | | | |

CALL CONTROL RESULT 1.3.1

Logically:

Call control result : '00' = Allowed, no modification

Coding

| | | |
|----------|----|----|
| BER-TLV: | 00 | 00 |
|----------|----|----|

TERMINAL RESPONSE : SET UP CALL 1.3.1

Logically:

| | |
|---------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP CALL |
| Command qualifier: | Only if not currently busy on another call |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 10 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 1.4 (CALL CONTROL BY SIM , set up call attempt by user, not allowed)

| Step | Direction | Message / Action | Comments |
|------|------------|--|---------------------------------------|
| 1 | User -> ME | Set up a call to "+01234567890123456789" | |
| 2 | ME -> SIM | ENVELOPE CALL CONTROL 1.4.1 | |
| 3 | SIM -> ME | 9F 02 | |
| 4 | ME -> SIM | GET RESPONSE | |
| 5 | SIM -> ME | CALL CONTROL RESULT 1.4.1 | [Call control result : "not Allowed"] |
| 6 | ME | The ME does not set up the call | |

ENVELOPE CALL CONTROL 1.4.1

Logically:

| | |
|------------------------|--|
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Address | |
| TON: | International |
| NPI: | "ISDN / telephone numbering plan" or "unknown" |
| Dialling number string | "+01234567890123456789" |
| Location Information | |
| MCC & MNC | the mobile country and network code (F110) |
| LAC | the location Area Code (1) |
| Cell ID | Cell Identity Value (0001) |

Coding

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D4 | 1A | 82 | 02 | 82 | 81 | 86 | 0B | 91 | 10 | 32 | 54 |
| | 76 | 98 | 10 | 32 | 54 | 76 | 98 | 13 | 07 | 00 | F1 | 10 |
| | 00 | 01 | 00 | 01 | | | | | | | | |

CALL CONTROL RESULT 1.4.1

Logically:

Call control result : '01' = not Allowed

Coding

| | | |
|----------|----|----|
| BER-TLV: | 01 | 00 |
|----------|----|----|

Expected Sequence 1.5 (CALL CONTROL BY SIM , set up call attempt resulting from a set up call proactive command, not allowed)

| Step | Direction | Message / Action | Comments |
|------|-----------|--------------------------------------|---|
| 1 | SIM -> ME | PROACTIVE COMMAND PENDING | |
| 2 | ME->SIM | FETCH | |
| 3 | SIM -> ME | PROACTIVE COMMAND: SET UP CALL 1.5.1 | [Set up call to "+012340123456"] |
| 4 | ME -> SIM | ENVELOPE CALL CONTROL 1.5.1 | |
| 5 | SIM -> ME | 9F 02 | |
| 6 | ME -> SIM | GET RESPONSE | |
| 7 | SIM -> ME | CALL CONTROL RESULT 1.5.1 | [Call control result : "Not Allowed"] |
| 8 | ME -> SIM | TERMINAL RESPONSE: SET UP CALL 1.5.1 | Permanent Problem – Interaction with Call Control by SIM] |
| 9 | ME | The ME does not set up the call | |

PROACTIVE COMMAND : SET UP CALL 1.5.1

Logically:

| | |
|------------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP CALL |
| Command qualifier: | Only if not currently busy on another call |
| Device identities | |
| Source device: | SIM |
| Destination device: | Network |
| Alpha identifier: | the initial phone number ("+012340123456") |
| Address | |
| TON: | International |
| NPI: | "ISDN / telephone numbering plan" |
| Dialling number string | "012340123456" |

Coding

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 21 | 81 | 03 | 01 | 10 | 00 | 82 | 02 | 81 | 83 |
| | 05 | 0D | 2B | 30 | 31 | 32 | 33 | 34 | 30 | 31 | 32 |
| | 33 | 34 | 35 | 36 | 86 | 07 | 91 | 10 | 32 | 04 | 21 |
| | 43 | 65 | | | | | | | | | |

ENVELOPE CALL CONTROL 1.5.1

Logically:

| | |
|------------------------|--|
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Address | |
| TON: | International |
| NPI: | "ISDN / telephone numbering plan" or "unknown" |
| Dialling number string | "012340123456" |
| Location Information | |
| MCC & MNC | the mobile country and network code (F110) |
| LAC | the location Area Code (1) |
| Cell ID | Cell Identity Value (0001) |

Coding

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D4 | 16 | 02 | 02 | 82 | 81 | 06 | 07 | 91 | 10 | 32 |
| | 04 | 21 | 43 | 65 | 13 | 07 | 00 | F1 | 10 | 00 | 01 |
| | 00 | 01 | | | | | | | | | |

CALL CONTROL RESULT 1.5.1

Logically:

| | |
|-----------------------|--------------------|
| Call control result : | '01' = not Allowed |
|-----------------------|--------------------|

Coding

| | | |
|----------|----|----|
| BER-TLV: | 01 | 00 |
|----------|----|----|

TERMINAL RESPONSE : SET UP CALL 1.5.1

Logically:

Command details

Command number: 1
 Command type: SET UP CALL
 Command qualifier: Only if not currently busy on another call

Device identities

Source device: ME
 Destination device: SIM

Result

General Result: Interaction with call control by SIM or MO short message control by SIM, permanent problem
 Additional information : Action not allowed

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 10 | 00 | 82 | 02 | 82 | 81 | 83 | 02 | 39 |
| | 01 | | | | | | | | | | | |

Expected Sequence 1.6 (CALL CONTROL BY SIM , set up call attempt by user, allowed with modifications)

| Step | Direction | Message / Action | Comments |
|-------------|------------------|---|--|
| 1 | User -> ME | Set up a call to "+01234567890123456789" | |
| 2 | ME -> SIM | ENVELOPE CALL CONTROL 1.6.1 | |
| 3 | SIM -> ME | 9F 07 | |
| 4 | ME -> SIM | GET RESPONSE | |
| 5 | SIM -> ME | CALL CONTROL RESULT 1.6.1 | [Call control result : "Allowed with modifications",] |
| 6 | ME | The ME sets up the call to "+010203" | |

ENVELOPE CALL CONTROL 1.6.1

Logically:

| | |
|------------------------|--|
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Address | |
| TON: | International |
| NPI: | “ISDN / telephone numbering plan” or “unknown” |
| Dialling number string | “01234567890123456789” |
| Location Information | |
| MCC & MNC | the mobile country and network code (F110) |
| LAC | the location Area Code (1) |
| Cell ID | Cell Identity Value (0001) |

Coding

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D4 | 1A | 82 | 02 | 82 | 81 | 86 | 0B | 91 | 10 | 32 | 54 |
| | 76 | 98 | 10 | 32 | 54 | 76 | 98 | 13 | 07 | 00 | F1 | 10 |
| | 00 | 01 | 00 | 01 | | | | | | | | |

CALL CONTROL RESULT 1.6.1

Logically:

| | |
|------------------------|--|
| Call control result : | '02' = Allowed with modifications |
| Address | |
| TON: | International |
| NPI: | “ISDN / telephone numbering plan” or “unknown” |
| Dialling number string | “010203” |

Coding

| | | | | | | | | |
|---------|----|----|----|----|----|----|----|----|
| Coding: | 02 | 06 | 86 | 04 | 91 | 10 | 20 | 30 |
|---------|----|----|----|----|----|----|----|----|

Expected Sequence 1.7 (CALL CONTROL BY SIM , set up call attempt resulting from a set up call proactive command, allowed with modifications)

| Step | Direction | Message / Action | Comments |
|------|-----------|--|--|
| 1 | SIM -> ME | PROACTIVE COMMAND PENDING | |
| 2 | ME->SIM | FETCH | |
| 3 | SIM -> ME | PROACTIVE COMMAND: SET UP CALL 1.7.1 | [Set up call to “+012340123456”] |
| 4 | ME -> SIM | ENVELOPE CALL CONTROL 1.7.1 | |
| 5 | SIM -> ME | 9F 0B | |
| 6 | ME -> SIM | GET RESPONSE | |
| 7 | SIM -> ME | CALL CONTROL RESULT 1.7.1 | [Call control result : “Allowed with modifications”,] |
| 8 | ME -> SIM | TERMINAL RESPONSE: SET UP CALL 1.7.1 | [command performed successfully] |
| 9 | ME | The ME sets up the call to “+011111111111” | |

PROACTIVE COMMAND : SET UP CALL 1.7.1

Logically:

| | |
|------------------------|--|
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Address | |
| TON: | National |
| NPI: | “ISDN / telephone numbering plan” or “unknown” |
| Dialling number string | “+012340123456” |
| Location Information | |
| MCC & MNC | the mobile country and network code (F110) |
| LAC | the location Area Code (1) |
| Cell ID | Cell Identity Value (0001) |

Coding

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D4 | 15 | 02 | 02 | 82 | 81 | 06 | 06 | 80 | FB | 21 |
| | 43 | 10 | 32 | 13 | 07 | 00 | F1 | 10 | 00 | 01 | 00 |
| | | | 01 | | | | | | | | |

ENVELOPE CALL CONTROL 1.7.1

Logically:

| | |
|------------------------|--|
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Address | |
| TON: | International |
| NPI: | “ISDN / telephone numbering plan” or “unknown” |
| Dialling number string | “012340123456” |
| Location Information | |
| MCC & MNC | the mobile country and network code (F110) |
| LAC | the location Area Code (1) |
| Cell ID | Cell Identity Value (0001) |

Coding

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D4 | 16 | 02 | 02 | 82 | 81 | 06 | 07 | 91 | 10 | 32 |
| | 04 | 21 | 43 | 65 | 13 | 07 | 00 | F1 | 10 | 00 | 01 |
| | | | 00 | 01 | | | | | | | |

CALL CONTROL RESULT 1.7.1

Logically:

| | |
|------------------------|--|
| Call control result : | '02' = Allowed with modifications |
| Address | |
| TON: | National |
| NPI: | “ISDN / telephone numbering plan” or “unknown” |
| Dialling number string | “+012340123450” |

Coding

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|--|
| BER-TLV: | 02 | 0A | 86 | 06 | 07 | 91 | 10 | 11 | 11 | 11 | |
| | 11 | | | | | | | | | | |

TERMINAL RESPONSE : SET UP CALL 1.7.1

Logically:

| | |
|---------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP CALL |
| Command qualifier: | Only if not currently busy on another call |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 10 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

Expected Sequence 1.8 (CALL CONTROL BY SIM , set up call attempt by user, allowed with modifications : emergency call)

| Step | Direction | Message / Action | Comments |
|------|------------|---|---|
| 1 | User -> ME | Set up a call to "+01234567890123456789" | |
| 2 | ME -> SIM | ENVELOPE CALL CONTROL 1.8.1 | |
| 3 | SIM -> ME | 9F 06 | |
| 4 | ME -> SIM | GET RESPONSE | |
| 5 | SIM -> ME | CALL CONTROL RESULT 1.8.1 | [Call control result : "Allowed with modifications",] |
| 6 | ME | The ME sets up the emergency call to "112" | |

ENVELOPE CALL CONTROL 1.8.1

Logically:

| | |
|------------------------|--|
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Address | |
| TON: | International |
| NPI: | "ISDN / telephone numbering plan" or "unknown" |
| Dialling number string | "01234567890123456789" |
| Location Information | |
| MCC & MNC | the mobile country and network code (F110) |
| LAC | the location Area Code (1) |
| Cell ID | Cell Identity Value (0001) |

Coding

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D4 | 1A | 82 | 02 | 82 | 81 | 86 | 0B | 91 | 10 | 32 | 54 |
| | 76 | 98 | 10 | 32 | 54 | 76 | 98 | 13 | 07 | 00 | F1 | 10 |
| | 00 | 01 | 00 | 01 | | | | | | | | |

CALL CONTROL RESULT 1.8.1

Logically:

| | |
|---------------------|-----------------------------------|
| Call control result | Allowed, with modification |
| Address | |
| TON | Unknown |
| NPI | “ISDN / telephone numbering plan” |
| Address value | "112" |

Coding: 02 05 86 03 81 11 F2

Expected Sequence 1.9 (CALL CONTROL BY SIM , set up call attempt by user, allowed with modifications : number in EF_{ECC})

| Step | Direction | Message / Action | Comments |
|------|------------|---|---|
| 1 | User -> ME | Set up a call to "+01234567890123456789" | |
| 2 | ME -> SIM | ENVELOPE CALL CONTROL 1.9.1 | |
| 3 | SIM -> ME | 9F 06 | |
| 4 | ME -> SIM | GET RESPONSE | |
| 5 | SIM -> ME | CALL CONTROL RESULT 1.9.1 | [Call control result : “Allowed with modifications”,] |
| 6 | ME | The ME sets up call with the dialled digits "1020". The ME does not set up an emergency call | |

