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Smart Cards;
Test specification for the Host Controller Interface (HCI);
Part 2: UICC features
(Release 10)

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The present document is part 2 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".

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Introduction

The present document defines test cases for the UICC 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.

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1 Scope

The present document covers the minimum characteristics which are considered necessary for the UICC 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 terminal 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 reference 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] ETSI TS 102 613: "Smart Cards; UICC - Contactless Front-end (CLF) Interface; Part 1: Physical and data link layer characteristics".

[3] ISO/IEC 18092: "Information technology - Telecommunications and information exchange between systems - Near Field Communication - Interface and Protocol (NFCIP-1)".

[4] ISO/IEC 14443-3: "Cards and security devices for personal identification -- Contactless proximity objects -- Part 3: Initialization and anticollision".

[5] ISO/IEC 14443-4: "Cards and security devices for personal identification -- Contactless proximity objects -- Part 4: Transmission protocol".

[6] ISO/IEC 9646-7: "Information technology -- Open Systems Interconnection -- Conformance testing methodology and framework -- Part 7: Implementation Conformance Statements".

[7] ETSI TS 102 221: "Smart Cards; UICC-Terminal interface; Physical and logical characteristics".

[8] ETSI TS 102 600: "Smart Cards; UICC-Terminal interface; Characteristics of the USB interface".

[9] ISO/IEC 7816-4: "Identification cards - Integrated circuit cards - Part 4: Organization, security and commands for interchange".

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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 reference 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.

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 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

For the purposes of the present document, the terms given in ETSI TS 102 622 [1] and the following apply:

allowed error response code: response code which is not ANY_OK and which is allowed for the referenced command as specified in ETSI TS 102 622 [1]

non-occurrence RQ: RQ which has been extracted from ETSI TS 102 622 [1], but which indicates a situation which should never occur

NOTE: The consequence is that such RQs cannot be explicitly tested.

user: any logical or physical entity which controls the test equipment in a way that it is able to trigger activities of the DUT

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3.2 Symbols

For the purposes of the present document, the symbols given in ETSI TS 102 622 [1] and the following apply:

$PIPE_0$	the static pipe connected to the link management gate of the device under test
$PIPE_1$	the static pipe connected to the administration gate of the device under test

3.3 Abbreviations

For the purposes of the present document, the abbreviations given in ETSI TS 102 622 [1] and the following apply:

ATQA	Answer To reQuest of type A
ATQB	Answer To reQuest of type B
CLT	ContactLess Tunnelling
DUT	Device Under Test
EOF	End of Frame
FFS	For Further Study
FWI	Frame Waiting time Integer
HCI	Host Controller Interface
HCS	Host Controller Simulator
HUT	Host Under Test
ICRx	Initial Condition Requirement (where x is a number)

NOTE: As used in the applicability table; see clauses 4.2 and 4.5.2.