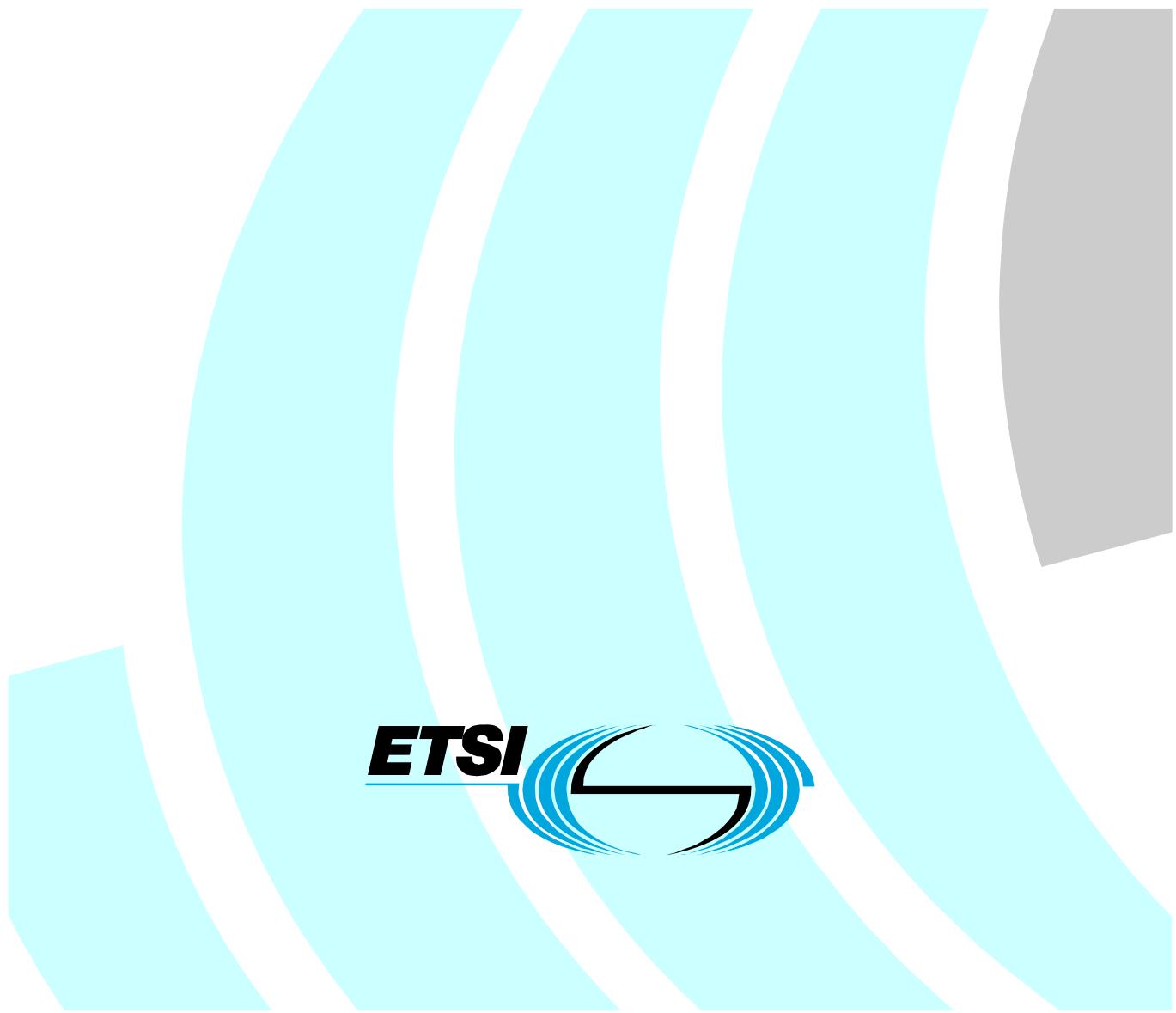


**Electromagnetic compatibility
and Radio spectrum Matters (ERM);
Interoperability testing for the Peer-to-Peer
Digital Private Mobile Radio;
Part 5: Interoperability Test Suite Structure and
Test Purposes (TSS&TP) specification**



Reference

RTS/ERM-TGDMR-269-5

Keywordsdigital, interoperability, mobile, radio, testing,
TSS&TP***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, please send your comment to one of the following services:
http://portal.etsi.org/chaircor/ETSI_support.asp

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 2008.
All rights reserved.

DECT™, PLUGTESTS™, UMTS™, TIPHON™, the TIPHON logo and the ETSI logo are Trade Marks of ETSI registered 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.

Contents

Intellectual Property Rights	4
Foreword.....	4
1 Scope	5
2 References	5
2.1 Normative references	5
2.2 Informative references.....	6
3 Abbreviations	6
4 Test Suite Structure (TSS).....	6
5 Test Purposes (TP)	7
5.1 ISF CSF Common	7
5.1.1 All Call	7
5.1.2 channel access.....	8
5.1.3 framing.....	11
5.1.3.1 end frame.....	11
5.1.3.2 header frames	11
5.1.3.2.1 call information field	12
5.1.3.3 packet data frame	12
5.1.3.4 superframe.....	12
5.1.3.4.1 type 1 data	12
5.1.3.4.2 type 2 data	17
5.1.3.4.3 voice	22
5.1.4 late entry	23
5.1.5 powersave	24
5.1.6 talking party ID.....	24
5.1.7 Slow User Data	25
5.2 CSF.....	26
5.2.1 broadcast call	26
5.2.2 dialling plan	26
5.2.3 individual short data message	31
5.2.3.1 ISDM free text message	32
5.2.3.2 ISDM precoded message.....	33
5.2.3.3 ISDM short file transfer	34
5.2.3.4 ISDM status message	35
5.2.4 OACSU.....	36
5.2.5 short appended data	37
5.2.6 slow user data	39
5.2.7 type 3 data.....	39
5.3 ISF	40
Annex A (normative): dPMR interoperability test configurations.....	41
Annex B (normative): dPMR TPLan interoperability testing user definitions.....	42
History	44

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>).

Pursuant to the ETSI IPR Policy, no investigation, including IPR searches, has been carried out by ETSI. No guarantee can be given as to the existence of other IPRs not referenced in ETSI SR 000 314 (or the updates on the ETSI Web server) which are, or may be, or may become, essential to the present document.

Foreword

This Technical Specification (TS) has been produced by ETSI Technical Committee Electromagnetic compatibility and Radio spectrum Matters (ERM).

The present document is part 5 of a multi-part deliverable covering the Electromagnetic compatibility and Radio spectrum Matters (ERM); Conformance testing for the Peer-to-Peer Digital Private Mobile Radio, as identified below:

- Part 1: "Protocol Implementation Conformance Statement (PICS) proforma";
- Part 2: "Test Suite Structure and Test Purposes (TSS&TP) specification";
- Part 3: "Requirements catalogue";
- Part 4: "Abstract Test Suite (ATS)";
- Part 5: "Interoperability Test Suite Structure and Test Purposes (TSS&TP) specification";**
- Part 6: "Test descriptions (TD)".

1 Scope

The present document specifies the interoperability Test Purposes (TPs) for the Peer-to-Peer Digital Private Mobile Radio (dPMR) standard, TS 102 490 [1]. TPs are defined using the TPLan notation described in ES 202 553 [i.1]. Test purposes have been written based on the test specification framework described in TS 102 351 [2] and based on the methodology defined in ISO 9646-2 [3].

2 References

References are either specific (identified by date of publication and/or edition number or version number) or non-specific.

- For a specific reference, subsequent revisions do not apply.
- Non-specific reference may be made only to a complete document or a part thereof and only in the following cases:
 - if it is accepted that it will be possible to use all future changes of the referenced document for the purposes of the referring document;
 - for informative references.

Referenced documents which are not found to be publicly available in the expected location might be found at <http://docbox.etsi.org/Reference>.

For online referenced documents, information sufficient to identify and locate the source shall be provided. Preferably, the primary source of the referenced document should be cited, in order to ensure traceability. Furthermore, the reference should, as far as possible, remain valid for the expected life of the document. The reference shall include the method of access to the referenced document and the full network address, with the same punctuation and use of upper case and lower case letters.

NOTE: While any hyperlinks included in this clause were valid at the time of publication ETSI cannot guarantee their long term validity.

2.1 Normative references

The following referenced documents are indispensable for the application of the present document. For dated references, only the edition cited applies. For non-specific references, the latest edition of the referenced document (including any amendments) applies.

- [1] ETSI TS 102 490 (V1.3.1): "Electromagnetic compatibility and Radio spectrum Matters (ERM); Peer-to-Peer Digital Private Mobile Radio using FDMA with a channel spacing of 6,25 kHz with e.r.p. of up to 500 mW".
- [2] ETSI TS 102 351 (V2.1.1): "Methods for Testing and Specification (MTS); Internet Protocol Testing (IPT); IPv6 Testing: Methodology and Framework".
- [3] ISO/IEC 9646-2: "Information technology - Open Systems Interconnection - Conformance testing methodology and framework - Part 2: Abstract Test Suite specification".
- [4] ETSI TS 102 587-3: "Electromagnetic compatibility and Radio spectrum Matters (ERM); Peer-to-Peer Digital Private Mobile Radio; Part 3: Requirements catalogue".