ENVELOPE CALL CONTROL 1.9.1

Logically:

| | |
|------------------------|--|
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Address | |
| TON: | International |
| NPI: | “ISDN / telephone numbering plan” or “unknown” |
| Dialling number string | "01234567890123456789" |
| Location Information | |
| MCC & MNC | the mobile country and network code (F110) |
| LAC | the location Area Code (1) |
| Cell ID | Cell Identity Value (0001) |

Coding

BER-TLV: D4 1A 82 02 82 81 86 0B 91 10 32 54
 76 98 10 32 54 76 98 13 07 00 F1 10
 00 01 00 01

CALL CONTROL RESULT 1.9.1

Logically:

| | |
|---------------------|-----------------------------------|
| Call control result | Allowed, with modification |
| Address | |
| TON | Unknown |
| NPI | “ISDN / telephone numbering plan” |
| Address value | "1020" |

Coding: 02 05 86 03 81 01 02

Expected Sequence 1.10 (CALL CONTROL BY SIM , set up call attempt by user to an emergency call)

| Step | Direction | Message / Action | Comments |
|-------------|------------------|---|-----------------|
| 1 | User -> ME | Set up a call to "112" | |
| 2 | ME | The ME does not send any ENVELOPE CALL CONTROL 1.9.1, set up the emergency call | |

Expected Sequence 1.11 (CALL CONTROL BY SIM , set up call through call register, the SIM responds with '90 00')

Pre-condition : the ME has a mean to register the last dialed number(s), and the ME will store dialled numbers allowed by call control in its register.

| Step | Direction | Message / Action | Comments |
|-------------|------------------|--|--|
| 1 | User -> ME | Set up a call to "+01234567890123456789" | |
| 2 | ME -> SIM | ENVELOPE CALL CONTROL 1.1.1 | |
| 3 | SIM -> ME | 90 00 | |
| 4 | ME | The ME sets up the call without modification | [Set up call to "+01234567890123456789"] |
| 5 | USER -> ME | End Call. | |
| 6 | USER -> ME | Recall the last dialed number | |
| 7 | ME -> SIM | ENVELOPE CALL CONTROL 1.1.1 | |
| 8 | SIM -> ME | 90 00 | |
| 9 | ME | The ME sets up the call without modification | [Set up call to "+01234567890123456789"] |
| 10 | USER -> ME | End Call. | |

Expected Sequence 1.12 (CALL CONTROL BY SIM , set up call through call register, allowed without modification)

Pre-condition : the ME has a mean to register the last dialed number(s), and the ME will store dialled numbers allowed by call control in its register.

| Step | Direction | Message / Action | Comments |
|------|------------|--|--|
| 1 | User -> ME | Set up a call to “+01234567890123456789” | |
| 2 | ME -> SIM | ENVELOPE CALL CONTROL 1.2.1 | |
| 3 | SIM -> ME | 9F 02 | |
| 4 | ME -> SIM | GET RESPONSE | |
| 5 | SIM -> ME | CALL CONTROL RESULT 1.2.1 | [Call control result : “Allowed, no modification”] |
| 6 | ME | The ME sets up the call without modification | [Set up call to “+01234567890123456789”] |
| 7 | User -> ME | End the call then call the last dialled number | |
| 8 | ME -> SIM | ENVELOPE CALL CONTROL 1.2.1 | |
| 9 | SIM -> ME | 9F 02 | [Call control result : “Allowed, no modification”] |
| 10 | ME -> SIM | GET RESPONSE | [Set up call to “+01234567890123456789”] |
| 11 | SIM -> ME | CALL CONTROL RESULT 1.2.1 | |

Expected Sequence 1.13 (CALL CONTROL BY SIM , set up call through call register, not allowed)

Pre-condition : the ME has a mean to register the last dialed number(s), and the ME will store dialed numbers not allowed by call control in its register.

| Step | Direction | Message / Action | Comments |
|------|------------|---|---------------------------------------|
| 1 | User -> ME | Set up a call to “+01234567890123456789” | |
| 2 | ME -> SIM | ENVELOPE CALL CONTROL 1.4.1 | |
| 3 | SIM -> ME | 9F 02 | |
| 4 | ME -> SIM | GET RESPONSE | |
| 5 | SIM -> ME | CALL CONTROL RESULT 1.4.1 | [Call control result : “not Allowed”] |
| 6 | ME | The ME does not set up the call | |
| 7 | User -> ME | The user calls the last dialed number | |
| 8 | ME -> SIM | ENVELOPE CALL CONTROL 1.4.1 | |
| 9 | SIM -> ME | 9F 02 | |
| 10 | ME -> SIM | GET RESPONSE | |
| 11 | SIM -> ME | CALL CONTROL RESULT 1.4.1 | [Call control result : “not Allowed”] |
| 12 | ME | The ME does not set up the call | |

Expected Sequence 1.14 (CALL CONTROL BY SIM , set up call through call register, allowed with modifications)

Pre-condition : the ME has a mean to register the last dialed number(s), and the ME will store dialed numbers allowed with modification in its register.

| Step | Direction | Message / Action | Comments |
|-------------|------------------|---|--|
| 1 | User -> ME | Set up a call to "+01234567890123456789" | |
| 2 | ME -> SIM | ENVELOPE CALL CONTROL 1.6.1 | |
| 3 | SIM -> ME | 9F 07 | |
| 4 | ME -> SIM | GET RESPONSE | |
| 5 | SIM -> ME | CALL CONTROL RESULT 1.6.1 | [Call control result : "Allowed with modifications",] |
| 6 | ME | The ME sets up the call to "+010203" | |
| 7 | User -> ME | Set up a call to "+01234567890123456789" | |
| 8 | ME -> SIM | ENVELOPE CALL CONTROL 1.6.1 | |
| 9 | SIM -> ME | 9F 07 | |
| 10 | ME -> SIM | GET RESPONSE | |
| 11 | SIM -> ME | CALL CONTROL RESULT 1.6.1 | [Call control result : "Allowed with modifications",] |
| 12 | ME | The ME sets up the call to "+010203" | |

27.22.6.2 Procedure for Supplementary (SS) Services

27.22.6.2.1 Definition and applicability

See Section 3.2.2.

27.22.6.2.2 Conformance requirement

The ME shall support the CALL CONTROL facility as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 9.1.2

27.22.6.2.3 Test Purpose

To verify that the ME first pass the supplementary service control string corresponding to the supplementary service operation to the SIM, using the ENVELOPE (CALL CONTROL) command.

To verify that, if the SIM responds with '90 00', the ME shall send the supplementary service operation with the information as sent to the SIM.

To verify that, if the SIM responds with '9F XX', the ME shall use the GET RESPONSE command to get the response data. The response data from the SIM shall indicate to the ME whether to send the supplementary service operation as proposed, not send the SS operation, or instead send the SS operation using the data supplied by the SIM.

27.22.6.2.4 method of tests

27.22.6.2.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The call control service is allocated and activated in the SIM Service Table.

27.22.6.2.4.2 Procedure

Expected Sequence 2.1 (CALL CONTROL BY SIM , send SS, the SIM responds with '90 00')

| Step | Direction | Message / Action | Comments |
|------|------------|--|----------|
| 1 | User -> ME | The user selects the facility of the ME which requires an unconditional call forward supplementary service operation to be sent to the network (System Simulator). | |
| 2 | ME -> SIM | ENVELOPE CALL CONTROL 2.1.1 | |
| 3 | SIM -> ME | 90 00 | |
| 4 | ME | The ME sends the supplementary service operation with the information as sent to the SIM | |

ENVELOPE CALL CONTROL 2.1.1

Logically:

| | |
|------------------------|--|
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Address | |
| TON: | Unknown |
| NPI: | “ISDN / telephone numbering plan” or “unknown” |
| Dialling number string | “*21*#” |
| Location Information | |
| MCC & MNC | the mobile country and network code (F110) |
| LAC | the location Area Code (1) |
| Cell ID | Cell Identity Value (0001) |

Coding

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D4 | 13 | 82 | 02 | 82 | 81 | 89 | 04 | 81 | 2A | A1 | FB |
| | 13 | 07 | 00 | F1 | 10 | 00 | 01 | 00 | 01 | | | |

Expected Sequence 2.2 (CALL CONTROL BY SIM , send SS, allowed without modifications)

| Step | Direction | Message / Action | Comments |
|------|------------|--|---|
| 1 | User -> ME | The user selects the facility of the ME which requires an unconditional call forward supplementary service operation to be sent to the network (System Simulator). | |
| 2 | ME -> SIM | ENVELOPE CALL CONTROL 2.2.1 | |
| 3 | SIM -> ME | 9F 02 | |
| 4 | ME -> SIM | GET RESPONSE | |
| 5 | SIM -> ME | CALL CONTROL RESULT 2.2.1 | [Call control result : "Allowed without modifications"] |
| 6 | ME | The ME sends the supplementary service operation with the information as sent to the SIM | |

ENVELOPE CALL CONTROL 2.2.1

Logically:

| | |
|------------------------|--|
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Address | |
| TON: | Unknown |
| NPI: | "ISDN / telephone numbering plan" or "unknown" |
| Dialling number string | "*21*#" |
| Location Information | |
| MCC & MNC | the mobile country and network code (F110) |
| LAC | the location Area Code (1) |
| Cell ID | Cell Identity Value (0001) |

Coding

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D4 | 13 | 82 | 02 | 82 | 81 | 89 | 04 | 81 | 2A | A1 | FB |
| | 13 | 07 | 00 | F1 | 10 | 00 | 01 | 00 | 01 | | | |

CALL CONTROL RESPONSE 2.2.1

Logically:

| | |
|---------------------|---------------------------|
| Call control result | Allowed, no modifications |
|---------------------|---------------------------|

Coding: 00 00

Expected Sequence 2.3 (CALL CONTROL BY SIM , send SS, not allowed)

| Step | Direction | Message / Action | Comments |
|------|------------|--|---------------------------------------|
| 1 | User -> ME | The user selects the facility of the ME which requires an unconditional call forward supplementary service operation to be sent to the network (System Simulator). | |
| 2 | ME -> SIM | ENVELOPE CALL CONTROL 2.3.1 | |
| 3 | SIM -> ME | 9F 02 | |
| 4 | ME -> SIM | GET RESPONSE | |
| 5 | SIM -> ME | CALL CONTROL RESULT 2.3.1 | [Call control result : "Not Allowed"] |
| 6 | ME | The ME does not send the supplementary service operation | |

ENVELOPE CALL CONTROL 2.3.1

Logically:

| | |
|------------------------|--|
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Address | |
| TON: | Unknown |
| NPI: | "ISDN / telephone numbering plan" or "unknown" |
| Dialling number string | "*21*#" |
| Location Information | |
| MCC & MNC | the mobile country and network code (F110) |
| LAC | the location Area Code (1) |
| Cell ID | Cell Identity Value (0001) |

Coding

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D4 | 13 | 82 | 02 | 82 | 81 | 89 | 04 | 81 | 2A | A1 | FB |
| | 13 | 07 | 00 | F1 | 10 | 00 | 01 | 00 | 01 | | | |

CALL CONTROL RESPONSE 2.3.1

Logically:

| | |
|---------------------|-------------|
| Call control result | Not Allowed |
|---------------------|-------------|

| | | |
|---------|----|----|
| Coding: | 01 | 00 |
|---------|----|----|

Expected Sequence 2.4 (CALL CONTROL BY SIM , send SS, allowed with modifications)

| Step | Direction | Message / Action | Comments |
|------|------------|--|--|
| 1 | User -> ME | The user selects the facility of the ME which requires an unconditional call forward supplementary service operation to be sent to the network (System Simulator). | |
| 2 | ME -> SIM | ENVELOPE CALL CONTROL 2.4.1 | |
| 3 | SIM -> ME | 9F 07 | |
| 4 | ME -> SIM | GET RESPONSE | |
| 5 | SIM -> ME | CALL CONTROL RESULT 2.4.1 | [Call control result : "Allowed with modifications"] |
| 6 | ME | The ME sends the supplementary service operation with the information as sent by the SIM | |

ENVELOPE CALL CONTROL 2.4.1

Logically:

| | |
|------------------------|--|
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Address | |
| TON: | Unknown |
| NPI: | "ISDN / telephone numbering plan" or "unknown" |
| Dialling number string | "*21*#" |
| Location Information | |
| MCC & MNC | the mobile country and network code (F110) |
| LAC | the location Area Code (1) |
| Cell ID | Cell Identity Value (0001) |

Coding

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D4 | 13 | 82 | 02 | 82 | 81 | 89 | 04 | 81 | 2A | A1 | FB |
| | 13 | 07 | 00 | F1 | 10 | 00 | 01 | 00 | 01 | | | |

CALL CONTROL RESPONSE 2.4.1

Logically:

| | |
|---------------------|-----------------------------------|
| Call control result | Allowed, with modifications |
| SS String | |
| TON | Unknown |
| NPI | "ISDN / telephone numbering plan" |
| SS String | "*#21#" |
| Coding: | 02 06 89 04 81 BA 12 FB |

27.22.6.3 Interaction with Fixed Dialling Number (FDN)

27.22.6.3.1 Definition and applicability

See Section 3.2.2.

