ETSI TS 102 695-1 V9.5.0 (2019-05)

Smart Cards;
Test specification for the Host Controller Interface (HCI);
Part 1: Terminal features
(Release 9)

Reference
RTS/SCP-00HCITv950

Keywords
smart card, terminal

ETSI

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Foreword

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The present document is part 1 of a multi-part deliverable covering the Test specification for the Host Controller Interface (HCI), as identified below:

Part 1: "Terminal features";

Part 2: "UICC features";

Part 3: "Host Controller features".

Modal verbs terminology

In the present document "**shall**", "**shall not**", "**should**", "**should not**", "**may**", "**need not**", "**will**", "**will not**", "**can**" and "**cannot**" are to be interpreted as described in clause 3.2 of the ETSI Drafting Rules (Verbal forms for the expression of provisions).

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Introduction

The present document defines test cases for the terminal relating to the Host Controller Interface (HCI) as specified in ETSI TS 102 622 [1].

The aim of the present document is to ensure interoperability between the terminal and the UICC independently of the respective manufacturer, card issuer or operator.

1 Scope

The present document covers the minimum characteristics which are considered necessary for the terminal in order to provide compliance to ETSI TS 102 622 [1].

The present document specifies the test cases for:

- the HCI core as described in the first part of ETSI TS 102 622 [1];
- the contactless platform as described in the second part of ETSI TS 102 622 [1].

Test cases for the UICC relating to ETSI TS 102 622 [1] and test cases for the Single Wire Protocol (SWP) covering both terminal and UICC are out of scope of the present document.

2 References

2.1 Normative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

- In the case of a reference to a TC SCP document, a non-specific reference implicitly refers to the latest version of that document in the same Release as the present document.

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

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

The following referenced documents are necessary for the application of the present document.

[1] ETSI TS 102 622: "Smart Cards; UICC - Contactless Front-end (CLF) Interface; Host Controller Interface (HCI)".

[2] Void.

[3] Void.

[4] Void.

[5] Void.

[6] Void.

[7] Void.

[8] Void.

[9] Void.

[10] Void.

[11] ETSI TS 102 695-1: "Smart Cards; Test specification for the Host Controller Interface (HCI); Part 1: Terminal features (Release 10)".

2.2 Informative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the referenced document (including any amendments) applies.

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The following referenced documents are not necessary for the application of the present document but they assist the user with regard to a particular subject area.

Not applicable.

3 Definition of terms, symbols and abbreviations

3.1 Terms

Void.

3.2 Symbols

Void.

3.3 Abbreviations

Void.

4 Test environment

Void.

5 Test cases

All test cases are present in ETSI TS 102 695-1 [11].

Annex A (informative): Bibliography

Void.

Annex B (informative): Core specification version information

Void.

Annex C (informative): Change history

The table below indicates all changes that have been incorporated into the present document since it was placed under change control.