2.2 Informative references

The following referenced documents are not essential to the use of the present document but they assist the user with regard to a particular subject area. For non-specific references, the latest version of the referenced document (including any amendments) applies.

- [i.1] ETSI ES 202 553: "Methods for testing and Specification (MTS); TPLan: A notation for expressing test Purposes".

3 Abbreviations

For the purposes of the present document, the following abbreviations apply:

CF	(Test) ConFiguration
CSF	Configured Services and Facilities
dPMR	digital Private Mobile Radio
ISDM	Individual Short Data Message
ISF	Initial Services and Facilities
OACSU	Off Air Call Set-Up
PTT	Push To Talk
RC	Requirements Catalogue
RQ	ReQuirement
TP	Test Purpose
TSS	Test Suite Structure

4 Test Suite Structure (TSS)

The Test Suite Structure is based on the dPMR Requirements Catalogue [4]. It is defined by the groups within the following TPLan specification of test purposes. The numbering is not contiguous so that new TPs can be added at a later date without the need to completely renumber the TSS groups.

The test purposes have been divided into three groups:

Group 1: Common requirements.

Group 2: CSF requirements.

Group 3: ISF requirements.

The sub-grouping of these three group follows the structure of the RC. Some of the sub-groups of the RC contained no testable requirement. Headings for those sub-groups are in this test purpose document in the node group to give a full view on the relation between RQ and TSS&TP.

```

Group 1 "ISF CSF Common"
Group 1.1 "All Call"
Group 1.2 "Channel Access"
Group 1.3 "Framing"
Group 1.3.1 "End frame"
Group 1.3.2 "Header frames"
Group 1.3.2.1 "Call information field"
Group 1.3.3 "Packet data frame"
Group 1.3.4 "Superframe"
Group 1.3.4.1 "Type 1 data"
Group 1.3.4.2 "Type 2 data"
Group 1.3.4.3 "Voice"
Group 1.4 "Late Entry"
Group 1.5 "Powersave"
Group 1.6 "Talking Party ID"
Group 2 "CSF"
Group 2.1 "Broadcast Call"
Group 2.2 "Dialling Plan"
Group 2.3 "Individual Short Data Message"
Group 2.3.1 "ISDM Free Text Message"
Group 2.3.2 "ISDM Precoded Message"
Group 2.3.3 "ISDM Short File Transfer"

```

```

Group 2.3.4 "ISDM Status Message"
Group 2.4 "OACSU"
Group 2.5 "Short Appended Data"
Group 2.6 "Slow User Data"
Group 2.7 "Type 3 data"
Group 3 "ISF"

```

5 Test Purposes (TP)

The test purposes have been written in the formal notation TPlan. Configurations that are referenced by test purposes are shown in annex A. TPlan user definitions are listed in annex B.

5.1 ISF CSF Common

```
Group 1 'ISF CSF Common'
```

5.1.1 All Call

```
Group 1.1 'All Call'
```

```

TP id      : TP_PMR_0824_01
summary    : 'Support of all call with any specific callee ID'
RQ ref     : RQ_001_0824
TP type    : interoperability
Role       : ISF
config ref: CF_ISF_01_I -- ISF QE1 and EUT
TD ref     : TBD
with {    QE1 and EUT in standby and
          using_compatible_vocoders
}
ensure that {
  when { QE1 uses Common_ID 255 and
         EUT uses another Common_ID and
         QE1_User makes a Call to EUT }
  then { EUT_User receives the Call }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_0824_02
summary    : 'All call with all call callee ID'
RQ ref     : RQ_001_0824
TP type    : interoperability
Role       : ISF
config ref: CF_ISF_01_I -- ISF QE1 and EUT
TD ref     : TBD
with {    QE1 and EUT in standby and
          using_compatible_vocoders
}
ensure that {
  when { QE1 and EUT using Common_ID 255 and
         QE1_User makes a Call to EUT }
  then { EUT_User receives the Call }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```

```

TP id      : TP_PMR_0858_01
summary    : 'All call with all call callee ID'
RQ ref     : RQ_001_0858
TP type    : interoperability
Role       : ISF
config ref: CF_ISF_01_I -- ISF QE1 and EUT
TD ref     : TBD
with {    QE1 and EUT in standby and
           using_compatible_vocoders
}
ensure that {
  when { EUT uses Common_ID 255 and
         QE1 uses another Common_ID and
         QE1_User makes a Call }
  then { EUT_User does not receive the Call }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_0858_02
summary    : 'All call with all call callee ID'
RQ ref     : RQ_001_0858
TP type    : interoperability
Role       : ISF
config ref: CF_ISF_01_I -- ISF QE1 and EUT
TD ref     : TBD
with {    QE1 and EUT in standby and
           using_compatible_vocoders
}
ensure that {
  when { EUT uses Common_ID 255 and
         QE1 uses Common_ID 255 and
         QE1_User makes a Call }
  then { EUT_User does receive the Call }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

End group 1.1

```

5.1.2 channel access

```

Group 1.2 'Channel Access'

TP id      : TP_PMR_1006_01
summary    : 'Automatic call termination within 180 seconds '
RQ ref     : RQ_001_1006
TP type    : interoperability
Role       : ISF
config ref: CF_ISF_01_I -- ISF QE1 and EUT
TD ref     : TBD
with {    (EUT and QE1 using same Common_ID and
           powersave_disabled and
           using_compatible_vocoders) and
           QE1 and EUT in standby
}
ensure that {
  when { EUT_User makes a PTT_Call and
         PTT_Key is not released }
  then { QE1_User receives PTT_Call and
         EUT terminates the PTT_Call after 180 seconds}
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```

```

TP id      : TP_PMR_1006_02
summary    : 'Automatic call termination within 180 seconds '
RQ ref     : RQ_001_1006
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 powersave_disabled and
     using_compatible_vocoders)
    QE1 in standby
}
ensure that {
    when { EUT_User makes a Voice_Transmission addressed to QE1 and
           PTT_Key is not released }
    then { QE1_User receives Voice_Transmission and
           EUT terminates the Voice_Transmission after 180 seconds }
}

-- *****

TP id      : TP_PMR_1006_03
summary    : 'Automatic call termination within 180 seconds and call resume'
RQ ref     : RQ_001_1006
TP type    : interoperability
Role       : ISF
config ref: CF_ISF_01_I -- ISF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 using same Common_ID and
     powersave_disabled and
     using_compatible_vocoders) and
    EUT in call_timeout_terminated
}
ensure that {
    when { EUT_User releases and presses PTT_Key again }
    then { QE1_User receives PTT_Call }
}

-- *****

TP id      : TP_PMR_1006_04
summary    : 'Automatic call termination within 180 seconds and call resume'
RQ ref     : RQ_001_1006
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 powersave_disabled) and
    EUT in call_timeout_terminated
}
ensure that {
    when { EUT_User releases and presses the PTT_Key again }
    then { QE1_User receives Voice_Transmission }
}

-- *****

TP id      : TP_PMR_1008_01
summary    : 'Channel access in own call '
RQ ref     : RQ_001_1008
TP type    : interoperability
Role       : ISF
config ref: CF_ISF_02_I -- ISF QE1, QE2 and EUT
TD ref     : TBD
with {
    ((EUT and QE1 and QE2) using the same Common_ID and
     using_compatible_vocoders) and
    QE1 is transmitting
}
ensure that {
    when { EUT_User makes PTT_Call }
    then { QE2_User receives the PTT_Call from EUT }
}

-- *****

```

```

TP id      : TP_PMR_1008_02
summary    : 'Channel access in own call '
RQ ref     : RQ_001_1008
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_02_I -- CSF QE1, QE2 and EUT
TD ref     : TBD
with {
    ((EUT and QE1 and QE2) using the same call_group and
     using_compatible_vocoders) and
    QE1 is transmitting Voice_Transmission to EUT
}
ensure that {
    when { EUT_User makes a Voice_Transmission to QE2 }
    then { QE2_User receives the Voice_Transmission from EUT }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_1009_01
summary    : 'Channel access when ISF polite to own colour code'
RQ ref     : RQ_001_1009
TP type    : interoperability
Role       : ISF
config ref: CF_ISF_02_I -- ISF QE1, QE2 and EUT
TD ref     : TBD
with {
    ((EUT and QE1 and QE2) using same Common_ID and
     using_compatible_vocoders) and
    and using same colour_code ) and
    EUT is polite_to_own_CC and
    QE1 is transmitting to QE2
}
ensure that {
    when { EUT_User makes PTT_Call }
    then { QE2_User does not receive PTT_Call from EUT }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_1010_01
summary    : 'Channel access when ISF impolite'
RQ ref     : RQ_001_1010
TP type    : interoperability
Role       : ISF
config ref: CF_ISF_02_I -- ISF QE1, QE2 and EUT
TD ref     : TBD
with {
    ((EUT and QE1 and QE2) using_compatible_vocoders) and
    (EUT and QE2 using the same Common_ID) and
    (EUT and QE1 not using the same Common_ID) and
    EUT is impolite and
    QE1 is transmitting
}
ensure that {
    when { EUT_User makes PTT_Call }
    then { QE2_User receives PTT_Call from EUT }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_1011_01
summary    : 'Channel access when polite to own group and channel occupied by members of own group'
RQ ref     : RQ_001_1011
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_02_I -- CSF QE1, QE2 and EUT
TD ref     : TBD
with {
    ((EUT and QE1 and QE2) using same colour_code ) and
    ((EUT and QE1 and QE2) are 'member of same talkgroup') and
    EUT is polite_to_own_group and
    QE1 is transmitting to QE2
}
ensure that {
    when { EUT_User makes a Voice_Transmission to QE2 }
    then { QE2_User receives Voice_Transmission from QE1 } -- Indicating EUT does NOT transmit
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```