27.22.6.3.2 Conformance requirement

The ME shall support the CALL CONTROL facility as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 9.1.4

27.22.6.2.3 Test Purpose

To verify that the ME checks that the number entered through the MMI is on the FDN list.

To verify that, if the MMI input does not pass the FDN check, the call shall not be set up.

To verify that, if the MMI input does pass the FDN check, the ME shall pass the dialled digits and other parameters to the SIM, using the ENVELOPE (CALL CONTROL) command.

To verify that, if the SIM responds with "allowed, no modification", the ME shall set up the call as proposed.

To verify that, if the SIM responds with "not allowed", the ME shall not set up the call.

To verify that, if the SIM responds with "allowed with modifications", the ME shall set up the call in accordance with the response from the SIM. If the modifications involve changing the dialled digits, the ME shall not re-check this modified number against the FDN list.

27.22.6.2.4 method of tests

27.22.6.2.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The call control service is allocated and activated in the SIM Service Table.

Fixed Dialling Number service is enabled.

27.22.6.2.4.2 Procedure

Expected Sequence 3.1 (CALL CONTROL BY SIM , set up a call not in EF_{FDN})

| Step | Direction | Message / Action | Comments |
|------|------------|---|----------|
| 1 | User -> ME | The user sets up a call to "4321" | |
| 2 | ME | The ME does not send the ENVELOPE (CALL CONTROL) command to the SIM and does not set up the call. | |

Expected Sequence 3.2 (CALL CONTROL BY SIM , set up a call in EF_{FDN} , the SIM responds with '90 00')

| Step | Direction | Message / Action | Comments |
|------|------------|--|------------------------|
| 1 | User -> ME | The user sets up a call to "123" | |
| 2 | ME -> SIM | ENVELOPE CALL CONTROL 3.2.1 | |
| 3 | SIM -> ME | 90 00 | |
| 4 | ME | The ME sets up the call without modification | [Set up call to "123"] |

ENVELOPE CALL CONTROL 3.2.1

Logically:

| | |
|------------------------|--|
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Address | |
| TON | Unknown |
| NPI | "ISDN / telephone numbering plan" |
| Dialling number string | "123" |
| Location Information | |
| MCC & MNC | the mobile country and network code (F110) |
| LAC | the location Area Code (1) |
| Cell ID | Cell Identity Value (0001) |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D4 | 12 | 82 | 02 | 82 | 81 | 86 | 03 | 81 | 23 | F1 | 13 |
| | 07 | 00 | F1 | 10 | 00 | 01 | 00 | 01 | | | | |

Expected Sequence 3.3 (CALL CONTROL BY SIM , set up a call in EF_{FDN} , Allowed without modifications)

| Step | Direction | Message / Action | Comments |
|------|------------|--|---|
| 1 | User -> ME | The user sets up a call to "9876" | |
| 2 | ME -> SIM | ENVELOPE CALL CONTROL 3.3.1 | |
| 3 | SIM -> ME | 9F 02 | |
| 4 | ME -> SIM | GET RESPONSE | |
| 5 | SIM -> ME | CALL CONTROL RESULT 3.3.1 | [Call control result : "Allowed without modifications"] |
| 6 | ME | The ME sets up the call without modification | [Set up call to "9876"] |

ENVELOPE CALL CONTROL 3.3.1

Logically:

| | |
|------------------------|--|
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Address | |
| TON | Unknown |
| NPI | "ISDN / telephone numbering plan" |
| Dialling number string | "9876" |
| Location Information | |
| MCC & MNC | the mobile country and network code (F110) |
| LAC | the location Area Code (1) |
| Cell ID | Cell Identity Value (0001) |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D4 | 12 | 82 | 02 | 82 | 81 | 86 | 03 | 81 | 89 | 67 | 13 |
| | 07 | 00 | F1 | 10 | 00 | 01 | 00 | 01 | | | | |

CALL CONTROL RESPONSE 3.3.1

Logically:

| | |
|---------------------|---------------------------|
| Call control result | Allowed, no modifications |
|---------------------|---------------------------|

Coding: 00 00

Expected Sequence 3.4 (CALL CONTROL BY SIM , set up a call in EF_{FDN} , Not Allowed)

| Step | Direction | Message / Action | Comments |
|------|------------|-----------------------------------|---------------------------------------|
| 1 | User -> ME | The user sets up a call to "9876" | |
| 2 | ME -> SIM | ENVELOPE CALL CONTROL 3.4.1 | |
| 3 | SIM -> ME | 9F 02 | |
| 4 | ME -> SIM | GET RESPONSE | |
| 5 | SIM -> ME | CALL CONTROL RESULT 3.4.1 | [Call control result : "Not Allowed"] |
| 6 | ME | The ME does not set up the call | |

ENVELOPE CALL CONTROL 3.4.1

Logically:

| | |
|------------------------|--|
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Address | |
| TON | Unknown |
| NPI | "ISDN / telephone numbering plan" |
| Dialling number string | "9876" |
| Location Information | |
| MCC & MNC | the mobile country and network code (F110) |
| LAC | the location Area Code (1) |
| Cell ID | Cell Identity Value (0001) |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D4 | 12 | 82 | 02 | 82 | 81 | 86 | 03 | 81 | 89 | 67 | 13 |
| | 07 | 00 | F1 | 10 | 00 | 01 | 00 | 01 | | | | |

CALL CONTROL RESPONSE 3.4.1

Logically:

| | |
|---------------------|-------------|
| Call control result | Not Allowed |
|---------------------|-------------|

| | |
|---------|------------|
| Coding: | 01 00 |
|---------|------------|

Expected Sequence 3.5 (CALL CONTROL BY SIM , set up a call in EF_{FDN} , Allowed with modifications)

| Step | Direction | Message / Action | Comments |
|------|------------|---|--|
| 1 | User -> ME | The user sets up a call to "9876" | |
| 2 | ME -> SIM | ENVELOPE CALL CONTROL 3.5.1 | |
| 3 | SIM -> ME | 9F 07 | |
| 4 | ME -> SIM | GET RESPONSE | |
| 5 | SIM -> ME | CALL CONTROL RESULT 3.5.1 | [Call control result : "Allowed with modifications"] |
| 6 | ME | The ME sets up the call with data sent by the SIM | [Set up call to "3333"] |

ENVELOPE CALL CONTROL 3.5.1

Logically:

| | |
|------------------------|--|
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Address | |
| TON | Unknown |
| NPI | "ISDN / telephone numbering plan" |
| Dialling number string | "9876" |
| Location Information | |
| MCC & MNC | the mobile country and network code (F110) |
| LAC | the location Area Code (1) |
| Cell ID | Cell Identity Value (0001) |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D4 | 12 | 82 | 02 | 82 | 81 | 86 | 03 | 81 | 89 | 67 | 13 |
| | 07 | 00 | F1 | 10 | 00 | 01 | 00 | 01 | | | | |

CALL CONTROL RESPONSE 3.5.1

Logically:

| | |
|---------------------|-----------------------------------|
| Call control result | Allowed with modifications |
| Address | |
| TON | Unknown |
| NPI | "ISDN / telephone numbering plan" |
| Address value | "3333" |

| | | | | | | | |
|---------|----|----|----|----|----|----|----|
| Coding: | 02 | 05 | 86 | 03 | 81 | 33 | 33 |
|---------|----|----|----|----|----|----|----|

27.22.6.4 Support of Barred Dialling Number (BDN) service

27.22.6.4.1 Definition and applicability

See Section 3.2.2.

27.22.6.4.2 Conformance requirement

The ME shall support the CALL CONTROL facility as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 9.1.5.

27.22.6.2.3 Test Purpose

To verify that, if Barred Dialling Number service is enabled, the ME checks the number entered through the MMI against EF_{BDN}.

To verify that, if the SIM responds with "not allowed", the ME does not set up the call.

To verify that, if the SIM responds with "allowed, no modification", the ME shall set up the call (or the supplementary service operation) as proposed.

To verify that, if the SIM responds with "allowed with modifications", the ME sets up the call in accordance with the response from the SIM. If the modifications involve changing the dialled number the ME does not re-check this modified number against the FDN list when FDN is enabled.

27.22.6.2.4 method of tests

27.22.6.2.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The call control service is allocated and activated in the SIM Service Table.

Barred Dialling Number service is enabled.

27.22.6.2.4.2 Procedure

Expected Sequence 4.1 (CALL CONTROL BY SIM , set up a call in EF_{BDN})

| Step | Direction | Message / Action | Comments |
|-------------|------------------|----------------------------------|---------------------------------------|
| 1 | User -> ME | The user sets up a call to "321" | |
| 2 | ME -> SIM | ENVELOPE CALL CONTROL 4.1.1 | |
| 3 | SIM -> ME | 9F 02 | |
| 4 | ME -> SIM | GET RESPONSE | |
| 5 | SIM -> ME | CALL CONTROL RESULT 4.1.1 | [Call control result : "Not Allowed"] |
| 6 | ME | The ME does not set up the call | |

ENVELOPE CALL CONTROL 4.1.1

Logically:

| | |
|------------------------|--|
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Address | |
| TON | Unknown |
| NPI | "ISDN / telephone numbering plan" |
| Dialling number string | "321" |
| Location Information | |
| MCC & MNC | the mobile country and network code (F110) |
| LAC | the location Area Code (1) |
| Cell ID | Cell Identity Value (0001) |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D4 | 12 | 82 | 02 | 82 | 81 | 86 | 03 | 81 | 23 | F1 | 13 |
| | 07 | 00 | F1 | 10 | 00 | 01 | 00 | 01 | | | | |

CALL CONTROL RESPONSE 4.1.1

Logically:

| | |
|---------------------|-------------|
| Call control result | Not Allowed |
|---------------------|-------------|

Coding: 01 00

Expected Sequence 4.2 (CALL CONTROL BY SIM , set up a call not in EF_{BDN} , Allowed without modifications)

| Step | Direction | Message / Action | Comments |
|------|------------|--|---|
| 1 | User -> ME | The user sets up a call to "1234" | |
| 2 | ME -> SIM | ENVELOPE CALL CONTROL 4.2.1 | |
| 3 | SIM -> ME | 9F 02 | |
| 4 | ME -> SIM | GET RESPONSE | |
| 5 | SIM -> ME | CALL CONTROL RESULT 4.2.1 | [Call control result : "Allowed without modifications"] |
| 6 | ME | The ME sets up the call without modification | [Set up call to "1234"] |

ENVELOPE CALL CONTROL 4.2.1

Logically:

| | |
|------------------------|--|
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Address | |
| TON | Unknown |
| NPI | "ISDN / telephone numbering plan" |
| Dialling number string | "1234" |
| Location Information | |
| MCC & MNC | the mobile country and network code (F110) |
| LAC | the location Area Code (1) |
| Cell ID | Cell Identity Value (0001) |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D4 | 12 | 82 | 02 | 82 | 81 | 86 | 03 | 81 | 21 | 43 | 13 |
| | 07 | 00 | F1 | 10 | 00 | 01 | 00 | 01 | | | | |

CALL CONTROL RESPONSE 4.2.1

Logically:

| | |
|---------------------|---------------------------|
| Call control result | Allowed, no modifications |
|---------------------|---------------------------|

Coding: 00 00

Expected Sequence 4.3 (CALL CONTROL BY SIM , set up a call not in EF_{BDN} , Allowed with modifications)

| Step | Direction | Message / Action | Comments |
|------|------------|---|--|
| 1 | User -> ME | The user sets up a call to "1111" | |
| 2 | ME -> SIM | ENVELOPE CALL CONTROL 4.3.1 | |
| 3 | SIM -> ME | 9F 07 | |
| 4 | ME -> SIM | GET RESPONSE | |
| 5 | SIM -> ME | CALL CONTROL RESULT 4.3.1 | [Call control result : "Allowed with modifications"] |
| 6 | ME | The ME sets up the call with data sent by the SIM | [Set up call to "2222"] |

ENVELOPE CALL CONTROL 4.3.1

Logically:

| | |
|------------------------|--|
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Address | |
| TON | Unknown |
| NPI | “ISDN / telephone numbering plan” |
| Dialling number string | "9876" |
| Location Information | |
| MCC & MNC | the mobile country and network code (F110) |
| LAC | the location Area Code (1) |
| Cell ID | Cell Identity Value (0001) |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D4 | 12 | 82 | 02 | 82 | 81 | 86 | 03 | 81 | 11 | 11 | 13 |
| | 07 | 00 | F1 | 10 | 00 | 01 | 00 | 01 | | | | |

