

**Smart Cards;  
Test specification for the  
Single Wire Protocol (SWP) interface;  
Part 1: Terminal features  
(Release 7)**

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Reference

RTS/SCP-00SWPTv740

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Keywords

smart card, terminal

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# Contents

Intellectual Property Rights .....	4
Foreword.....	4
Introduction .....	4
1 Scope .....	5
2 References .....	5
2.1 Normative references .....	5
2.2 Informative references.....	6
3 Definitions, symbols and abbreviations .....	6
4 Test environment.....	6
5 Test cases.....	6
<b>Annex A: Void .....</b>	<b>7</b>
<b>Annex B (informative): Change history .....</b>	<b>8</b>
History .....	9

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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 Single Wire Protocol (SWP) interface, as identified below:

**Part 1: "Terminal features (Release 7)";**

Part 2: "UICC features (Release 7)".

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## Introduction

The present document defines test cases for the terminal relating to Single Wire Protocol (SWP). SWP is the communication interface between the UICC and a contactless frontend (CLF) as specified in TS 102 613 [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 terminal in order to provide compliance to TS 102 613 [1].

The present document specifies the test cases for:

- the physical layer of the interface CLF - UICC;
- the electrical interface of the CLF;
- the initial communication establishment CLF - UICC;
- the data link layer.

Test cases for the UICC relating to TS 102 613 [1] and test cases for the host controller interface (HCI) covering both terminal and UICC are out of scope of this document.

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# 2 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.

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## 2.1 Normative references

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

- |      |   |
|------|---|
| [1]  | ETSI TS 102 613: "Smart Cards; UICC - Contactless Front-end (CLF) Interface; Part 1: Physical and data link layer characteristics".       |
| [2]  | Void.   |
| [3]  | Void.   |
| [4]  | Void.   |
| [5]  | Void.   |
| [6]  | Void.   |
| [7]  | Void.   |
| [8]  | Void.   |
| [9]  | Void.   |
| [10] | ETSI TS 102 694-1: "Smart Cards; Test specification for the Single Wire Protocol (SWP) interface; Part 1: Terminal features (Release 8)". |

## 2.2 Informative references

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.

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## 3 Definitions, symbols and abbreviations

Void.

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## 4 Test environment

Void.

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## 5 Test cases

All test cases are present in TS 102 694-1 [10].

Annex A:  
Void

## Annex B (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)0118	002	-	F	Corrections to test case 5.9.2.2.2	7.0.0	7.1.0
2010-07	SCP #45	SCP(10)0118	003	-	F	Modify test case 5.9.2.1.2	7.0.0	7.1.0
		SCP(10)0118	004	-	F	Improved testing of idle bits	7.0.0	7.1.0
		SCP(10)0118	005	-	F	Test case 5.3.2.3.19: added RSET to last step of test case	7.0.0	7.1.0
		SCP(10)0118	006	-	F	Test case 5.6.2.2.3: clear specification of sequence numbers	7.0.0	7.1.0
		SCP(10)0118	007	-	F	Correction of specification regarding ACT_INFORMATION	7.0.0	7.1.0
		SCP(10)0118	008	-	F	Test case 5.3.2.2.2: correction of applicability	7.0.0	7.1.0
		SCP(10)0118	009	-	F	Test case 5.3.2.5.2: removal due to redundancy	7.0.0	7.1.0
		SCP(10)0118	010	-	F	Test cases 5.6.3.2.X: Updated to send subsequent frames in order to check for response to invalid frame	7.0.0	7.1.0
		SCP(10)0118	011	-	F	Change of usage of 10 I-frames throughout specification to 9 I-frames	7.0.0	7.1.0
		SCP(10)0118	014	-	F	Removal of redundant applicability statements	7.0.0	7.1.0
		SCP(10)0188	012	1	F	HCP message fragmentation	7.0.0	7.1.0
		SCP(10)0189	013	1	F	Clarification of O_WS_3	7.0.0	7.1.0
2010-10	SCP #46	SCP(10)0221	015	-	F	Clarification of Test cases 2: I-frame reception - single I-Frame reception and Test case 3: I-frame reception - multiple I-Frame reception	7.1.0	7.2.0
2011-01	SCP #47	SCP(11)0014	016		F	Removal of redundant options and conditional items	7.2.0	7.3.0
		SCP(11)0015	017		F	Removal of redundant requirement related to non-support of Class A	7.2.0	7.3.0
		SCP(11)0017	021		F	Test case 5.3.2.3.3: allow for terminals which activate TS 102 221 interface first	7.2.0	7.3.0
		SCP(11)0018r1	022	1	F	Correction of handling of CL_PROTO_INF(A) and of wrong specification of CLT_PAYLOAD length	7.2.0	7.3.0
		SCP(11)0019	023		F	Corrections to test procedure 5.9.2.1.3 and 5.9.2.2.2	7.2.0	7.3.0
		SCP(11)0020r1	024	1	F	Extended RESUME time and clarification of interface deactivation	7.2.0	7.3.0
		SCP(11)0021	025		F	Modify the applicability of test case 5.7.7.6.2	7.2.0	7.3.0
		SCP(11)0022	026		F	Correction to 'only one SREJ at any one time' test case	7.2.0	7.3.0
		SCP(11)0025	020		F	Clarifications to CLT test cases related to REQA/WUPA	7.2.0	7.3.0
		SCP(11)0026	018		F	Correction of SHDLC window size negotiation	7.2.0	7.3.0
2011-03	SCP #48	SCP(11)0102	029		F	Correction to test case 5.4.1.5.2.2 – addition of text for activation	7.2.0	7.3.0
		SCP(11)0103	030		F	Corrections to test procedure 5.9.2.2.2 and add new test case 5.9.2.2.X	7.2.0	7.3.0
		SCP(11)0104	031		F	Addition of testing for reception of closely spaced frames	7.2.0	7.3.0
		SCP(11)0105	032		F	Corrections to test procedure 5.9.2.2.2	7.2.0	7.3.0
2011-03	SCP #48	SCP(11)0101	028		F	Deletion of Rel-7 content of TS 102 694-1	7.3.0	7.4.0



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## History

<b>Document history</b>		
V7.0.0	April 2010	Publication
V7.1.0	October 2010	Publication
V7.2.0	January 2011	Publication
V7.3.0	July 2011	Publication
V7.4.0	July 2011	Publication