```

TP id      : TP_PMR_1012_01
summary    : 'Repeated acknowledgements when RF channel is busy'
RQ ref     : RQ_001_1012
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_02_I -- CSF QE1, QE2 and EUT
TD ref     : TBD
with {
    ((EUT and QE1 and QE2) using same colour_code ) and
    ((EUT and QE2) are 'member of same talkgroup') and
    QE1 is transmitting
}
ensure that {
    when { QE2_User makes a connect_request to EUT}
    then { QE2_User receives 'no more than four' acknowledgement from EUT}
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_1013_01
summary    : 'Channel access when CSF polite to own colour code'
RQ ref     : RQ_001_1013
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_02_I -- CSF QE1, QE2 and EUT
TD ref     : TBD
with {
    ((EUT and QE1 and QE2) using the same colour_code and
     using_compatible_vocoders) and
    QE1 is transmitting Voice_Transmission to QE2
    EUT is polite_to_own_CC
}
ensure that {
    when { EUT_User makes Voice_Transmission addressed to QE2}
    then { QE2_User does not receive Voice_Transmission from EUT }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_1014_01
summary    : 'Channel access when CSF impolite'
RQ ref     : RQ_001_1014
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_02_I -- CSF QE1, QE2 and EUT
TD ref     : TBD
with {
    ((EUT and QE1 and QE2) using_compatible_vocoders) and
    QE1 is transmitting Voice_Transmission to QE2 and
    EUT is impolite
}
ensure that {
    when { EUT_User makes Voice_Transmission addressed to QE2}
    then { QE2_User receives Voice_Transmission from EUT }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

End group 1.2

```

5.1.3 framing

```

Group 1.3 'Framing'
-- No TP specified

```

5.1.3.1 end frame

```

Group 1.3.1 'End frame'
-- No TP specified
End group 1.3.1

```

5.1.3.2 header frames

```

Group 1.3.2 'Header frames'
-- No TP specified

```

5.1.3.2.1 call information field

```
Group 1.3.2.1 'Call information field'
-- No TP specified
End group 1.3.2.1
End group 1.3.2
```

5.1.3.3 packet data frame

```
Group 1.3.3 'Packet data frame'
-- No TP specified
End group 1.3.3
```

5.1.3.4 superframe

```
Group 1.3.4 'Superframe'
```

5.1.3.4.1 type 1 data

```
Group 1.3.4.1 'Type 1 data'

TP id : TP_PMR_0807_01
summary : 'Support receiving of type 1 ISF group short data messages'
RQ ref : RQ_001_0807
TP type : interoperability
Role : ISF
config ref: CF_ISF_01_I -- ISF QE1 and EUT
TD ref : TBD
with { (EUT and QE1 using same Common_ID and
       powersave_disabled) and
       EUT in standby
}
ensure that {
  when { QE1_User sends a T1_Transmission to EUT }
  then { EUT_User receives the T1_Transmission }
}

-- XXXXXXXXXXXXXXXXXXXXXXXXX

TP id : TP_PMR_0807_02
summary : 'Support sending of type 1 ISF group short data messages'
RQ ref : RQ_001_0807
TP type : interoperability
Role : ISF
config ref: CF_ISF_01_I -- ISF QE1 and EUT
TD ref : TBD
with { (EUT and QE1 using same Common_ID and
       powersave_disabled) and
       QE1 in standby
}
ensure that {
  when { EUT_User sends a T1_Transmission to QE1 }
  then { QE1_User receives the T1_Transmission }
}

-- XXXXXXXXXXXXXXXXXXXXXXXXX

TP id : TP_PMR_0807_03
summary : 'Support receiving of type 1 CSF group short data messages'
RQ ref : RQ_001_0807
TP type : interoperability
Role : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref : TBD
with { (EUT and QE1 using same Group_ID and
       powersave_disabled) and
       EUT in standby
}
ensure that {
  when { QE1_User sends a T1_Transmission to EUT }
  then { EUT_User receives the T1_Transmission }
}

-- XXXXXXXXXXXXXXXXXXXXXXXXX
```

```

TP id      : TP_PMR_0807_04
summary    : 'Support sending of type 1 CSF group short data messages'
RQ ref     : RQ_001_0807
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 using same Group_ID and
     powersave_disabled) and
    QE1 in standby
}
ensure that {
    when { EUT_User sends a T1_Transmission to QE1 }
    then { QE1_User receives the T1_Transmission }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_0831_01
summary    : 'Support receiving of type 1 ISF group data status messages'
RQ ref     : RQ_001_0831
TP type    : interoperability
Role       : ISF
config ref: CF_ISF_01_I -- ISF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 using same Common_ID and
     powersave_disabled) and
    EUT in standby
}
ensure that {
    when { QE1_User sends a T1_Status_Message to EUT }
    then { EUT_User receives the T1_Status_Message }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_0831_02
summary    : 'Support sending of type 1 ISF group data status messages'
RQ ref     : RQ_001_0831
TP type    : interoperability
Role       : ISF
config ref: CF_ISF_01_I -- ISF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 using same Common_ID and
     powersave_disabled) and
    QE1 in standby
}
ensure that {
    when { EUT_User sends a T1_Status_Message to QE1 }
    then { QE1_User receives the T1_Status_Message }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_0831_03
summary    : 'Support receiving of type 1 CSF group data status messages'
RQ ref     : RQ_001_0831
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 using same Group_ID and
     powersave_disabled) and
    EUT in standby
}
ensure that {
    when { QE1_User sends a T1_Status_Message to EUT }
    then { EUT_User receives the T1_Status_Message }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```

```

TP id      : TP_PMR_0831_04
summary    : 'Support sending of type 1 CSF group data status messages'
RQ ref     : RQ_001_0831
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 using same Group_ID and
     powersave_disabled) and
    QE1 in standby
}
ensure that {
when { EUT_User sends a T1_Status_Message to QE1 }
then { QE1_User receives the T1_Status_Message }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_0832_01
summary    : 'Support receiving of type 1 ISF group data precoded messages'
RQ ref     : RQ_001_0832
TP type    : interoperability
Role       : ISF
config ref: CF_ISF_01_I -- ISF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 using same Common_ID and
     powersave_disabled) and
    EUT in standby
}
ensure that {
when { QE1_User sends a T1_Precoded_Data_Message to EUT }
then { EUT_User receives the T1_Precoded_Data_Message }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_0832_02
summary    : 'Support sending of type 1 ISF group data precoded messages'
RQ ref     : RQ_001_0832
TP type    : interoperability
Role       : ISF
config ref: CF_ISF_01_I -- ISF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 using same Common_ID and
     powersave_disabled) and
    QE1 in standby
}
ensure that {
when { EUT_User sends a T1_Precoded_Data_Message to QE1 }
then { QE1_User receives the T1_Precoded_Data_Message }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_0832_03
summary    : 'Support receiving of type 1 CSF group data precoded messages'
RQ ref     : RQ_001_0832
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 using same Group_ID and
     powersave_disabled) and
    EUT in standby
}
ensure that {
when { QE1_User sends a T1_Precoded_Data_Message to EUT }
then { EUT_User receives the T1_Precoded_Data_Message }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```