CALL CONTROL RESPONSE 4.3.1

Logically:

| | |
|---------------------|-----------------------------------|
| Call control result | Allowed with modifications |
| Address | |
| TON | Unknown |
| NPI | “ISDN / telephone numbering plan” |
| Address value | "2222" |
| Coding: | 02 05 86 03 81 22 22 |

Expected Sequence 4.4 (CALL CONTROL BY SIM , FDN and BDN enabled, set up a call in EF_{FDN}, Allowed with modifications)

| Step | Direction | Message / Action | Comments |
|------|------------|---|---|
| 1 | User -> ME | The user sets up a call to "123" | |
| 2 | ME -> SIM | ENVELOPE CALL CONTROL 4.4.1 | |
| 3 | SIM -> ME | 9F 0A | |
| 4 | ME -> SIM | GET RESPONSE | |
| 5 | SIM -> ME | CALL CONTROL RESULT 4.4.1 | [Call control result : “Allowed with modifications”] |
| 6 | ME | The ME sets up the call with data sent by the SIM | [Set up call to "987654321" the ME does not re-check this modified number against the FDN list] |

ENVELOPE CALL CONTROL 4.4.1

Logically:

Device identities

Source device: ME

Destination device: SIM

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Dialling number string "9876"

Location Information

MCC & MNC the mobile country and network code (F110)

LAC the location Area Code (1)

Cell ID Cell Identity Value (0001)

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D4 | 12 | 82 | 02 | 82 | 81 | 86 | 03 | 81 | 89 | 67 | 13 |
| | 07 | 00 | F1 | 10 | 00 | 01 | 00 | 01 | | | | |

CALL CONTROL RESPONSE 4.4.1

Logically:

Call control result Allowed with modifications

Address

TON Unknown

NPI "ISDN / telephone numbering plan"

Address value "987654321"

Coding: 02 08 86 06 81 89 67 45 23 F1

27.22.7 EVENT DOWNLOAD

27.22.7.1 MT Call Event

27.22.7.1.1 MT Call Event (normal)

27.22.7.1.1.1 Definition and applicability

See Section 3.2.2.

27.22.7.1.1.2 Conformance requirement

The ME shall support the EVENT: MT Call event as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 4.7, 5.2 (Terminal Profile), 6.4.16, 6.8 (Terminal Response), 11, 11.1, 12.25

27.22.7.1.1.3 Test Purpose

To verify that the ME informs the SIM the an Event: MT Call has occurred using the ENVELOPE (EVENT DOWNLOAD – MT Call) command.

27.22.7.1.1.4 Method of test

27.22.7.1.1.4.1 Initial Conditions

The ME is connected to the SIM Simulator and the System Simulator.

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

27.22.7.1.1.4.2 Procedure

Expected Sequence 1.1 (EVENT DOWNLOAD –MT Call event)

| Step | Direction | Message / Action | Behaviour |
|------|-----------|---|---|
| 1 | SIM -> ME | PROACTIVE COMMAND PENDING | |
| 2 | ME -> SIM | FETCH | |
| 3 | SIM -> ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 | |
| 4 | ME -> SIM | TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 | |
| 5 | SS -> ME | CALL SET UP without CLI | [MT Call Set Up Without CLI] |
| 6 | ME -> SIM | ENVELOPE: EVENT DOWNLOAD – MT Call 1.1.1 | |
| 7 | SS -> ME | CALL DISCONNECT | |
| 8 | SS -> ME | CALL SET UP with CLI | [MT Call Set Up With CLI] |
| 9 | ME -> SIM | ENVELOPE: EVENT DOWNLOAD – MT Call 1.1.2 | |
| 10 | SS -> ME | CALL DISCONNECT | |
| 11 | SS -> ME | CALL SET UP with CLI and sub- address | [MT Call Set Up with CLI and sub-address] |
| 12 | ME -> SIM | ENVELOPE: EVENT DOWNLOAD – MT Call 1.1.3 | |
| 13 | SS -> ME | CALL DISCONNECT | |

PROACTIVE COMMAND : SET UP EVENT LIST 1.1.1

Logically:

Command details

| | |
|--------------------|-------------------|
| Command number: | 1 |
| Command type: | SET UP EVENT LIST |
| Command qualifier: | '00' |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Event List

| | |
|----------|---------|
| Event 1: | MT call |
|----------|---------|

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 81 | 82 | 99 |
| | 01 | 00 | | | | | | | | | | |

TERMINAL RESPONSE : SET UP EVENT LIST 1.1.1

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP EVENT LIST |
| Command qualifier: | '00' |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

EVENT DOWNLOAD – MT CALL 1.1.1

Logically:

| | |
|--------------------------|---------------|
| Event List : | MT call event |
| Device identities | |
| Source device: | Network |
| Destination device: | SIM |
| Transaction identifier : | |
| Ti value : | 0 (bit 5-7) |
| Ti flag : | 0 (bit 8) |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 0A | 19 | 01 | 00 | 82 | 02 | 83 | 81 | 1C | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

EVENT DOWNLOAD – MT CALL 1.1.2

Logically:

| | |
|--------------------------|-----------------------------------|
| Event List : | MT call event |
| Device identities | |
| Source device: | Network |
| Destination device: | SIM |
| Transaction identifier : | |
| Ti value : | 0 (bit 5-7) |
| Ti flag : | 0 (bit 8) |
| Address : | |
| TON | Unknown |
| NPI | "ISDN / telephone numbering plan" |
| Dialling number string | "9876" |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 0F | 19 | 01 | 00 | 82 | 02 | 83 | 81 | 1C | 01 | 00 |
| | 86 | 03 | 90 | 89 | 67 | | | | | | | |

EVENT DOWNLOAD – MT CALL 1.1.3

Logically:

| | |
|--------------------------|-----------------------------------|
| Event List : | MT call event |
| Device identities | |
| Source device: | Network |
| Destination device: | SIM |
| Transaction identifier : | |
| Ti value : | 0 (bit 5-7) |
| Ti flag : | 0 (bit 8) |
| Address : | |
| TON | Unknown |
| NPI | "ISDN / telephone numbering plan" |
| Dialling number string | "9876" |
| Called party subaddress | |
| Type of subaddress: | NSAP (X.213 / ISO 8348 AD2) |
| Odd / even indicator: | even number of address signals |
| Subaddress information: | AFI, 95, 95, 95, 95, 95 |

:

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 19 | 19 | 01 | 00 | 82 | 02 | 83 | 81 | 1C | 01 | 00 |
| | 86 | 03 | 91 | 89 | 67 | 88 | 88 | 07 | 80 | 50 | 95 | 95 |
| | 95 | 95 | 95 | | | | | | | | | |

27.22.7.1.5 Test Requirement

The behaviour of the test is as defined in 'Expected Sequence 1.1'.

27.22.7.2 Call Connected Event

27.22.7.2.1 Call Connected Event (MT and MO call)

27.22.7.2.1.1 Definition and applicability

See Section 3.2.2.

27.22.7.2.1.2 Conformance requirement

The ME shall support the EVENT: Call Connected event as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 4.7, 5.2 (Terminal Profile), 6.4.16, 6.8 (Terminal Response), 11, 11.2, 12.25

27.22.7.2.1.3 Test Purpose

To verify that the ME informs the SIM the an Event: Call Connected has occurred using the ENVELOPE (EVENT DOWNLOAD –Call Connected) command.

27.22.7.2.1.4 Method of test

27.22.7.2.1.4.1 Initial Conditions

The ME is connected to the SIM Simulator and the System Simulator.

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

27.22.7.2.1.4.2 Procedure

Expected Sequence 1.1 (EVENT DOWNLOAD –CALL CONNECTED)

| Step | Direction | Message / Action | Behaviour |
|------|------------|---|--------------------------------|
| 1 | SIM -> ME | PROACTIVE COMMAND PENDING | |
| 2 | ME -> SIM | FETCH | |
| 3 | SIM -> ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 | [EVENT: Call Connected active] |
| 4 | ME -> SIM | TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 | |
| 5 | SS -> ME | SETUP | |
| 6 | USER -> ME | Accept Call Set Up | [MT Call] Ti = 0 |
| 7 | ME->SS | CONNECT | |
| 8 | ME -> SIM | ENVELOPE: EVENT DOWNLOAD - Call Connected 1.1.1 | |
| 9 | SS -> ME | DISCONNECT | |
| 10 | USER -> ME | Initiate Call to "123" | |
| 11 | ME -> SS | SETUP | |
| 12 | SS -> ME | CONNECT | [MO Call] Ti = 0 |
| 13 | ME -> SIM | ENVELOPE: EVENT DOWNLOAD – Call Connected 1.1.1 | |
| 14 | USER -> ME | End Call | |
| 15 | ME -> SS | DISCONNECT | |

PROACTIVE COMMAND : SET UP EVENT LIST 1.1.1

Logically:

Command details

Command number: 1
 Command type: SET UP EVENT LIST
 Command qualifier: '00'

Device identities

Source device: SIM
 Destination device: ME

Event List

Event 1: Call Connected

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 81 | 82 | 99 |
| | 01 | | | | | | | | | | | |

TERMINAL RESPONSE : SET UP EVENT LIST 1.1.1

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP EVENT LIST |
| Command qualifier: | '00' |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

EVENT DOWNLOAD – CALL CONNECTED 1.1.1

Logically:

| | |
|--------------------------|----------------|
| Event List : | Call connected |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Transaction identifier : | |
| Ti value : | 0 (bit 5-7) |
| Ti flag : | 1 (bit 8) |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 0A | 19 | 01 | 01 | 82 | 02 | 82 | 81 | 1C | 01 | 80 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

EVENT DOWNLOAD – CALL CONNECTED 1.1.2

Logically:

| | |
|--------------------------|----------------|
| Event List : | Call connected |
| Device identities | |
| Source device: | Network |
| Destination device: | SIM |
| Transaction identifier : | |
| Ti value : | 0 (bit 5-7) |
| Ti flag : | 1 (bit 8) |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 0A | 19 | 01 | 01 | 82 | 02 | 83 | 81 | 1C | 01 | 80 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

27.22.7.2.1.5 Test Requirement

The behaviour of the test is as defined in 'Expected Sequence 1.1'.

27.22.7.2.2 Call Connected Event (ME supporting SET UP CALL)

27.22.7.2.2.1 Definition and applicability

See Section 3.2.2.

27.22.7.2.2.2 Conformance requirement

3GPP TS 11.14 [15] clause 11.2.2, 6.4.13, 6.6.12

Additionally the ME shall support the SET UP CALL Proactive SIM Command as defined in the following technical specifications

27.22.7.2.2.3 Test Purpose

To verify that the ME informs the SIM the an Event: Call Connected has occurred using the ENVELOPE (EVENT DOWNLOAD –Call Connected) command.

27.22.7.2.2.4 Method of test

27.22.7.2.2.4.1 Initial Conditions

The ME is connected to the SIM Simulator and the System Simulator.