Change history								
Date	**Meeting**	**Plenary Doc**	**CR**	**Rev**	**Cat**	**Subject/Comment**	**Old**	**New**
						Creation of the specification		7.0.0
2010-07	SCP #45	SCP(10)0195	001	1	F	Correction of card emulation test procedures and initial conditions	7.0.0	7.1.0
		SCP(10)0120	002	-	F	Removal of redundant steps.	7.0.0	7.1.0
		SCP(10)0120	003	-	F	Correction of test procedure 5.5.4.2.3	7.0.0	7.1.0
2010-10	SCP #46	SCP(10)0223	004	-	F	Correction of wrong test cases numbering	7.1.0	7.2.0
		SCP(10)0224	005	-	F	Deletion of RFU Gates test procedure 5.1.3.3	7.1.0	7.2.0
2011-01	SCP #47	SCP(11)0028	006	-	F	Corrections to allow for EVT_CARD_ACTIVATED being optional	7.2.0	7.3.0
		SCP(11)0029	007	-	F	Numbering correction	7.2.0	7.3.0
		SCP(11)0030	008	-	F	Modify RF registries setting test cases to consider the procedure in ETSI TS 102 622 clause 9.4.5	7.2.0	7.3.0
2011-03	SCP #48	SCP(11)0109	009	-	F	Specification of default of full power mode only for test execution	7.2.0	7.3.0
		SCP(11)0110	010	-	F	ANY_OPEN_PIPE command is sent to the pipe already opened	7.2.0	7.3.0
		SCP(11)0111	011	-	F	Update the requirements to version 7.8.0 of ETSI TS 102 622	7.2.0	7.3.0
		SCP(11)0114	014	-	F	Correction of card emulation test cases to allow for SWP DEACTIVATED state and low power mode	7.2.0	7.3.0
		SCP(11)0115	015	-	F	Correction of state transition for ISO/IEC 14443-3 type B	7.2.0	7.3.0
		SCP(11)0112	012	-	F	Creation of Rel-8 of ETSI TS 102 695-1 to cover Rel-8 conformance requirements of ETSI TS 102 622	7.3.0	8.0.0
2011-06	SCP #50	SCP(11)0233	016	-	F	Modification of card emulation test cases applicability from mandatory to conditional	8.0.0	8.1.0
		SCP(11)0234	017	-	F	Modifiac Test Cases on card emulation to include the data rate capabilities of the terminal	8.0.0	8.1.0
		SCP(11)0235	018	-	F	Clarification of the portion of the ATS which can be checked in TC 5.6.3.3.4.2.4	8.0.0	8.1.0
		SCP(11)0236	019	-	D	Editorial corrections of VENDOR_NAME typo	8.0.0	8.1.0
		SCP(11)0237	020	-	F	Corrections of card emulation test cases	8.0.0	8.1.0
		SCP(11)0238	021	-	F	Clarify the test of SAK on RF	8.0.0	8.1.0
2011-09	SCP #52	SCP(11)0299r1	022	1	B	Addition of reader mode test cases	8.1.0	8.2.0
2011-12	SCP #53	SCP(11)0347r1	023	1	F	Definition of card emulation trigger	8.1.0	8.2.0
		SCP(11)0348	024	-	F	Test case 5.6.3.3.4.3.3: More precision in testing CID bit	8.1.0	8.2.0
2012-09	SCP #56	SCP(12)000185	025	-	F	Definition of ATQA for Card emulation test cases	8.1.0	8.2.0
2012-12	SCP #57	SCP(12)000244	026	-	F	Correction of test procedure 5.6.1.2.3 and 5.6.3.3.4.2.3.3	8.2.0	8.3.0
2013-02	SCP #58	SCP(13)000031	027	-	B	Creation of Rel-9 of ETSI TS 102 695-1	8.3.0	9.0.0
2013-04	SCP #59	SCP(13)000077	029	-	B	Add the test spec to ETSI TS 102 695-1 for Type F (altered at implementation for consistency with the changes in CR 80r1)	9.0.0	9.1.0
		SCP(13)000078	030	-	F	Addition of low power mode execution for card emulation test cases	9.0.0	9.1.0
		SCP(13)000079	031	-	F	Tidy up of RQ status	9.0.0	9.1.0
		SCP(13)000080r1	032	1	F	Correction of test cases 5.6.1.2/3 to power on the field during the test procedure	9.0.0	9.1.0
		SCP(13)000082	034	-	F	Improved specification of no response expected behaviour	9.0.0	9.1.0
2013-07	SCP #60	SCP(13)000134r1	036	1	F	Test case 5.5.1.3.3: removal of delay by simulator	9.1.0	9.2.0
2013-10	SCP #61	SCP(13)000214	035	1	F	Card emulation test cases: update to set SESSION_IDENTITY and MODE	9.2.0	9.3.0
		SCP(13)000215	037	1	B	Additional tests for Type F	9.2.0	9.3.0
		SCP(13)000213r1	038	1	F	Definition of time to wait for response	9.2.0	9.3.0
2014-02	SCP #62	SCP(14)000018	039	-	F	CR 102 695-1 R9 #039: Clarification for Type F initialization command and response parameters	9.3.0	9.4.0

Change history								
Date	**Meeting**	**Plenary Doc**	**CR**	**Rev**	**Cat**	**Subject/Comment**	**Old**	**New**
2014-06	SCP #64	SCP(14)000155	040	-	F	CR 102 695-1 R9 #040: Addition of test case for EVT_TRANSACTION	9.3.0	9.4.0
		SCP(14)000154r1	041	1	F	CR 102 695-1 R9 #041r1: Addition of test cases on Non ISO/IEC 14443-4 type A	9.3.0	9.4.0
		SCP(14)000156	043	-	F	CR 102 695-1 R9 #043: Correction of ATQA coding	9.3.0	9.4.0
		SCP(14)000153r1	042	1	F	CR 102 695-1 R9 #42r1: Event reception on lowest gate ID	9.3.0	9.4.0
2015-02	SCP #67	SCP(15)000018	045	-	B	Deletion of REL-9 content of ETSI TS 102 695-1	9.4.0	9.5.0

History

Document history		
V9.0.0	April 2013	Publication
V9.1.0	July 2013	Publication
V9.2.0	September 2013	Publication
V9.3.0	December 2013	Publication
V9.4.0	November 2014	Publication
V9.5.0	May 2019	Publication