```

TP id      : TP_PMR_0832_04
summary    : 'Support sending of type 1 CSF group data precoded messages'
RQ ref     : RQ_001_0832
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 using same Group_ID and
     powersave_disabled) and
    QE1 in standby
}
ensure that {
    when { EUT_User sends a T1_Precoded_Data_Message to QE1 }
    then { QE1_User receives the T1_Precoded_Data_Message }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_0833_01
summary    : 'Support receiving of type 1 ISF group data free text messages'
RQ ref     : RQ_001_0833
TP type    : interoperability
Role       : ISF
config ref: CF_ISF_01_I -- ISF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 using same Common_ID and
     powersave_disabled) and
    EUT in standby
}
ensure that {
    when { QE1_User sends a T1_Freetext_Data_Message to EUT }
    then { EUT_User receives the T1_Freetext_Data_Message }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_0833_02
summary    : 'Support sending of type 1 ISF group data free text messages'
RQ ref     : RQ_001_0833
TP type    : interoperability
Role       : ISF
config ref: CF_ISF_01_I -- ISF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 using same Common_ID and
     powersave_disabled) and
    QE1 in standby
}
ensure that {
    when { EUT_User sends a T1_Freetext_Data_Message to QE1 }
    then { QE1_User receives the T1_Freetext_Data_Message }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_0833_03
summary    : 'Support receiving of type 1 CSF group data free text messages'
RQ ref     : RQ_001_0833
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 using same Group_ID and
     powersave_disabled) and
    EUT in standby
}
ensure that {
    when { QE1_User sends a T1_Freetext_Data_Message to EUT }
    then { EUT_User receives the T1_Freetext_Data_Message }
}

```

```

TP id      : TP_PMR_0833_04
summary    : 'Support sending of type 1 CSF group data free text messages'
RQ ref     : RQ_001_0833
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 using same Group_ID and
     powersave_disabled) and
    QE1 in standby
}
ensure that {
    when { EUT_User sends a T1_Freetext_Data_Message to QE1 }
    then { QE1_User receives the T1_Freetext_Data_Message }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_0834_01
summary    : 'Support receiving of type 1 ISF group data short file transfer'
RQ ref     : RQ_001_0834
TP type    : interoperability
Role       : ISF
config ref: CF_ISF_01_I -- ISF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 using same Common_ID and
     powersave_disabled) and
    EUT in standby
}
ensure that {
    when { QE1_User makes a T1_Short_File_Transfer to EUT }
    then { EUT_User receives the T1_Short_File_Transfer }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_0834_02
summary    : 'Support sending of type 1 ISF group data short file transfer'
RQ ref     : RQ_001_0834
TP type    : interoperability
Role       : ISF
config ref: CF_ISF_01_I -- ISF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 using same Common_ID and
     powersave_disabled) and
    QE1 in standby
}
ensure that {
    when { EUT_User makes a T1_Short_File_Transfer to QE1 }
    then { QE1_User receives the T1_Short_File_Transfer }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_0834_03
summary    : 'Support receiving of type 1 CSF group data short file transfer'
RQ ref     : RQ_001_0834
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 using same Group_ID and
     powersave_disabled) and
    EUT in standby
}
ensure that {
    when { QE1_User makes a T1_Short_File_Transfer to EUT }
    then { EUT_User receives the T1_Short_File_Transfer }
}

```

```

TP id      : TP_PMR_0834_04
summary    : 'Support sending of type 1 CSF group data short file transfer'
RQ ref     : RQ_001_0834
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 using same Group_ID and
     powersave_disabled) and
    QE1 in standby
}
ensure that {
    when { EUT_User makes a T1_Short_File_Transfer to QE1 }
    then { QE1_User receives the T1_Short_File_Transfer }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

End group 1.3.4.1

```

5.1.3.4.2 type 2 data

```

Group 1.3.4.2 'Type 2 data'

TP id      : TP_PMR_0806_01
summary    : 'Support receiving of type 2 group short data messages'
RQ ref     : RQ_001_0806
TP type    : interoperability
Role       : ISF
config ref: CF_ISF_01_I -- ISF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 using same Common_ID and
     powersave_disabled) and
    EUT in standby
}
ensure that {
    when { QE1_User sends a T2_Transmission to EUT }
    then { EUT_User receives the T2_Transmission }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_0806_02
summary    : 'Support sending of type 2 group short data messages'
RQ ref     : RQ_001_0806
TP type    : interoperability
Role       : ISF
config ref: CF_ISF_01_I -- ISF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 using same Common_ID and
     powersave_disabled) and
    QE1 in standby
}
ensure that {
    when { EUT_User sends a T2_Transmission to QE1 }
    then { QE1_User receives the T2_Transmission }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_0806_03
summary    : 'Support receiving of type 2 CSF group short data messages'
RQ ref     : RQ_001_0806
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 using same Group_ID and
     powersave_disabled) and
    EUT in standby
}
ensure that {
    when { QE1_User sends a T2_Transmission to EUT }
    then { EUT_User receives the T2_Transmission }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```

```

TP id      : TP_PMR_0806_04
summary    : 'Support sending of type 2 CSF group short data messages'
RQ ref     : RQ_001_0806
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 using same Group_ID and
     powersave_disabled) and
    QE1 in standby
}
ensure that {
    when { EUT_User sends a T2_Transmission to QE1 }
    then { QE1_User receives the T2_Transmission }
}

-- *****


```

```

TP id      : TP_PMR_0825_01
summary    : 'Support receiving of type 2 ISF group data status messages'
RQ ref     : RQ_001_0825
TP type    : interoperability
Role       : ISF
config ref: CF_ISF_01_I -- ISF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 using same Common_ID and
     powersave_disabled) and
    EUT in standby
}
ensure that {
    when { QE1_User sends a T2_Status_Message to EUT }
    then { EUT_User receives the T2_Status_Message }
}

-- *****


```

```

TP id      : TP_PMR_0825_02
summary    : 'Support sending of type 2 ISF group data status messages'
RQ ref     : RQ_001_0825
TP type    : interoperability
Role       : ISF
config ref: CF_ISF_01_I -- ISF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 using same Common_ID and
     powersave_disabled) and
    QE1 in standby
}
ensure that {
    when { EUT_User sends a T2_Status_Message to QE1 }
    then { QE1_User receives the T2_Status_Message }
}

-- *****


```

```

TP id      : TP_PMR_0825_03
summary    : 'Support receiving of type 2 CSF group data status messages'
RQ ref     : RQ_001_0825
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 using same Group_ID and
     powersave_disabled) and
    EUT in standby
}
ensure that {
    when { QE1_User sends a T2_Status_Message to EUT }
    then { EUT_User receives the T2_Status_Message }
}

-- *****


```

```

TP id      : TP_PMR_0825_04
summary    : 'Support sending of type 2 CSF group data status messages'
RQ ref     : RQ_001_0825
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 using same Group_ID and
     powersave_disabled) and
    QE1 in standby
}
ensure that {
    when { EUT_User sends a T2_Status_Message to QE1 }
    then { QE1_User receives the T2_Status_Message }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_0827_01
summary    : 'Support receiving of type 2 ISF group data precoded messages'
RQ ref     : RQ_001_0827
TP type    : interoperability
Role       : ISF
config ref: CF_ISF_01_I -- ISF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 using same Common_ID and
     powersave_disabled) and
    EUT in standby
}
ensure that {
    when { QE1_User sends a T2_Precoded_Data_Message to EUT }
    then { EUT_User receives the T2_Precoded_Data_Message }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_0827_02
summary    : 'Support sending of type 2 ISF group data precoded messages'
RQ ref     : RQ_001_0827
TP type    : interoperability
Role       : ISF
config ref: CF_ISF_01_I -- ISF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 using same Common_ID and
     powersave_disabled) and
    QE1 in standby
}
ensure that {
    when { EUT_User sends a T2_Precoded_Data_Message to QE1 }
    then { QE1_User receives the T2_Precoded_Data_Message }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_0827_03
summary    : 'Support receiving of type 2 CSF group data precoded messages'
RQ ref     : RQ_001_0827
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 using same Group_ID and
     powersave_disabled) and
    EUT in standby
}
ensure that {
    when { QE1_User sends a T2_Precoded_Data_Message to EUT }
    then { EUT_User receives the T2_Precoded_Data_Message }
}

```

```

TP id      : TP_PMR_0827_04
summary    : 'Support sending of type 2 CSF group data precoded messages'
RQ ref     : RQ_001_0827
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 using same Group_ID and
     powersave_disabled) and
    QE1 in standby
}
ensure that {
    when { EUT_User sends a T2_Precoded_Data_Message to QE1 }
    then { QE1_User receives the T2_Precoded_Data_Message }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_0829_01
summary    : 'Support receiving of type 2 ISF group data free text messages'
RQ ref     : RQ_001_0829
TP type    : interoperability
Role       : ISF
config ref: CF_ISF_01_I -- ISF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 using same Common_ID and
     powersave_disabled) and
    EUT in standby
}
ensure that {
    when { QE1_User sends a T2_Freetext_Data_Message to EUT }
    then { EUT_User receives the T2_Freetext_Data_Message }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_0829_02
summary    : 'Support sending of type ISF 2 group data free text messages'
RQ ref     : RQ_001_0829
TP type    : interoperability
Role       : ISF
config ref: CF_ISF_01_I -- ISF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 using same Common_ID and
     powersave_disabled) and
    QE1 in standby
}
ensure that {
    when { EUT_User sends a T2_Freetext_Data_Message to QE1 }
    then { QE1_User receives the T2_Freetext_Data_Message }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_0829_03
summary    : 'Support receiving of type 2 CSF group data free text messages'
RQ ref     : RQ_001_0829
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 using same Group_ID and
     powersave_disabled) and
    EUT in standby
}
ensure that {
    when { QE1_User sends a T2_Freetext_Data_Message to EUT }
    then { EUT_User receives the T2_Freetext_Data_Message }
}