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

27.22.7.2.2.4.2 Procedure

Expected Sequence 2.1 (EVENT DOWNLOAD –CALL CONNECTED, ME supporting SET UP CALL)

| Step | Direction | Message / Action | Behaviour |
|-------------|------------------|--|--------------------------------|
| 1 | SIM -> ME | PROACTIVE COMMAND PENDING | |
| 2 | ME -> SIM | FETCH | |
| 3 | SIM -> ME | PROACTIVE COMMAND: SET UP EVENT LIST 2.1.1 | [EVENT: Call Connected active] |
| 4 | ME -> SIM | TERMINAL RESPONSE: SET UP EVENT LIST 2.1.1 | |
| 5 | SIM -> ME | PROACTIVE COMMAND PENDING | |
| 6 | ME -> SIM | FETCH | |
| 7 | SIM -> ME | PROACTIVE COMMAND: SET UP CALL 2.1.1 | [SAT Call] |
| 8 | ME | | |
| 9 | USER -> ME | Confirm call set up | ME BEHAVIOUR: SET UP CALL |
| 10 | ME -> SS | SETUP | Ti=0 |
| 11 | SS -> ME | CONNECT | |
| 12 | ME -> SIM | TERMINAL RESPONSE: SET UP CALL 2.1.1 | |
| 13 | ME -> SIM | ENVELOPE: CALL CONNECTED 2.1.1 | |

PROACTIVE COMMAND : SET UP EVENT LIST 2.1.1

Logically:

Command details

| | |
|--------------------|-------------------|
| Command number: | 1 |
| Command type: | SET UP EVENT LIST |
| Command qualifier: | '00' |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Event List

| | |
|----------|----------------|
| Event 1: | Call Connected |
|----------|----------------|

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 81 | 82 | 99 |
| | 01 | 01 | | | | | | | | | | |

TERMINAL RESPONSE : SET UP EVENT LIST 2.1.1

Logically:

Command details

| | |
|--------------------|-------------------|
| Command number: | 1 |
| Command type: | SET UP EVENT LIST |
| Command qualifier: | '00' |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|--------------------------------|
| General Result: | Command performed successfully |
|-----------------|--------------------------------|

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

PROACTIVE COMMAND : SET UP CALL 2.1.1

Logically:

Command details

| | |
|--------------------|--|
| Command number: | 1 |
| Command type: | SET UP CALL |
| Command qualifier: | Only if not currently busy on another call |

Device identities

| | |
|---------------------|---------|
| Source device: | SIM |
| Destination device: | Network |

Alpha identifier:

| |
|--|
| the initial phone number ("+012340123456") |
|--|

Address

| | |
|------------------------|-----------------------------------|
| TON: | International |
| NPI: | "ISDN / telephone numbering plan" |
| Dialling number string | "012340123456" |

Coding

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 21 | 81 | 03 | 01 | 10 | 00 | 82 | 02 | 81 | 83 |
| | 05 | 0D | 2B | 30 | 31 | 32 | 33 | 34 | 30 | 31 | 32 |
| | 33 | 34 | 35 | 36 | 86 | 07 | 91 | 10 | 32 | 04 | 21 |
| | 43 | 65 | | | | | | | | | |

TERMINAL RESPONSE : SET UP CALL 2.1.1

Logically:

| | |
|---------------------|--|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP CALL |
| Command qualifier: | Only if not currently busy on another call |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 10 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

EVENT DOWNLOAD – CALL CONNECTED 2.1.1

Logically:

| | |
|--------------------------|----------------|
| Event List : | Call connected |
| Device identities | |
| Source device: | Network |
| Destination device: | SIM |
| Transaction identifier : | |
| Ti value : | 0 (bit 5-7) |
| Ti flag : | 1 (bit 8) |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 0A | 19 | 01 | 01 | 82 | 02 | 83 | 81 | 1C | 01 | 80 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

27.22.7.2.2.5 Test Requirement

The behaviour of the test is as defined in ‘Expected Sequence 1.1’.

27.22.7.3 Call Disconnected Event

27.22.7.3.1 Call Disconnected Event

27.22.7.3.1.1 Definition and applicability

See Section 3.2.2.

27.22.7.3.1.2 Conformance requirement

The ME shall support the EVENT: Call Disconnected event as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 4.7, 5.2 (Terminal Profile), 6.4.16, 6.8 (Terminal Response), 11, 11.3, 12.25

27.22.7.3.1.3 Test Purpose

To verify that the ME informs the SIM the an Event: Call Disconnected has occurred using the ENVELOPE (EVENT DOWNLOAD –Call Disconnected) command.

27.22.7.3.1.4 Method of test

27.22.7.3.1.4.1 Initial Conditions

The ME is connected to the SIM Simulator and the System Simulator.

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

27.22.7.3.1.4.2 Procedure

Expected Sequence 1.1 (EVENT DOWNLOAD –CALL DISCONNECTED)

| Step | Direction | Message / Action | Behaviour |
|------|------------|--|---|
| 1 | SIM -> ME | PROACTIVE COMMAND PENDING | |
| 2 | ME -> SIM | FETCH | |
| 3 | SIM -> ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 | [EVENT: Call Disconnected active] |
| 4 | ME -> SIM | TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 | |
| 5 | SS -> ME | SETUP | [incoming call] Ti=0 |
| 6 | USER -> ME | Accept Call Set Up | |
| 7 | SS -> ME | DISCONNECT | [MT DISCONNECT] |
| 8 | ME-> SIM | ENVELOPE: CALL DISCONNECTED 1.1.1 | |
| 9 | SS -> ME | SETUP | [incoming call] Ti=0 |
| 10 | USER -> ME | Accept Call Set Up | |
| 11 | SS -> ME | RELEASE | [MT RELEASE] |
| 12 | ME-> SIM | ENVELOPE: CALL DISCONNECTED 1.1.1 | |
| 13 | SS -> ME | SETUP | [incoming call] Ti=0 |
| 14 | USER -> ME | Accept Call Set Up | |
| 15 | SS -> ME | RELEASE COMPLETE | [MT RELEASE COMPLETE] |
| 16 | ME-> SIM | ENVELOPE: CALL DISCONNECTED 1.1.1 | |
| 17 | SS -> ME | SETUP | [incoming call] Ti=0 |
| 18 | USER -> ME | Accept Call Set Up | |
| 19 | USER -> ME | End Call | |
| 20 | ME -> SS | DISCONNECT | [MO DISCONNECT] |
| 21 | ME -> SIM | ENVELOPE: CALL DISCONNECTED 1.1.2 | |
| 22 | SS -> ME | DISCONNECT ACK ??? | |
| 23 | SS -> ME | SETUP | [incoming call] Ti=0 |
| 24 | USER -> ME | Accept Call Set Up | |
| 25 | SS -> ME | DISCONNECT | [MT DISCONNECT + CAUSE : normal call clearing] |
| 26 | ME-> SIM | ENVELOPE: CALL DISCONNECTED 1.1.3 | |
| 27 | SS -> ME | SETUP | Ti=0 |
| 28 | USER -> ME | Accept Call Set Up | |
| 29 | SS | TX POWER to XX | [RADIO LINK FAILURE] |
| 30 | ME-> SIM | ENVELOPE: CALL DISCONNECTED 1.1.4A or 1.1.1B | |

PROACTIVE COMMAND : SET UP EVENT LIST 1.1.1

Logically:

Command details

| | |
|--------------------|-------------------|
| Command number: | 1 |
| Command type: | SET UP EVENT LIST |
| Command qualifier: | '00' |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Event List

| | |
|----------|-------------------|
| Event 1: | Call Disconnected |
|----------|-------------------|

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 81 | 82 | 99 |
| | 01 | 02 | | | | | | | | | | |

TERMINAL RESPONSE : SET UP EVENT LIST 1.1.1

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP EVENT LIST |
| Command qualifier: | '00' |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

EVENT DOWNLOAD – CALL DISCONNECTED 1.1.1

Logically:

| | |
|--------------------------|-------------------|
| Event List : | Call Disconnected |
| Device identities | |
| Source device: | Network |
| Destination device: | SIM |
| Transaction identifier : | |
| Ti value : | 0 (bit 5-7) |
| Ti flag : | 0 (bit 8) |
| Cause : | |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 0A | 19 | 01 | 02 | 82 | 02 | 83 | 81 | 1C | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

EVENT DOWNLOAD – CALL DISCONNECTED 1.1.2

Logically:

| | |
|--------------------------|-------------------|
| Event List : | Call Disconnected |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Transaction identifier : | |
| Ti value : | 0 (bit 5-7) |
| Ti flag : | 1 (bit 8) |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 0A | 19 | 01 | 01 | 82 | 02 | 83 | 81 | 1C | 01 | 80 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

EVENT DOWNLOAD – CALL DISCONNECTED 1.1.2

Logically:

| | |
|-------------------|-------------------|
| Event List : | Call Disconnected |
| Device identities | |
| Source device: | ME |

| | |
|--------------------------|-------------|
| Destination device: | SIM |
| Transaction identifier : | |
| Ti value : | 0 (bit 5-7) |
| Ti flag : | 1 (bit 8) |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 0A | 19 | 01 | 01 | 82 | 02 | 82 | 81 | 1C | 01 | 80 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

EVENT DOWNLOAD – CALL DISCONNECTED 1.1.3

Logically:

| | |
|--------------------------|----------------------|
| Event List : | Call Disconnected |
| Device identities | |
| Source device: | Network |
| Destination device: | SIM |
| Transaction identifier : | |
| Ti value : | 0 (bit 5-7) |
| Ti flag : | 0 (bit 8) |
| Cause : | normal call clearing |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 0E | 19 | 01 | 01 | 82 | 02 | 82 | 81 | 1C | 01 | 00 |
| | 9A | 02 | 60 | 90 | | | | | | | | |

EVENT DOWNLOAD – CALL DISCONNECTED 1.1.4A

Logically:

| | |
|--------------------------|--------------------|
| Event List : | Call Disconnected |
| Device identities | |
| Source device: | Network |
| Destination device: | SIM |
| Transaction identifier : | |
| Ti value : | 0 (bit 5-7) |
| Ti flag : | 1 (bit 8) |
| Cause : | radio link failure |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 0E | 19 | 01 | 01 | 82 | 02 | 82 | 81 | 1C | 01 | 80 |
| | 9A | 00 | | | | | | | | | | |

EVENT DOWNLOAD – CALL DISCONNECTED 1.1.4B

Logically:

| | |
|--------------------------|--------------------|
| Event List : | Call Disconnected |
| Device identities | |
| Source device: | Network |
| Destination device: | SIM |
| Transaction identifier : | |
| Ti value : | 0 (bit 5-7) |
| Ti flag : | 0 (bit 8) |
| Cause : | radio link failure |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 0E | 19 | 01 | 01 | 82 | 02 | 82 | 81 | 1C | 01 | 00 |
| | 9A | 00 | | | | | | | | | | |

27.22.7.3.1.5 Test Requirement

The behaviour of the test is as defined in ‘Expected Sequence 1.1’.

27.22.7.4 Location Status Event**27.22.7.4.1 Location Status Event (normal)****27.22.7.4.1.1 Definition and applicability**

See Section 3.2.2.

27.22.7.4.1.2 Conformance requirement

The ME shall support the EVENT: Location Status event as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 11.4, 6.4.16

27.22.7.4.1.3 Test Purpose

To verify that the ME informs the SIM that an Event: MM_IDLE state has occurred using the ENVELOPE (EVENT DOWNLOAD – Location Status) command.

27.22.7.4.1.4 Method of test

27.22.7.4.1.4.1 Initial Conditions

The ME is connected to the SIM Simulator and the System Simulator.

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

Two cells are defined. Cell 1 has location area code 1 and cell 2 has location area code 2.

MS is in service on Cell 1.

27.22.7.4.4.2 Procedure

Expected Sequence 1.1(EVENT DOWNLOAD –LOCATION STATUS)

| Step | Direction | Message / Action | Behaviour |
|------|-----------|--|---|
| 1 | SIM -> ME | PROACTIVE COMMAND PENDING | |
| 2 | ME -> SIM | FETCH | |
| 3 | SIM -> ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 | |
| 4 | ME -> SIM | TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 | |
| 5 | SS | | Cell 2 is switched on and cell 1 is switched off ME performs cell reselection to cell 2 |
| 6 | | | |
| 7 | ME -> SS | Location Updating Request | |
| 8 | SS -> ME | Location updating accept | |
| 9 | ME -> SIM | ENVELOPE: EVENT DOWNLOAD – Location Status 1.1.1 | [NOTE : The inclusion of the location information is optional : (If location status indicates normal status)] |

PROACTIVE COMMAND : SET UP EVENT LIST 1.1.1

Logically:

Command details

| | |
|--------------------|-------------------|
| Command number: | 1 |
| Command type: | SET UP EVENT LIST |
| Command qualifier: | '00' |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Event List

| | |
|----------|-----------------|
| Event 1: | Location status |
|----------|-----------------|

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 81 | 82 | 99 |
| | 01 | | | | | | | | | | | |

TERMINAL RESPONSE : SET UP EVENT LIST 1.1.1

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP EVENT LIST |
| Command qualifier: | '00' |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

EVENT DOWNLOAD – LOCATION STATUS 1.1.1

Logically:

| | |
|----------------------|--|
| Event List : | Location status |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Location status : | normal service |
| Location Information | |
| MCC & MNC | the mobile country and network code (F110) |
| LAC | the location Area Code (2) |
| Cell ID | Cell Identity Value (0001) |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 13 | 19 | 01 | 02 | 82 | 02 | 82 | 81 | 1B | 01 | 00 |
| | 13 | 07 | 00 | F1 | 10 | 00 | 02 | 00 | 01 | | | |

27.22.7.4.1.5 Test Requirement

The behaviour of the test is as defined in ‘Expected Sequence 1.1’.

27.22.7.5 User Activity Event

27.22.7.5.1 User Activity Event (normal)

27.22.7.5.1.1 Definition and applicability

See Section 3.2.2.

27.22.7.5.1.2 Conformance Requirement

The ME shall support the EVENT DOWNLOAD -USER ACTIVITY as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 5.2 (Terminal Profile), clause 6.4.16 (Set Up Event List), clause 6.8 (Terminal Response), clause 6.6.16, clause 6.11, clause 11 (Event Download), clause 11.5 (User Activity event), clause 12.6 (Commands details), clause 12.25 (Event List).