```

```

TP id      : TP_PMR_0829_04
summary    : 'Support sending of type 2 CSF group data free text messages'
RQ ref     : RQ_001_0829
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 using same Group_ID and
     powersave_disabled) and
    QE1 in standby
}
ensure that {
when { EUT_User sends a T2_Freetext_Data_Message to QE1 }
then { QE1_User receives the T2_Freetext_Data_Message }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_0830_01
summary    : 'Support receiving of type 2 ISF group data short file transfer'
RQ ref     : RQ_001_0830
TP type    : interoperability
Role       : ISF
Role       : Callee
config ref: CF_ISF_01_I -- ISF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 using same Common_ID and
     powersave_disabled) and
    EUT in standby
}
ensure that {
when { QE1_User makes a T2_Short_File_Transfer to EUT }
then { EUT_User receives the T2_Short_File_Transfer }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_0830_02
summary    : 'Support sending of type 2 ISF group data short file transfer'
RQ ref     : RQ_001_0830
TP type    : interoperability
Role       : ISF
Role       : Caller
config ref: CF_ISF_01_I -- ISF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 using same Common_ID and
     powersave_disabled) and
    QE1 in standby
}
ensure that {
when { EUT_User makes a T2_Short_File_Transfer to QE1 }
then { QE1_User receives the T2_Short_File_Transfer }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_0830_03
summary    : 'Support receiving of type 2 CSF group data short file transfer'
RQ ref     : RQ_001_0830
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 using same Group_ID and
     powersave_disabled) and
    EUT in standby
}
ensure that {
when { QE1_User makes a T2_Short_File_Transfer to EUT }
then { EUT_User receives the T2_Short_File_Transfer }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```

```

TP id : TP_PMR_0830_04
summary : 'Support sending of type 2 CSF group data short file transfer'
RQ ref : RQ_001_0830
TP type : interoperability
Role : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref : TBD
with {
    (EUT and QE1 using same Group_ID and
     powersave_disabled) and
    QE1 in standby
}
ensure that {
    when { EUT_User makes a T2_Short_File_Transfer to QE1 }
    then { QE1_User receives the T2_Short_File_Transfer }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

End group 1.3.4.2

```

5.1.3.4.3 voice

Group 1.3.4.3 'Voice'

```

TP id : TP_PMR_0801_01
summary : 'A radio can be called by another'
RQ ref : RQ_001_0801
TP type : interoperability
Role : ISF
config ref: CF_ISF_01_I -- ISF QE1 and EUT
TD ref : TBD
with {
    ( EUT and QE1 using same Common_ID and
     powersave_disabled and
     using_compatible_vocoders) and
    EUT in standby
}
ensure that {
    when { QE1_User makes a PTT_Call to EUT }
    then { EUT_User receives the PTT_Call }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id : TP_PMR_0801_02
summary : 'A radio can call another'
RQ ref : RQ_001_0801
TP type : interoperability
Role : ISF
config ref: CF_ISF_02_I -- ISF QE1 and EUT
TD ref : TBD
with {
    ( EUT and QE1 using same Common_ID and
     powersave_disabled and
     using_compatible_vocoders) and
    EUT in standby
}
ensure that {
    when { EUT_User makes a PTT_Call }
    then { QE1_User receives the PTT_Call }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

End group 1.3.4.3
End group 1.3.4
End group 1.3

```

5.1.4 late entry

Group 1.4 'Late Entry'

```

TP id      : TP_PMR_0802_01
summary    : 'Support of Late Entry for ISF'
RQ ref     : RQ_001_0802
TP type    : interoperability
Role       : ISF
config ref: CF_ISF_01_I -- ISF QE1 and EUT
TD ref     : TBD
with {     (EUT and QE1 using the same Common_ID and
            powersave_disabled and
            using_compatible_vocoders) and
            EUT switched_off and
            QE1 is transmitting a PTT_Call addressed to the EUT
        }
ensure that {
    when { EUT is switched_on }
    then { EUT_User receives the remainder of the PTT_Call after a 'short delay' }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_0802_02
summary    : 'Support of Late Entry by CSF with individual address'
RQ ref     : RQ_001_0802
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {     (EUT and QE1 powersave_disabled and
            using_compatible_vocoders) and
            EUT switched_off and
            QE1 is transmitting an Individual_Call addressed to the EUT
        }
ensure that {
    when { EUT is switched_on }
    then { EUT_User receives the remainder of the Individual_Call after a 'short delay' }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_0802_03
summary    : 'Support of Late Entry by CSF with wildcard address'
RQ ref     : RQ_001_0802
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {     (EUT and QE1 powersave_disabled and
            using_compatible_vocoders) and
            EUT switched_off and
            QE1 is transmitting a Group_Call addressed to the EUT
        }
ensure that {
    when { EUT is switched_on }
    then { EUT_User receives the remainder of the Group_Call after a 'short delay' }
}

```

```

TP id      : TP_PMR_0802_04
summary    : 'Support of Late Entry by CSF with Talk Group address'
RQ ref     : RQ_001_0802
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 with powersave_disabled and
     using_compatible_vocoders) and
    EUT switched_off and
    QE1 is transmitting a TalkGroup_Call addressed to the EUT
}
ensure that {
    when { EUT is switched_on }
    then { EUT_User receives the remainder of the TalkGroup_Call after a 'short delay' }
}

-- XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

End group 1.4

```

5.1.5 powersave

```

Group 1.5 'Powersave'
-- No TP specified
End group 1.5

```

5.1.6 talking party ID

```

Group 1.6 'Talking Party ID'

TP id      : TP_PMR_0803_01
summary    : 'Support of Talking Party ID'
RQ ref     : RQ_001_0803
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 with powersave_disabled) and
    EUT in standby
}
ensure that {
    when { QE1_User makes an Individual_Call to EUT }
    then { EUT indicates the address of QE1 }
}

-- XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

TP id      : TP_PMR_0803_02
summary    : 'Support of Talking Party ID'
RQ ref     : RQ_001_0803
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 with powersave_disabled) and
    EUT in standby
}
ensure that {
    when { QE1_User makes a Group_Call to EUT }
    then { EUT indicates the address of QE1 }
}

-- XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

End group 1.6
End group 1

```

5.1.7 Slow User Data

```

Group 1.7 'Slow User Data'

TP id : TP_PMR_0836_01
summary : 'Support receiving of CSF slow user data'
RQ ref : RQ_001_0836
TP type : interoperability
Role : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref : TBD
with {
    (EUT and QE1 using same Group_ID and
     powersave_disabled and
     using_compatible_vocoders) and
    QE1 preset_with_SLD_test_data and
    EUT in standby
}
ensure that {
    when { QE1_User makes a Group_SLD_Call to EUT }
    then { EUT_User receives the Group_Call and the SLD_test_data }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id : TP_PMR_0836_02
summary : 'Support sending of CSF slow user data'
RQ ref : RQ_001_0836
TP type : interoperability
Role : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref : TBD
with {
    (EUT and QE1 using same Group_ID and
     powersave_disabled and
     using_compatible_vocoders) and
    EUT preset_with_SLD_test_data and
    QE1 in standby
}
ensure that {
    when { EUT_User makes a Group_SLD_Call to QE1 }
    then { QE1_User receives the Group_Call and the SLD_test_data }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id : TP_PMR_0836_03
summary : 'Support receiving of ISF slow user data'
RQ ref : RQ_001_0836
TP type : interoperability
Role : ISF
config ref: CF_ISF_01_I -- ISF QE1 and EUT
TD ref : TBD
with {
    (EUT and QE1 using same Common_ID and
     powersave_disabled and
     using_compatible_vocoders) and
    QE1 preset_with_SLD_test_data and
    EUT in standby
}
ensure that {
    when { QE1_User makes a PTT_Call to EUT }
    then { EUT_User receives the PTT_Call and the SLD_test_data }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```

```

TP id      : TP_PMR_0836_04
summary    : 'Support sending of ISF slow user data'
RQ ref     : RQ_001_0836
TP type    : interoperability
Role       : ISF
config ref: CF_ISF_01_I -- ISF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 using same Common_ID and
     powersave_disabled and
     using_compatible_vocoders) and
    EUT preset_with_SLD_test_data and
    QE1 in standby
}
ensure that {
    when { EUT_User makes a PTT_Call to QE1 }
    then { QE1_User receives the PTT_Call and the SLD_test_data }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```

5.2 CSF

Group 2 'CSF'

5.2.1 broadcast call

```

Group 2.1 'Broadcast Call'
-- No TP specified
End group 2.1

```

5.2.2 dialling plan

Group 2.2 'Dialling Plan'

```

TP id      : TP_PMR_1403_01
summary    : 'The user should enter or select a string of digits and then press a button to initiate
the call'
RQ ref     : RQ_001_1403
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I
TD ref     : TBD
with {
    QE1 and EUT in standby and
    EUT Complies_with_Standard_User_Interface
}
ensure that {
    when { EUT_User enters or selects an address of QE1 }
    then { QE1_User does not receive the Call }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_1403_02
summary    : 'The user should enter a string of digits and then press a button to initiate the call'
RQ ref     : RQ_001_1403
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I
TD ref     : TBD
with {
    QE1 and EUT in standby and
    EUT Complies_with_Standard_User_Interface
}
ensure that {
    when { EUT_User enters or selects an address of QE1 before EUT_User
           presses the hash_key or dedicated_send_key }
    then { QE1_User receives the Call }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```

```

TP id      : TP_PMR_1412_01
summary    : 'Some numeric address are not permitted'
RQ ref     : RQ_001_1409
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I
TD ref     : TBD
with {
    EUT Complies_with_Standard_User_Interface and
    QE1 and EUT in standby
}
ensure that {
    when { EUT_User enters or selects a non_dialable_address and
           presses dedicated_send_key }
    then { EUT indicates an error} -- audible or visible prompt
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_1415_01
summary    : 'Radio receiving a talkgroup call - using wildcard'
RQ ref     : RQ_001_1415
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I
TD ref     : TBD
with {
    QE1 and EUT in standby and
    QE1 Complies_with_Standard_User_Interface
}
ensure that {
    when { QE1_User enters or selects an EUT address
           containing an asterisk_symbol 'in one of the last four digits' and
           presses the hash_key or dedicated_send_key }
    then { EUT_User receives a TalkGroup_Call }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_1415_02
summary    : 'Radio receiving a talkgroup call'
RQ ref     : RQ_001_1415
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I
TD ref     : TBD
with {
    (EUT 'programmed with a talkgroup address') and
    QE1 Complies_with_Standard_User_Interface and
    QE1 and EUT in standby
}
ensure that {
    when { QE1_User enters or selects the talkgroup_address of the EUT and
           presses the hash_key or dedicated_send_key }
    then { EUT_User receives the TalkGroup_Call }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_1417_01
summary    : 'Abbreviated dialled digit to address mapping'
RQ ref     : RQ_001_1417
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I
TD ref     : TBD
with {
    (EUT Complies_with_Standard_User_Interface and
     abbreviated_dialling_available) and
    QE1 in standby
}
ensure that {
    when { EUT_User enters or selects an abbreviated_dialling_string of QE1 and
           presses the hash_key or dedicated_send_key }
    then { QE1_User receives the Call }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```

```

TP id      : TP_PMR_1417_02
summary    : 'Abbreviated dialling string with wildcard and no match'
RQ ref     : RQ_001_1417
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I
TD ref     : TBD
with {
    (EUT Complies_with_Standard_User_Interface and
     abbreviated_dialling_available)
    EUT and QE1 'addresses are same except for last two or more digits'
    EUT and QE1 in standby
}
ensure that {
    when { EUT_User enters or selects the asterisk_symbol and
           presses the hash_key or dedicated_send_key }
    then { QE1_User does not receive the Call }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_1417_03
summary    : 'Abbreviated dialling string with wildcard'
RQ ref     : RQ_001_1417
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I
TD ref     : TBD
with {
    (EUT Complies_with_Standard_User_Interface and abbreviated_dialling_available)
    EUT and QE1 'addresses are same except for the last digit'
    EUT and QE1 in standby
}
ensure that {
    when { EUT_User enters or selects the asterisk_symbol and
           presses the dedicated_send_key}
    then { QE1_User receives the Call }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_1418_01
summary    : 'Talkgroup call'
RQ ref     : RQ_001_1418
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I
TD ref     : TBD
with {
    (EUT Complies_with_Standard_User_Interface and
     'an address input mask enabled covering at least one of the last four digits') and
    (EUT and QE1 'addresses having the same digits outside of the mask' and
     in standby)
}
ensure that {
    when { EUT_User enters or selects a masked_dialling_string of QE1
           containing an asterisk_symbol 'as the last digit' and
           presses the hash_key or dedicated_send_key }
    then { QE1_User receives the TalkGroup_Call }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```

```

TP id      : TP_PMR_1418_02
summary    : 'Talkgroup call'
RQ ref     : RQ_001_1418
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I
TD ref     : TBD
with {
    (EUT Complies_with_Standard_User_Interface and
     abbreviated_dialling_available and
     'an address input mask is enabled covering at least one of the last four digits') and
     (EUT and QE1 'addresses having the same digits outside of the mask' and
      in standby)
}
ensure that {
    when { EUT_User enters or selects an abbreviated_masked_dialling_string of QE1
           containing an asterisk_symbol 'as the last digit' and
           presses the hash_key or dedicated_send_key }
    then { QE1_User receives the TalkGroup_Call }
}

-- *****

TP id      : TP_PMR_1420_01
summary    : 'Broadcast plan'
RQ ref     : RQ_001_1420
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I
TD ref     : TBD
with {
    (EUT Complies_with_Standard_User_Interface and
     QE1 'programmed with a talkgroup address'
     QE1 and EUT in standby)
}
ensure that {
    when { EUT_User enters a broadcast_command
           containing a talkgroup_address of QE1 and
           presses dedicated_send_key}
    then { QE1_User receives the Broadcast_Call }
}

-- *****

TP id      : TP_PMR_1420_02
summary    : 'Broadcast call - abbreviated dialling'
RQ ref     : RQ_001_1420
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I
TD ref     : TBD
with {
    (EUT Complies_with_Standard_User_Interface and
     abbreviated_dialling_available) and
     EUT and QE1 'addresses differing in one or more of the last digits'
     QE1 and EUT in standby
}
ensure that {
    when { EUT_User enters a broadcast_command
           containing a valid abbreviated_dialling_string of QE1
           containing 'one or more asterisk symbols' and
           presses the hash_key or dedicated_send_key }
    then { QE1_User receives the Broadcast_Call }
}

-- *****

```

```

TP id      : TP_PMR_1421_01
summary    : 'Status call'
RQ ref     : RQ_001_1421
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I
TD ref     : TBD
with {
    EUT Complies_with_Standard_User_Interface and
    QE1 and EUT in standby
}
ensure that {
when { EUT_User enters a status_command
        containing a code between 0 and 31 and
        containing the address of QE1 and
        presses the hash_key or dedicated_send_key }
then { QE1_User receives the Status_Call indicating the selected code }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_1421_02
summary    : 'Status call - wrong status code entered'
RQ ref     : RQ_001_1421
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I
TD ref     : TBD
with {
    EUT Complies_with_Standard_User_Interface
    QE1 and EUT in standby
}
ensure that {
when { EUT_User enters a status_command
        containing a code 'greater than' 31 and
        containing the address of QE1 and
        presses the dedicated_send_key }
then { EUT indicates an error}
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_1423_01
summary    : 'Force talkgroup service'
RQ ref     : RQ_001_1423
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I
TD ref     : TBD
with {
    EUT Complies_with_Standard_User_Interface and
    QE1 and EUT in standby
}
ensure that {
when { EUT_User enters a talkgroup_command
        containing the address of QE1 and
        presses the dedicated_send_key}
then { QE1_User receives the TalkGroup_Call }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```

```

TP id      : TP_PMR_1423_02
summary    : 'Force talkgroup service - abbreviated dialling'
RQ ref     : RQ_001_1423
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I
TD ref     : TBD
with {
    (EUT Complies_with_Standard_User_Interface_and
     abbreviated_dialling_available) and
    EUT and QE1 'addresses differing in one or more of the last digits'
    QE1 and EUT in standby
}
ensure that {
    when { EUT_User enters a talkgroup_command
           containing a valid abbreviated_dialling_string of QE1 and
           presses hash_key or dedicated_send_key }
    then { QE1_User receives the TalkGroup_Call }
}
-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

End group 2.2

```

5.2.3 individual short data message

```

Group 2.3 'Individual Short Data Message'

TP id      : TP_PMR_0809_01
summary    : 'Support receiving of type 2 CSF individual short data messages'
RQ ref     : RQ_001_0809
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 with powersave_disabled) and
    EUT in standby
}
ensure that {
    when { QE1_User sends a T2_Transmission addressed to EUT }
    then { EUT_User receives the T2_Transmission }
}
-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_0809_02
summary    : 'Support sending of type 2 CSF individual short data messages'
RQ ref     : RQ_001_0809
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 with powersave_disabled) and
    QE1 in standby
}
ensure that {
    when { EUT_User sends a T2_Transmission addressed to QE1 }
    then { QE1_User receives the T2_Transmission }
}
-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_0810_01
summary    : 'Support of type 1 individual short data messages'
RQ ref     : RQ_001_0810
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 powersave_disabled) and
    EUT in standby
}
ensure that {
    when { QE1_User sends a T1_Transmission addressed to EUT }
    then { EUT_User receives the T1_Transmission }
}
-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```

```

TP id      : TP_PMR_0810_02
summary    : 'Support sending of type 1 CSF individual short data messages'
RQ ref     : RQ_001_0810
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {     (EUT and QE1 with powersave_disabled) and
           QE1 in standby
}
ensure that {
  when { EUT_User sends a T1_Transmission addressed to QE1 }
  then { QE1_User receives the T1_Transmission }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```

5.2.3.1 ISDM free text message

Group 2.3.1 'ISDM Free Text Message'