27.22.7.5.1.3 Test Purpose

To verify that the ME performed correctly the procedure of USER ACTIVITY EVENT.

27.22.7.5.1.4 Method of Test

27.22.7.5.1.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default with the following exceptions.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The ME screen shall be in its normal stand-by display.

27.22.7.5.1.4.2 Procedure

Expected Sequence 1.1 (EVENT DOWNLOAD -USER ACTIVITY)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|---|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1 | [set up event list : event User Activity] |
| 2 | ME → SIM | TERMINAL RESPONSE: SET UP EVENT LIST 1.1 | [command performed successfully] |
| 3 | USER | press any key | |
| 4 | ME → SIM | ENVELOPE EVENT DOWNLOAD -USER ACTIVITY 1.1 | |
| 9 | USER | press any key | check if no envelope Event Download-User activity sending to the SIM (this event is reported once) |

PROACTIVE COMMAND : SET UP EVENT LIST 1.1.1

Logically:

Command details

| | |
|--------------------|-------------------|
| Command number: | 1 |
| Command type: | SET UP EVENT LIST |
| Command qualifier: | |

Device identities

| | |
|--------------------------|-----|
| Source device: | SIM |
| Destination device: | ME |
| Event List User Activity | |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 15 | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 81 | 82 | 99 |
| | 01 | | 04 | | | | | | | | | |

TERMINAL RESPONSE : SET UP EVENT LIST 1.1.1

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP EVENT LIST |
| Command qualifier: | |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 05 | 80 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

EVENT DOWNLOAD -USER ACTIVITY 1.1.1

Logically:

| | |
|---------------------|---------------|
| Event List | User Activity |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |

Coding:

| | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 07 | 19 | 01 | 04 | 82 | 02 | 83 | 81 |
|----------|----|----|----|----|----|----|----|----|----|

27.22.7.5.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 1.1.

27.22.7.6 Idle screen available event

27.22.7.6.1 Idle Screen Available (normal)

27.22.7.6.1.1 Definition and applicability

See Section 3.2.2.

27.22.7.6.1.2 Conformance requirement

The ME shall support the EVENT: IDLE SCREEN AVAILABLE event as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 4.7, 5.2 (Terminal Profile), 6.4.16, 6.8 (Terminal Response), 11, 11.1, 12.25

27.22.7.6.1.3 Test Purpose

To verify that the ME informs the SIM the an Event: Idle Screen Available has occurred using the ENVELOPE (EVENT DOWNLOAD – IDLE SCREEN AVAILABLE) command.

27.22.7.6.1.4 Method of test

27.22.7.6.1.4.1 Initial Conditions

The ME is connected to the SIM Simulator and the System Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

27.22.7.6.1.4.2 Procedure

Expected Sequence 1.1 (EVENT DOWNLOAD - IDLE SCREEN AVAILABLE)

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------|--|--|
| 1 | USER → ME | Select screen other than the ME idle screen | |
| 2 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1 | [set up event list : idle screen available] |
| 3 | ME → SIM | TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 | [command performed successfully] |
| 4 | USER → ME | Select ME idle screen | |
| 5 | ME → SIM | ENVELOPE: IDLE SCREEN AVAILABLE 1.1.1 | |
| 6 | USER → ME | Select ME idle screen | check if no envelope Event Download- idle screen sending to the SIM (this event is reported once) |

PROACTIVE COMMAND : SET UP EVENT LIST 1.1.1

Logically:

Command details

| | |
|--------------------|-------------------|
| Command number: | 1 |
| Command type: | SET UP EVENT LIST |
| Command qualifier: | '00' |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Event List

| | |
|----------|-----------------------|
| Event 1: | idle screen available |
|----------|-----------------------|

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 81 | 82 | 99 |
| | 01 | 05 | | | | | | | | | | |

TERMINAL RESPONSE : SET UP EVENT LIST 1.1.1

Logically:

Command details

| | |
|--------------------|-------------------|
| Command number: | 1 |
| Command type: | SET UP EVENT LIST |
| Command qualifier: | '00' |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|--------------------------------|
| General Result: | Command performed successfully |
|-----------------|--------------------------------|

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

EVENT DOWNLOAD - IDLE SCREEN AVAILABLE 1.1.1

Logically:

| | |
|---------------------|---------------|
| Event List | User Activity |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |

Coding:

| | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 07 | 19 | 01 | 05 | 82 | 02 | 83 | 81 |
|----------|----|----|----|----|----|----|----|----|----|

27.22.7.6.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 1.1.

27.22.7.7 Card reader status event

27.22.7.7.1 Card Reader Status (normal)

27.22.7.7.1.1 Definition and applicability

See Section 3.2.2.

27.22.7.7.1.2 Conformance requirement

The ME shall support the EVENT: Call Card Reader Status event as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 4.7 (Event Download), clause 4.9 (Multiple Card), clause 5.2 (Terminal Profile), clause 6.4.16 (Set Up Event List), clause 6.8 (Terminal Response), clause 11 (Event download), clause 11.7 (Card reader status event), clause 12.25 (Event List), clause 12.33 (Card reader status), ANNEX G (Monitoring of events), Annex H (Support of MultipleCard Operation), clause 12.25 (Event list), clause 12.7 (Device identities).

27.22.7.7.1.3 Test Purpose

To verify that the ME informs the SIM the an Event: Card Reader Status has changed using the ENVELOPE (EVENT DOWNLOAD – Card Reader Status) command.

The ME-Manufacturer can assign the card reader identifier from 0 to 7.

This test applies for MEs with only one additional card reader.

In this particular case the card reader identifier 1 is chosen.

27.22.7.7.1.4 Method of test

27.22.7.7.1.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

27.22.7.7.1.4.2 Procedure

Expected Sequence 1.1 (EVENT DOWNLOAD, Card reader status, Card reader 1, card reader attached, no card inserted)

| Step | Direction | Message / Action | Behaviour |
|------|-----------|--|-----------------------------|
| 1 | SIM -> ME | PROACTIVE COMMAND 1.1.1 PENDING | |
| 2 | ME -> SIM | FETCH | |
| 3 | SIM -> ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 | [EVENT: Card Reader Status] |
| 4 | ME -> SIM | TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 | [Successfully] |
| 5 | User->ME | Insert a card in Reader | |
| 6 | ME-> SIM | ENVELOPE: CARD READER STATUS 1.1.1a or ENVELOPE: CARD READER STATUS 1.1.1b Or ENVELOPE: CARD READER STATUS 1.1.1c Or ENVELOPE: CARD READER STATUS 1.1.1d | |
| 7 | User->ME | Remove the card from Reader | |
| 8 | ME-> SIM | ENVELOPE: CARD READER STATUS 1.1.2a Or ENVELOPE: CARD READER STATUS 1.1.2b Or ENVELOPE: CARD READER STATUS 1.1.2c Or ENVELOPE: CARD READER STATUS 1.1.2d | |

PROACTIVE COMMAND : SET UP EVENT LIST 1.1.1

Logically:

Command details

| | |
|--------------------|-------------------|
| Command number: | 1 |
| Command type: | SET UP EVENT LIST |
| Command qualifier: | '00' |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Event list

| | |
|----------|--------------------|
| Event 1: | Card Reader Status |
|----------|--------------------|

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0D | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 81 | 82 |
| | 99 | 01 | 06 | | | | | | | | |

TERMINAL RESPONSE : SET UP EVENT LIST 1.1.1

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP EVENT LIST |
| Command qualifier: | '00' |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

BER-TLV: 81 03 01 05 00 82 02 82 81 83 01 00

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.1a

Logically:

| | |
|--------------------------|--------------------|
| Event list | |
| Event 1: | Card Reader Status |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Card reader status | |
| Identity of card reader: | 01 |
| Card reader removable: | Yes |
| Card reader present: | Yes |
| Card reader ID-1 size: | Yes |
| Card present in reader: | Yes |
| Card powered: | No |

Coding:

BER-TLV: D6 0A 99 01 06 82 02 82 81 A0 01 97

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.1b

Logically:

| | |
|--------------------------|--------------------|
| Event list | |
| Event 1: | Card Reader Status |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Card reader status | |
| Identity of card reader: | 01 |
| Card reader removable: | Yes |
| Card reader present: | Yes |
| Card reader ID-1 size: | No |
| Card present in reader: | Yes |
| Card powered: | No |

Coding:

BER-TLV: D6 0A 99 01 06 82 02 82 81 A0 01 95

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.1c

Logically:

| | |
|--------------------------|--------------------|
| Event list | |
| Event 1: | Card Reader Status |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Card reader status | |
| Identity of card reader: | 01 |
| Card reader removable: | No |
| Card reader present: | Yes |
| Card reader ID-1 size: | Yes |
| Card present in reader: | Yes |
| Card powered: | No |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 0A | 99 | 01 | 06 | 82 | 02 | 82 | 81 | A0 | 01 | 17 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.1d

Logically:

| | |
|--------------------------|--------------------|
| Event list | |
| Event 1: | Card Reader Status |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Card reader status | |
| Identity of card reader: | 01 |
| Card reader removable: | No |
| Card reader present: | Yes |
| Card reader ID-1 size: | No |
| Card present in reader: | Yes |
| Card powered: | No |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 0A | 99 | 01 | 06 | 82 | 02 | 82 | 81 | A0 | 01 | 15 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.2a

Logically:

| | |
|--------------------------|--------------------|
| Event list | |
| Event 1: | Card Reader Status |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Card reader status | |
| Identity of card reader: | 01 |
| Card reader removable: | Yes |
| Card reader present: | Yes |
| Card reader ID-1 size: | Yes |
| Card present in reader: | No |
| Card powered: | No |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 0A | 99 | 01 | 06 | 82 | 02 | 82 | 81 | A0 | 01 | 93 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.2b

Logically:

| | |
|--------------------------|--------------------|
| Event list | |
| Event 1: | Card Reader Status |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Card reader status | |
| Identity of card reader: | 01 |
| Card reader removable: | Yes |
| Card reader present: | Yes |
| Card reader ID-1 size: | No |
| Card present in reader: | No |
| Card powered: | No |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 0A | 99 | 01 | 06 | 82 | 02 | 82 | 81 | A0 | 01 | 91 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.2c

Logically:

| | |
|--------------------------|--------------------|
| Event list | |
| Event 1: | Card Reader Status |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Card reader status | |
| Identity of card reader: | 01 |
| Card reader removable: | No |
| Card reader present: | Yes |
| Card reader ID-1 size: | Yes |
| Card present in reader: | No |
| Card powered: | No |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 0A | 99 | 01 | 06 | 82 | 02 | 82 | 81 | A0 | 01 | 13 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.2d

Logically:

| | |
|--------------------------|--------------------|
| Event list | |
| Event 1: | Card Reader Status |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Card reader status | |
| Identity of card reader: | 01 |
| Card reader removable: | No |
| Card reader present: | Yes |
| Card reader ID-1 size: | No |
| Card present in reader: | No |
| Card powered: | No |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 0A | 99 | 01 | 06 | 82 | 02 | 82 | 81 | A0 | 01 | 91 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

27.22.7.7.1.5 Test Requirement

The behaviour of the test is as defined in ‘Expected Sequence 1.1’.

27.22.7.7.2 Card Reader Status(detachable card reader)**27.22.7.7.2.1 Definition and applicability**

See Section 3.2.2.

27.22.7.7.2.2 Conformance requirement

The ME shall support the EVENT: Call Card Reader Status event as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 4.7 (Event Download), clause 4.9 (Multiple Card), clause 5.2 (Terminal Profile), clause 6.4.16 (Set Up Event List), clause 6.8 (Terminal Response), clause 11 (Event download), clause 11.7 (Card reader status event), clause 12.25 (Event List), clause 12.33 (Card reader status), ANNEX G (Monitoring of events), Annex H (Support of MultipleCard Operation), clause 12.25 (Event list), clause 12.7 (Device identities).

27.22.7.7.2.3 Test Purpose

To verify that the ME informs the SIM the an Event: Card Reader Status has changed using the ENVELOPE (EVENT DOWNLOAD – Card Reader Status) command.

The ME-Manufacturer can assign the card reader identifier from 0 to 7.

This test applies for MEs with only one additional card reader.