```

TP id      : TP_PMR_0852_01
summary    : 'Support receiving of type 2 CSF individual data free text messages'
RQ ref     : RQ_001_0852
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {     (EUT and QE1 powersave_disabled) and
           EUT in standby
}
ensure that {
  when { QE1_User sends a T2_Freetext_Data_Message addressed to EUT }
  then { EUT_User receives the T2_Freetext_Data_Message }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```

```

TP id      : TP_PMR_0852_02
summary    : 'Support sending of type 2 CSF individual data free text messages'
RQ ref     : RQ_001_0852
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {     (EUT and QE1 powersave_disabled) and
           QE1 in standby
}
ensure that {
  when { EUT_User sends a T2_Freetext_Data_Message addressed to QE1 }
  then { QE1_User receives the T2_Freetext_Data_Message }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```

```

TP id      : TP_PMR_0853_01
summary    : 'Support receiving of type 1 CSF individual data free text messages'
RQ ref     : RQ_001_0853
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {     (EUT and QE1 powersave_disabled) and
           EUT in standby
}
ensure that {
  when { QE1_User sends a T1_Freetext_Data_Message addressed to EUT }
  then { EUT_User receives the T1_Freetext_Data_Message }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```

```

TP id      : TP_PMR_0853_02
summary    : 'Support sending of type 1 CSF individual data free text messages'
RQ ref     : RQ_001_0853
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 powersave_disabled) and
    QE1 in standby
}
ensure that {
when { EUT_User sends a T1_Freetext_Data_Message addressed to QE1 }
then { QE1_User receives the T1_Freetext_Data_Message }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

End group 2.3.1

```

5.2.3.2 ISDM precoded message

Group 2.3.2 'ISDM Precoded Message'

```

TP id      : TP_PMR_0850_01
summary    : 'Support receiving of type 1 CSF individual data precoded messages'
RQ ref     : RQ_001_0850
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 powersave_disabled) and
    EUT in standby
}
ensure that {
when { QE1_User sends a T1_Precoded_Data_Message addressed to EUT }
then { EUT_User receives the T1_Precoded_Data_Message }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_0850_02
summary    : 'Support sending of type 1 CSF individual data precoded messages'
RQ ref     : RQ_001_0850
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 powersave_disabled) and
    QE1 in standby
}
ensure that {
when { EUT_User sends a T1_Precoded_Data_Message addressed to QE1 }
then { QE1_User receives the T1_Precoded_Data_Message }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_0851_01
summary    : 'Support receiving of type 2 CSF individual data precoded messages'
RQ ref     : RQ_001_0851
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 powersave_disabled) and
    EUT in standby
}
ensure that {
when { QE1_User sends a T2_Precoded_Data_Message addressed to EUT }
then { EUT_User receives the T2_Precoded_Data_Message }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```

```

TP id      : TP_PMR_0851_02
summary    : 'Support sending of type 2 CSF individual data precoded messages'
RQ ref     : RQ_001_0851
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 powersave_disabled) and
    QE1 in standby
}
ensure that {
when { EUT_User sends a T2_Precoded_Data_Message addressed to QE1 }
then { QE1_User receives the T2_Precoded_Data_Message }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

End group 2.3.2

```

5.2.3.3 ISDM short file transfer

Group 2.3.3 'ISDM Short File Transfer'

```

TP id      : TP_PMR_0855_01
summary    : 'Support receiving of type 3 CSF individual data short file transfer'
RQ ref     : RQ_001_0855
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 powersave_disabled) and
    EUT in standby
}
ensure that {
when { QE1_User makes a T3_Transmission addressed to EUT }
then { EUT_User receives the T3_Transmission }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_0855_02
summary    : 'Support sending of type 3 CSF individual data short file transfer'
RQ ref     : RQ_001_0855
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 powersave_disabled) and
    QE1 in standby
}
ensure that {
when { EUT_User makes a T3_Transmission addressed to QE1 }
then { QE1_User receives the T3_Transmission }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_0856_01
summary    : 'Support receiving of type 2 CSF individual data short file transfer'
RQ ref     : RQ_001_0856
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 powersave_disabled) and
    EUT in standby
}
ensure that {
when { QE1_User makes a T2_Short_File_Transfer addressed to EUT }
then { EUT_User receives the T2_Short_File_Transfer }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```

```

TP id      : TP_PMR_0856_02
summary    : 'Support sending of type 2 CSF individual data short file transfer'
RQ ref     : RQ_001_0856
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 powersave_disabled) and
    QE1 in standby
}
ensure that {
when { EUT_User makes a T2_Short_File_Transfer addressed to QE1 }
then { QE1_User receives the T2_Short_File_Transfer }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_0857_01
summary    : 'Support receiving of type 1 CSF individual data short file transfer'
RQ ref     : RQ_001_0857
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 powersave_disabled) and
    EUT in standby
}
ensure that {
when { QE1_User makes a T1_Short_File_Transfer addressed to EUT }
then { EUT_User receives the T1_Short_File_Transfer }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_0857_02
summary    : 'Support sending of type 1 CSF individual data short file transfer'
RQ ref     : RQ_001_0857
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 powersave_disabled) and
    QE1 in standby
}
ensure that {
when { EUT_User makes a T1_Short_File_Transfer addressed to QE1 }
then { QE1_User receives the T1_Short_File_Transfer }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxx

End group 2.3.3

```

5.2.3.4 ISDM status message

Group 2.3.4 'ISDM Status Message'

```

TP id      : TP_PMR_0846_01
summary    : 'Support receiving of type 2 CSF individual data status messages'
RQ ref     : RQ_001_0846
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 powersave_disabled) and
    EUT in standby
}
ensure that {
when { QE1_User sends a T2_Status_Message addressed to EUT }
then { EUT_User receives the T2_Status_Message }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxx

```

```

TP id      : TP_PMR_0846_02
summary    : 'Support sending of type 2 CSF individual data status messages'
RQ ref     : RQ_001_0846
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 powersave_disabled) and
    QE1 in standby
}
ensure that {
when { EUT_User sends a T2_Status_Message addressed to QE1 }
then { QE1_User receives the T2_Status_Message }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_0847_01
summary    : 'Support receiving of type 1 CSF individual data status messages'
RQ ref     : RQ_001_0847
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 powersave_disabled) and
    EUT in standby
}
ensure that {
when { QE1_User sends a T1_Status_Message addressed to EUT }
then { EUT_User receives the T1_Status_Message }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_0847_02
summary    : 'Support sending of type 1 CSF individual data status messages'
RQ ref     : RQ_001_0847
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 powersave_disabled) and
    QE1 in standby
}
ensure that {
when { EUT_User sends a T1_Status_Message addressed to QE1 }
then { QE1_User receives the T1_Status_Message }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxx

End group 2.3.4
End group 2.3

```

5.2.4 OACSU

```

Group 2.4 'OACSU'

TP id      : TP_PMR_0840_01
summary    : 'Support receiving of OACSU call'
RQ ref     : RQ_001_0840
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 powersave_disabled and
     using_compatible_vocoders and
     OACSU_enabled) and
    EUT in standby
}
ensure that {
when { QE1_User makes an OACSU_Call addressed to the EUT }
then { EUT_User receives the OACSU_Call }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxx

```

```

TP id      : TP_PMR_0840_02
summary    : 'Support sending of OACSU call'
RQ ref     : RQ_001_0840
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 powersave_disabled and
     using_compatible_vocoders and
     OACSU_enabled) and
    QE1 in standby
}
ensure that {
    when { EUT_User makes an OACSU_Call addressed to QE1 }
    then { QE1_User receives the OACSU_Call }
}

-- XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

TP id      : TP_PMR_0841_01
summary    : 'Support of cancel call set-up'
RQ ref     : RQ_001_0841
TP type    : interoperability
Role       : CSF
config ref: CF_ISF_02_I -- ISF QE1, QE2 and EUT
TD ref     : TBD
with {
    (EUT OACSU_enabled and
     powersave_disabled and
     polite_to_own_CC) and
    QE1 is transmitting to QE2
}
ensure that {
    when { QE1 stops transmitting after EUT_User cancels an OACSU_Call addressed to QE2 }
    then { QE2_User does not receive the OACSU_Call }
}

-- XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

End group 2.4

```

5.2.5 short appended data

```

Group 2.5 'Short Appended Data'

TP id      : TP_PMR_0837_01
summary    : 'Support receiving of CSF appended data'
RQ ref     : RQ_001_0837
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 using same Group_ID and
     powersave_disabled and
     using_compatible_vocoders) and
    QE1 preset_with_AD_test_data and
    EUT in standby
}
ensure that {
    when { QE1_User makes a Group_AD_Call to EUT }
    then { EUT_User receives the Group_Call and the AD_test_data }
}

-- XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