In this particular case the card reader identifier 1 is chosen as an example

27.22.7.7.2.4 Method of test

27.22.7.7.2.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

27.22.7.7.2.4.2 Procedure

Expected Sequence 2.1 (EVENT DOWNLOAD, Detachable reader, Card reader 1, detachable card reader not attached, no card inserted)

| Step | Direction | Message / Action | Behaviour |
|------|-----------|--|------------------------------------|
| 1 | SIM -> ME | PROACTIVE COMMAND 1.1.1PENDING | |
| 2 | ME -> SIM | FETCH | |
| 3 | SIM -> ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 | [SET UP EVENT: Card Reader Status] |
| 4 | ME -> SIM | TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 | [Successfully] |
| 5 | User->ME | Attach the Card Reader to ME | |
| 6 | ME-> SIM | ENVELOPE: CARD READER STATUS 2.1.1a Or ENVELOPE: CARD READER STATUS 2.1.1b | |
| 7 | User->ME | Detach the Card Reader from ME | |
| 8 | ME-> SIM | ENVELOPE: CARD READER STATUS 2.1.2a Or ENVELOPE: CARD READER STATUS 2.1.2b | |

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 1.1.1a

Logically:

| | |
|--------------------------|--------------------|
| Event list | |
| Event 1: | Card Reader Status |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Card reader status | |
| Identity of card reader: | 01 |
| Card reader removable: | Yes |
| Card reader present: | Yes |
| Card reader ID-1 size: | Yes |
| Card present in reader: | No |
| Card powered: | No |

Coding:

BER-TLV: D6 0A 99 01 06 82 02 82 81 A0 01 93

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 2.1.1b

Logically:

| | |
|--------------------------|--------------------|
| Event list | |
| Event 1: | Card Reader Status |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Card reader status | |
| Identity of card reader: | 01 |
| Card reader removable: | Yes |
| Card reader present: | Yes |
| Card reader ID-1 size: | No |
| Card present in reader: | No |
| Card powered: | No |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 0A | 99 | 01 | 06 | 82 | 02 | 82 | 81 | A0 | 01 | 91 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 2.1.2a

Logically:

| | |
|--------------------------|--------------------|
| Event list | |
| Event 1: | Card Reader Status |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Card reader status | |
| Identity of card reader: | 01 |
| Card reader removable: | Yes |
| Card reader present: | No |
| Card reader ID-1 size: | Yes |
| Card present in reader: | No |
| Card powered: | No |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 0A | 99 | 01 | 06 | 82 | 02 | 82 | 81 | A0 | 01 | 92 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

ENVELOPE: EVENT DOWNLOAD CARD READER STATUS 2.1.2b

Logically:

| | |
|--------------------------|--------------------|
| Event list | |
| Event 1: | Card Reader Status |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Card reader status | |
| Identity of card reader: | 01 |
| Card reader removable: | Yes |
| Card reader present: | No |
| Card reader ID-1 size: | No |
| Card present in reader: | No |
| Card powered: | No |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 0A | 99 | 01 | 06 | 82 | 02 | 82 | 81 | A0 | 01 | 90 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

27.22.7.7.1.5 Test Requirement

The behaviour of the test is as defined in ‘Expected Sequence 2.1’.

27.22.7.8 Language selection event

27.22.7.8.1 Language selection event (normal)

27.22.7.8.1.1 Definition and applicability

See Section 3.2.2.

27.22.7.8.1.2 Conformance requirement

The ME shall support the EVENT: LANGUAGE SELECTION event as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 4.7, 5.2 (Terminal Profile), 6.4.16, 6.8 (Terminal Response), 11, 11.8, 12.25

27.22.7.8.1.3 Test Purpose

To verify that the ME informs the SIM the an Event: Language selection has occurred using the ENVELOPE (EVENT DOWNLOAD – LANGUAGE SELECTION) command.

27.22.7.8.1.4 Method of test

27.22.7.8.1.4.1 Initial Conditions

The ME is connected to the SIM Simulator and the System Simulator.

The elementary files are coded as SIM Application Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure.

The current language shall have been set to english. Another language has to be supported, german is an example.

27.22.7.8.1.4.2 Procedure

Expected Sequence 1.1 (EVENT DOWNLOAD - LANGUAGE SELECTION)

| Step | Direction | MESSAGE / Action | Comments |
|------|--------------|--|--|
| 1 | SIM → ME | PROACTIVE COMMAND PENDING: SET UP EVENT LIST 1.1.1 | [set up event list : language selection] |
| 2 | ME → SIM | TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 | [command performed successfully] |
| 3 | USER → ME | Change the language to german. | |
| 4 | ME → SIM | ENVELOPE: LANGUAGE SELECTION 1.1.1 | |
| 5 | USER → ME | Change the language to english | |
| 6 | ME → SIM | ENVELOPE: LANGUAGE SELECTION 1.1.2 | check if an envelope Event Download- language selection is sending again to the SIM (this event is continuously reported) |

PROACTIVE COMMAND : SET UP EVENT LIST 1.1.1

Logically:

Command details

| | |
|--------------------|-------------------|
| Command number: | 1 |
| Command type: | SET UP EVENT LIST |
| Command qualifier: | '00' |

Device identities

| | |
|---------------------|-----|
| Source device: | SIM |
| Destination device: | ME |

Event List

| | |
|----------|--------------------|
| Event 1: | language selection |
|----------|--------------------|

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0C | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 81 | 82 | 99 |
| | 01 | 07 | | | | | | | | | | |

TERMINAL RESPONSE : SET UP EVENT LIST 1.1.1

Logically:

Command details

| | |
|--------------------|-------------------|
| Command number: | 1 |
| Command type: | SET UP EVENT LIST |
| Command qualifier: | '00' |

Device identities

| | |
|---------------------|-----|
| Source device: | ME |
| Destination device: | SIM |

Result

| | |
|-----------------|--------------------------------|
| General Result: | Command performed successfully |
|-----------------|--------------------------------|

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

EVENT DOWNLOAD – LANGUAGE SELECTION 1.1.1

Logically:

| | |
|---------------------|-----------------------|
| Event List | Language selection |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Language | |
| Language | ‘de’ → 64 65 (german) |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 0B | 19 | 01 | 07 | 82 | 02 | 83 | 81 | 2D | 02 | 64 |
| | 65 | | | | | | | | | | | |

EVENT DOWNLOAD – LANGUAGE SELECTION 1.1.2

Logically:

| | |
|---------------------|-----------------------|
| Event List | Language selection |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Language | |
| Language | ‘en’ → 64 65 (german) |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 0B | 19 | 01 | 07 | 82 | 02 | 83 | 81 | 2D | 02 | 65 |
| | 6E | | | | | | | | | | | |

27.22.7.8.1.5 Test Requirement

The ME shall operate in the manner defined in expected sequence 1.1.

27.22.7.9 Browser termination event

27.22.7.9.1 Browser termination (normal)

27.22.7.9.1.1 Definition and applicability

This test is only applicable to ME’s that support the EVENT: browser termination event driven information.

27.22.7.9.1.2 Conformance requirement

The ME shall support the EVENT: Browser termination event as defined in the following technical specifications:

3GPP TS 11.14 [15] clause 4.7 (Event Download), clause 5.2 (Terminal Profile), clause 6.4.16 (Set Up Event List), clause 6.8 (Terminal Response), clause 11 (Event download), clause 11.9 (Browser termination event), clause 12.25 (Event List), clause 12.51 (Browser termination cause), ANNEX G (Monitoring of events), clause 12.7 (Device identities).

27.22.7.9.1.3 Test Purpose

To verify that the ME informs the SIM of an Event: Browser termination using the ENVELOPE (EVENT DOWNLOAD – Card Reader Status) command.

This test applies for MEs which have a browser.

27.22.7.9.1.4 Method of test

27.22.7.9.1.4.1 Initial Conditions

The ME is connected to the SIM Simulator.

The ME shall be powered on and perform the PROFILE DOWNLOAD procedure.

27.22.7.9.1.4.2 Procedure

Expected Sequence 1.1 (EVENT DOWNLOAD - Browser termination)

| Step | Direction | Message / Action | Behaviour |
|------|-----------|---|-------------------------------------|
| 1 | SIM -> ME | PROACTIVE COMMAND 1.1.1 PENDING | |
| 2 | ME -> SIM | FETCH | |
| 3 | SIM -> ME | PROACTIVE COMMAND: SET UP EVENT LIST 1.1.1 | [EVENT: Browser termination Status] |
| 4 | ME -> SIM | TERMINAL RESPONSE: SET UP EVENT LIST 1.1.1 | [Successfully] |
| 5 | User->ME | Launch the browser , go to an URL, then stop the session and the browser. | |
| 6 | ME-> SIM | ENVELOPE: BROWSER TERMINATION 1.1.1 | |

PROACTIVE COMMAND : SET UP EVENT LIST 1.1.1

Logically:

| | |
|---------------------|---------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP EVENT LIST |
| Command qualifier: | '00' |
| Device identities | |
| Source device: | SIM |
| Destination device: | ME |
| Event list | |
| Event 1: | Browser termination |

Coding:

| | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D0 | 0D | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 81 | 82 |
| | 99 | 01 | 08 | | | | | | | | |

TERMINAL RESPONSE : SET UP EVENT LIST 1.1.1

Logically:

| | |
|---------------------|--------------------------------|
| Command details | |
| Command number: | 1 |
| Command type: | SET UP EVENT LIST |
| Command qualifier: | '00' |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Result | |
| General Result: | Command performed successfully |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 81 | 03 | 01 | 05 | 00 | 82 | 02 | 82 | 81 | 83 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

ENVELOPE: EVENT DOWNLOAD BROWSER TERMINATION 1.1.1

Logically:

| | |
|----------------------------|---------------------|
| Event list | |
| Event 1: | Browser termination |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Browser termination cause: | User termination |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 0A | 99 | 01 | 08 | 82 | 02 | 82 | 81 | B4 | 01 | 00 |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|

27.22.7.10 Data available event**27.22.7.10.1 Definition and applicability**

See Section 3.2.2.

27.22.7.10.2 Conformance requirements

The ME shall support the class "e" commands as defined in the following technical specifications: 3GPP TS 11.14 [15]

Additionnally the ME shall support ENVELOPE (EVENT DOWNLOAD – Data available)

27.22.7.10.3 Test Purpose

To verify that the ME shall send an ENVELOPE (EVENT DOWNLOAD – Data available) to the SIM after the ME receives a packet of data from the server by the BIP channel previously opened.

27.22.7.10.4 Method of test**27.22.7.10.4.1 Initial Conditions**

The ME is connected to the SIM Simulator. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure. The SIM must have sent the SET UP EVENT LIST to the ME to supply a set of events (event Data available).

27.22.7.10.4.2 Procedure

Expected sequence 1.1 (EVENT DOWNLOAD – Data available)

For that test, it is assumed that an OPEN CHANNEL proactive command has been successfully executed (with a consistent SIM buffer size).

| Step | Direction | MESSAGE / Action | Comments |
|------|----------------|---------------------------------------|----------|
| 1 | SERVER → ME | Data sent through the BIP channel | |
| 2 | ME → SIM | ENVELOPE 1.1.1 (Event-Data Available) | |

ENVELOPE: EVENT DOWNLOAD – Data available 1.1.1

Logically:

| | |
|----------------------|----------------------------------|
| Event List | |
| Event: | Data available |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Channel status | |
| Channel status: | Channel 1 open, link established |
| Channel Data Length | |
| Channel Data Length: | 8 Bytes available in Rx buffer |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 0E | 99 | 01 | 09 | 82 | 02 | 82 | 81 | B8 | 02 | 81 |
| | 00 | B7 | 01 | 08 | | | | | | | | |

27.22.7.11 Channel Status event

27.22.7.11.1 Definition and applicability

See Section 3.2.2.

27.22.7.11.2 Conformance requirements

The ME shall support the class “e” commands as defined in the following technical specifications: 3GPP TS 11.14 [15]

Additionnally the ME shall support ENVELOPE (EVENT DOWNLOAD – Channel Status)

27.22.7.11.3 Test Purpose

To verify that the ME shall send an ENVELOPE (EVENT DOWNLOAD – Channel Status) to the SIM after the link dropped between the NETWORK and the ME.

27.22.7.11.4 Method of test

27.22.7.11.4.1 Initial Conditions

The ME is connected to the SIM Simulator. The elementary files are coded as Toolkit default.

Prior to this test the ME shall have been powered on and performed the PROFILE DOWNLOAD procedure. The SIM must have sent the SET UP EVENT LIST to the ME to supply a set of events (event Channel Status).

27.22.7.11.4.2 Procedure

Expected sequence 1.1 (EVENT DOWNLOAD – Channel Status on a link dropped)

For that test, it is assumed that an OPEN CHANNEL proactive command has been successfully executed.

| Step | Direction | MESSAGE / Action | Comments |
|------|-----------------|---------------------------------------|----------|
| 1 | NETWORK → ME | Link dropped | |
| 2 | ME → SIM | ENVELOPE 1.1.1 (Event-Channel Status) | |

ENVELOPE: EVENT DOWNLOAD – Channel Status 1.1.1

Logically:

| | |
|---------------------|-------------------------|
| Event List | |
| Event: | Channel Status |
| Device identities | |
| Source device: | ME |
| Destination device: | SIM |
| Channel status | |
| Channel status: | Channel 1, link dropped |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | D6 | 0E | 99 | 01 | 09 | 82 | 02 | 82 | 81 | B8 | 02 | 01 |
| | 05 | | | | | | | | | | | |

Annex A (normative):
Void

Annex B (informative):
void

Annex C (normative): Initial Conditions for Icon Management

The ME is connected to the SIM Simulator.

The elementary files are coded as Toolkit default with the following exceptions.

The ME screen shall be in its normal stand-by display.

For the display of icon:

- Under the DF Telecom: creation of DF Grafics (5F50),
- Under the DF 5F50: creation of EF_{Img} (4F20, linear fixed file) and EF_{Instance} (4FXX, transparent file).

EF_{Img} (Image, 4F20)

Record 1:

Logically:

| | |
|------------------------------------|---------------------------------|
| Number of Actual Images Instances: | 01 |
| Image Instance Width: | 08 |
| Image Instance Height: | 08 |
| Image Coding Scheme: | 11 (basic image) |
| Image Instance File Identifier: | 4F 04 (EF _{Instance}) |
| Offset into Image Instance File: | 00 00 |
| Length of Image Instance Data: | 00 0A |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 01 | 08 | 08 | 11 | 4F | 04 | 00 | 00 | 00 | 0A | FF | FF |
| | FF | | | |

Record 2:

Logically:

| | |
|------------------------------------|--------------------------------|
| Number of Actual Images Instances: | 01 |
| Image Instance Width: | 08 |
| Image Instance Height: | 08 |
| Image Coding Scheme: | 21 (colour image) |
| Image Instance File Identifier: | 4F 02(EF _{Instance}) |
| Offset into Image Instance File: | 00 00 |
| Length of Image Instance Data: | 00 1F |

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 01 | 2E | 28 | 21 | 4F | 02 | 00 | 00 | 00 | 1F | FF | FF |
| | FF | | | |

Record 3:

Logically:

Number of Actual Images Instances: 01

Image Instance Width: 18

Image Instance Height: 10

Image Coding Scheme: 11 (basic image)

Image Instance File Identifier: 4F 03 (EF_{Instance})

Offset into Image Instance File: 00 00

Length of Image Instance Data: 00 32

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 01 | 18 | 10 | 11 | 4F | 03 | 00 | 00 | 00 | 32 | FF | FF |
| | FF | | | |

Record 4:

Logically:

Number of Actual Images Instances: 01

Image Instance Width: 2E

Image Instance Height: 28

Image Coding Scheme: 11 (basic image)

Image Instance File Identifier: 4F 01 (EF_{Instance})

Offset into Image Instance File: 00 00

Length of Image Instance Data: 00 E8

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 01 | 2E | 28 | 11 | 4F | 01 | 00 | 00 | 00 | E8 | FF | FF |
| | FF | | | |

Record 5:

Logically:

Number of Actual Images Instances: 01

Image Instance Width: 05

Image Instance Height: 05

Image Coding Scheme: 11 (basic image)

Image Instance File Identifier: 4F 05 (EF_{Instance})

Offset into Image Instance File: 00 00

Length of Image Instance Data: 00 08

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 01 | 05 | 05 | 11 | 4F | 05 | 00 | 00 | 00 | 08 | FF | FF |
| | FF | FF | FF | FF | FF | FF | | | | | | |

EF_{Instance} (4F01)

Logically:

Image Instance Data: see below

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 2E | 28 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 01 | FF | 80 |
| | 00 | 00 | 00 | 0F | FF | 00 | 00 | 00 | 00 | 77 | FE | 00 |
| | 00 | 00 | 01 | BF | F8 | 00 | 00 | 00 | 06 | FF | E0 | 00 |
| | 00 | 00 | 1A | 03 | 80 | 00 | 00 | 00 | 6B | F6 | BC | 00 |
| | 00 | 01 | AF | D8 | 38 | 00 | 00 | 06 | BF | 60 | 20 | 00 |
| | 00 | 1A | FD | 80 | 40 | 00 | 00 | 6B | F6 | 00 | 80 | 00 |
| | 01 | A0 | 1F | 02 | 00 | 00 | 06 | FF | E4 | 04 | 00 | 00 |
| | 1B | FF | 90 | 10 | 00 | 00 | 6D | EE | 40 | 40 | 00 | 01 |
| | BF | F9 | 01 | 00 | 00 | 6F | FF | E4 | 04 | 00 | 00 | 1B |
| | FF | 90 | 10 | 00 | 00 | 6F | FE | 40 | 40 | 00 | 01 | BF |
| | F9 | 01 | 00 | 00 | 06 | FF | E6 | 04 | 00 | 00 | 1B | FF |
| | 88 | 10 | 00 | 00 | 6F | FE | 20 | 40 | 00 | 01 | BF | F8 |
| | 66 | 00 | 00 | 06 | FF | E0 | F0 | 00 | 00 | 1B | FF | 80 |
| | 80 | 00 | 00 | 7F | FE | 00 | 00 | 00 | 03 | 00 | 0C | 00 |
| | 00 | 00 | 1F | FF | F8 | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 | 00 |
| | 1C | 21 | 08 | 44 | EE | 00 | 48 | C4 | 31 | 92 | 20 | 01 |
| | 25 | 11 | 45 | 50 | 80 | 07 | 14 | 45 | 15 | 43 | 80 | 12 |
| | 71 | 1C | 4D | 08 | 00 | 4A | 24 | 89 | 32 | 20 | 01 | C8 |
| | 9E | 24 | 4E | E0 | | | | | | | | |

EF_{Instance} (4F02)

Logically:

Image Instance Data:

Image width: 08

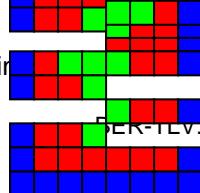
Image length: 08

Bits per raster image point: 02

Number of CLUT entries: 03

Location of CLUT: 00 16

Image body: see below

| | | | | | | | | | | | | | |
|---------|----------|---|----|----|----|----|----|----|----|----|----|----|----|
| Coding: | BER-TLV: |  | | | | | | | | | | | |
| | | 08 | 08 | 02 | 03 | 00 | 16 | AA | AA | 80 | 02 | 85 | 42 |
| | | 81 | 42 | 81 | 42 | 81 | 52 | 80 | 02 | AA | AA | FF | 00 |

EF_{Instance} (4F03)

Logically:

Image Instance Data: see below

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 18 | 10 | FF | FF | FF | 80 | 00 | 01 | 80 | 00 | 01 | 80 |
| | 00 | 01 | 8F | 3C | F1 | 89 | 20 | 81 | 89 | 20 | 81 | 89 |
| | 20 | F1 | 89 | 20 | 11 | 89 | 20 | 11 | 89 | 20 | 11 | 8F |
| | 3C | F1 | 80 | 00 | 01 | 80 | 00 | 01 | 80 | 00 | 01 | FF |
| | FF | FF | | | | | | | | | | |

EF_{Instance} (4F04)

Logically:

Image Instance Data: see below

Coding:

| | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 08 | 08 | FF | 03 | A5 | 99 | 99 | A5 | C3 | FF |
|----------|----|----|----|----|----|----|----|----|----|----|

EF_{Instance} (4F05)

Logically:

Image Instance Data: see below

Coding:

| | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|
| BER-TLV: | 05 | 05 | FE | EB | BF | FF | FF | FF |
|----------|----|----|----|----|----|----|----|----|

Annex D (normative): Details of Test-SIM (TestSIM)

The TestSIM shall be able to present the following data:

1. ANSWER TO RESET

Logically:

| | |
|-------------------------|--|
| TS (Initial character): | ‘3B’ |
| T0 (Format character): | ‘86’ (Following interface characters: TD(1), number of historical characters: 6) |
| TD1: | ‘00’ (Following interface characters: none, Transfer protocol: T=0) |
| T1: | 91 |
| T2: | 99 |
| T3: | 00 |
| T4: | 12 |
| T5: | C1 |
| T6: | 00 |

Coding:

BER-TLV: 3B 86 00 91 99 00 12 C1 00

2. For a successful outcome of the command „Select MasterFile“ the TestSIM shall send SW1/SW2 „9F 1B“
3. For a successful outcome of the command „Get Response with Length 1B“ on the MasterFile the TestSIM shall respond:

RFU: '00 00'
 Not allocated memory: '653 bytes'
 File ID: Master File
 Type of file: MF
 RFU: 00 00 22 FF 01'
 Length of following data: 14 bytes'
 File characteristics:
 Clock Stop: Not allowed
 Min. frequency for GSM algorithm: 13/8 MHz
 Technology identification: 3V Technology SIM
 CHV1: disabled
 DFs in current directory: 2
 EFs in current directory: 8
 Number of CHV and admin. Codes: 3
 RFU byte 18: 00
 CHV1 status:
 False representations remaining: 3
 RFU-bits 7-5: 000
 Secret code: Initialised
 Unlock CHV1 status:
 False representations remaining: 10
 RFU-bits 7-5: 000
 Secret code: Initialised
 CHV2 status:
 False representations remaining: 3
 RFU-bits 7-5: 000
 Secret code: Initialised
 Unlock CHV2 status:
 False representations remaining: 10
 RFU-bits 7-5: 000
 Secret code: Initialised
 RFU bytes 23: 00
 Reserved for admin. management: 00 83 00 FF
 Status Words
 SW1 / SW2: Normal ending of command

Coding:

| | | | | | | | | | | | | |
|----------|----|----|----|----|----|----|----|----|----|----|----|----|
| BER-TLV: | 00 | 00 | 02 | 8D | 3F | 00 | 01 | 00 | 00 | 22 | FF | 01 |
| | 0E | 9B | 02 | 08 | 03 | 00 | 83 | 8A | 83 | 8A | 00 | 00 |
| | 83 | 00 | FF | 90 | 00 | | | | | | | |

4. For a successful outcome of the command „Select GSM“ the TestSIM shall send SW1/SW2 „9F 1B“
5. For a successful outcome of the command „Select PLMN“ the TestSIM shall send SW1/SW2 „9F 0F“
6. EF_{PLMN} Information:

RFU-Bytes 1-2: 00 00
 File size: 102 bytes
 File ID: 6F30
 Type of File: Elementary file

Byte 8

RFU: 00

Access Condition:

UPDATE: CHV1

READ/SEEK: CHV1

RFU-bits 4-1: 1111

INCREASE: NEVER

INVALIDATE: NEVER

REHABILITATE: NEVER

File Status:

Invalidation status: File not invalidated

Readable/updateable: Not readable/updatable when invalidated

RFU-bits 8-4, 2: 0000 0

Length of following data: 2 bytes

Structure: Transparent

Length of record: 00

The initial coding of the EF_{PLMN} shall be FF FF ... FF (logically: Empty).

Annex C (informative): Change History

| SPEC | CR | RE | PHA | VERS | SUBJECT | CAT | NEW_VERS |
|---------|------|----|-----|-------|---|-----|----------|
| 11.10-4 | - | 96 | 2+ | - | Approved as release 1996 at SMG#30 | - | 5.0.0 |
| 11.10-4 | A001 | 96 | 2+ | 5.0.0 | Corrections to SIM Application Toolkit Test Specification | F | 5.1.0 |
| 11.10-4 | | | | 5.1.0 | Version update to 5.1.1 for Publication | | 5.1.1 |
| 11.10-4 | A002 | 96 | 2+ | 5.1.0 | Editorial and coding corrections | F | 5.2.0 |
| 11.10-4 | A003 | 96 | 2+ | 5.2.0 | Correction of wrong coding for SIM Application Toolkit test 27.22.4.2 | F | 5.3.0 |
| 11.10-4 | A004 | 96 | 2+ | 5.2.0 | Corrections for Test Case 27.22.5.1 (SMS-PP Data Download) | F | 5.3.0 |
| 11.10-4 | A005 | 96 | 2+ | 5.3.0 | Correction of wrong coding for SIM Application Toolkit 27.22 | F | 5.4.0 |
| 11.10-4 | A006 | 96 | 2+ | 5.4.0 | Corrections for Test Case 27.22.4.7 (REFRESH) | F | 5.5.0 |
| 11.10-4 | A007 | 96 | 2+ | 5.4.0 | Corrections for Test Case 27.22.5.2 (SMS-CB Data Download) | F | 5.5.0 |
| 11.10-4 | A008 | 99 | 2+ | 5.5.0 | Upgrade of the MS SAT test specification to Release 99 | F | 8.1.0 |

History

| Document history | | |
|-------------------------|---------------|-------------|
| V8.1.0 | December 2002 | Publication |
| | | |
| | | |
| | | |
| | | |