```

```

TP id      : TP_PMR_0837_02
summary    : 'Support sending of CSF appended data'
RQ ref     : RQ_001_0837
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 using same Group_ID and
     powersave_disabled and
     using_compatible_vocoders) and
    EUT preset_with_AD_test_data and
    QE1 in standby
}
ensure that {
    when { EUT_User makes a Group_Ad_Call to QE1 }
    then { QE1_User receives the Group_Call and the AD_test_data }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_0844_01
summary    : 'Support receiving of appended data'
RQ ref     : RQ_001_0844
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 powersave_disabled and
     using_compatible_vocoders) and
    QE1 preset_with_AD_test_data and
    EUT in standby
}
ensure that {
    when { QE1_User sends a Individual_Ad_Call addressed to EUT }
    then { EUT_User receives the Individual_Call and the AD_test_data }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_0844_02
summary    : 'Support sending of appended data'
RQ ref     : RQ_001_0844
TP type    : interoperability
Role       : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 powersave_disabled and
     using_compatible_vocoders) and
    EUT preset_with_AD_test_data and
    QE1 in standby
}
ensure that {
    when { EUT_User sends a Individual_Ad_Call addressed to QE1 }
    then { QE1_User receives the Individual_Call and the AD_test_data }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

End group 2.5

```

5.2.6 slow user data

```

Group 2.6 'Slow User Data'

TP id      : TP_PMR_0843_01
summary    : 'Support receiving of CSF slow user data'
RQ ref     : RQ_001_0843
TP type    : interoperability
Role        : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 powersave_disabled and
     using_compatible_vocoders) and
    QE1 preset_with_SLD_test_data and
    EUT in standby
}
ensure that {
    when { QE1_User sends an Individual_SLD_Call addressed to EUT }
    then { EUT_User receives the Individual_Call and the SLD_test_data }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

TP id      : TP_PMR_0843_02
summary    : 'Support sending of slow user data'
RQ ref     : RQ_001_0843
TP type    : interoperability
Role        : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 powersave_disabled and
     using_compatible_vocoders) and
    EUT preset_with_SLD_test_data and
    QE1 in standby
}
ensure that {
    when { EUT_User sends an Individual_SLD_Call addressed to QE1 }
    then { QE1_User receives the Individual_Call and the SLD_test_data }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

End group 2.6

```

5.2.7 type 3 data

```

Group 2.7 'Type 3 data'

TP id      : TP_PMR_0808_01
summary    : 'Support receiving of type 3 CSF short data messages'
RQ ref     : RQ_001_0808
TP type    : interoperability
Role        : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref     : TBD
with {
    (EUT and QE1 with powersave_disabled) and
    EUT in standby
}
ensure that {
    when { QE1_User sends a T3_Transmission addressed to EUT }
    then { EUT_User receives the T3_Transmission }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

```

```

TP id : TP_PMR_0808_02
summary : 'Support sending of type 3 CSF short data messages'
RQ ref : RQ_001_0808
TP type : interoperability
Role : CSF
config ref: CF_CSF_01_I -- CSF QE1 and EUT
TD ref : TBD
with {
    (EUT and QE1 with powersave_disabled) and
    QE1 in standby
}
ensure that {
    when { EUT_User sends a T3_Transmission addressed to QE1 }
    then { QE1_User receives the T3_Transmission }
}

End group 2.7
End group 2

```

5.3 ISF

Group 3 'ISF'

```

TP id : TP_PMR_0804_01
summary : 'Support of 255 Common IDs'
RQ ref : RQ_001_0804
TP type : interoperability
Role : ISF
config ref: CF_ISF_01_I -- ISF QE1 and EUT
TD ref : TBD
with {
    QE1 and EUT in standby and
    using_compatible_vocoders
}
ensure that {
    when { QE1 uses a Common_ID between 1 and 254 and
        EUT uses same Common_ID and
        QE1_User makes a Call to EUT }
    then { EUT_User receives the Call }
}

-- xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

End group 3

```

Annex A (normative): dPMR interoperability test configurations

Void.

Annex B (normative): dPMR TPLan interoperability testing user definitions

```
--****Cross references***

xref PICS_doc      {DTS/ERM-TGDMR-066-1}

-- Configurations
xref CF_ISF_01_I {dPMR_IOT_Configurations.ppt} -- ISF QE1, EUT
xref CF_ISF_02_I {dPMR_IOT_Configurations.ppt} -- ISF QE1, QE2, EUT
xref CF_CSF_01_I {dPMR_IOT_Configurations.ppt} -- CSF QE1, EUT
xref CF_CSF_02_I {dPMR_IOT_Configurations.ppt} -- CSF QE1, QE2, EUT

--****Definitions***

def header type -- TP type

-- Entities
def entity EUT
def entity QE1
def entity QE2
-- Note: user could be a human user, machine, or program
def entity QE1_User -- the user operating QE1
def entity QE2_User -- the user operating QE2
def entity EUT_User -- the user operating EUT

-- Messages or signals
def event PTT_Call -- user presses PTT button and payload transmission starts immediately ONLY ISF
def event Individual_Call
def event Group_Call -- call with wildcard(s)
def event TalkGroup_Call -- call with only numeric address
def event Call -- any dialled call
def event Voice_Transmission -- Group or individual call ONLY CSF
def event PTT_Key
def event T1_Transmission -- Type 1 data message call
def event T2_Transmission -- Type 2 data message call
def event T3_Transmission -- Type 3 data message call
def event T1_Status_Message -- Type 1 data status message call
def event T2_Status_Message -- Type 2 data status message call
def event T1_Precoded_Data_Message -- Type 1 data precoded text message call
def event T2_Precoded_Data_Message -- Type 2 data precoded text message call
def event T1_Freetext_Data_Message -- Type 1 data free text message call
def event T2_Freetext_Data_Message -- Type 2 data free text message call
def event T1_Short_File_Transfer -- Type 1 data short file transfer
def event T2_Short_File_Transfer -- Type 2 data short file transfer
def event Individual_SLD_Call -- Individual call including slow user data
def event Group_SLD_Call -- Group call including slow user data
def event Individual_AD_Call -- Individual call including appended data
def event Group_AD_Call -- Group call including appended data
def event Broadcast_Call
def event OACSU_Call -- Individual call using off air call set up
def event acknowledgement
def event connect_request -- call set up request
def event Status_Call
def event dedicated_send_key
def event hash_key
def event broadcast_command -- same as #1*
def event status_command { code } -- same as #0ss*
def event talkgroup_command -- same as #6*
def event error

-- Values
def value Common_ID
def value Group_ID
def value RF_Channel
def value channel
def value remainder
def value colour_code
def value call_group -- "call group" means "group" in dPMR sense but needed since "group" is already predefined TPLan keyword
def value SLD_test_data
def value AD_test_data
def value asterisk_symbol
def value dialling_string -- keypad entry
```

```

def value addresses { address }

def value non_dialable_address -- '0000000', '1000000', '2000000', '3000000', '4000000', '5000000',
'6000000', '7000000', '8000000', '9000000'

def value abbreviated_dialling_string          -- address where some of the most significant digits are
omitted

def value talkgroup_address                   -- Group or Talk group address

def value masked_dialling_string            -- digits of an address that are covered by an input
mask

def value abbreviated_masked_dialling_string -- digits of an address that are covered by an input
mask where some of the most significant digits have been omitted

def unit seconds

def condition standby
def condition switched_on
def condition switched_off
def condition powersave_enabled
def condition powersave_disabled
def condition call_timeout_terminated      -- State if radio is that call got terminated by timeout
(after 180 sec)
def condition polite_to_own_CC           -- Channel access policy is "Polite to own Colour Code"
def condition polite_to_own_group        -- Channel access policy is "Polite to own group or
talkgroup"
def condition impolite                  -- Channel access policy is "Impolite"
def condition abbreviated_dialling_available
def condition Complies_with_Standard_User_Interface
def condition OACSU_enabled             -- radio configured for Off Air Call Set-up
def condition preset_with_SLD_test_data -- buffering of slow data etc in the radio
def condition preset_with_AD_test_data  -- buffering of appended data etc in the radio
def condition using_compatible_vocoders

-- Keywords - (Pre)conditions
def word addressed
def word using
def word transmitting

-- Keywords - Stimuli
def word uses
def word makes
def word requested
def context {is ~requested to}
def word selects
def word terminates
def word releases
def word released
def context {is ~released}
def word presses
def word enters
def word cancels
def word stops

-- Keywords - Responses
def word receive
def word indicates

-- Keywords - Glue
def word on
def word for
def word both
def word between
def word same
def word being
def word are
def word another
def word valid
def word selected
def word does
def word again

```

History

Document history		
V1.1.1	April 2007	Publication
V1.2.1	July 2008	Publication