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Technical Specification

Universal Mobile Telecommunications System (UMTS); UICC-terminal interface; Physical and logical characteristics (3GPP TS 31.101 version 5.0.0 Release 5)



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Foreword

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

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Version x.y.z

where:

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

Introduction

The present document defines a generic Terminal/Integrated Circuit Card (ICC) interface. The present document is independent of the 3G USIM application and can thus be the platform for any IC card application.

The aim of the present document is to ensure interoperability between an ICC and a terminal independently of the respective manufacturer, card issuer or operator. The present document does not define any aspects related to the administrative management phase of the ICC. Any internal technical realisation of either the ICC or the terminal is only specified where these are reflected over the interface.

Application specific details for applications residing on an ICC are specified in the respective application specific documents. The Universal Subscriber Identity Module (USIM)-application for 3G telecommunication networks is specified in document 3G TS 31.102 [2].

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1 Scope

The present document specifies the interface between the UICC and the Terminal for 3G telecom network operation.

The present document specifies:

- the requirements for the physical characteristics of the UICC;
- the electrical interface between the UICC and the Terminal;
- the initial communication establishment and the transport protocols;
- the model which serves as a basis for the logical structure of the UICC;
- the communication commands and the procedures;
- the application independent files and protocols.

The administrative procedures and initial card management are not part of the present document.

2 References

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

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies.
- [1] ETSI TS 102 221 "Smart Cards; UICC-Terminal interface; Physical and logical characteristics (Release 1999)".
- [2] 3GPP TS 31.102: "Characteristics of the USIM Application".

3 Definitions, symbols, abbreviations and coding

All definitions, symbols, abbreviations applicable to the terminal are specified in TS 102 221 [1].

4 Physical and logical characteristics

The UICC/terminal interface shall comply with all requirements stated in ETSI TS 102 221 [1]. Where options are indicated in ETSI TS 102 221 [1], 3GPP TS 31.102 [2] specifies which option is to be used for a UICC/terminal interface where the UICC supports a USIM.

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Annex A (informative): Change history

The table below indicates all change requests that have been incorporated into the present document since it was initially approved by 3GPP TSG-T.

Change history									
Date	Meeting	TSG Doc.	CR	Rev	Cat	Subject/Comment	Old	New	
2000-04	TP-07	TP-000013	001	3	В	Security Attributes	3.0.0	3.1.0	
		TP-000013	002	2	В	Incorporation of the USAT (USIM application toolkit)			
						features.			
		TP-000013		3	В	File Control Parameters			
		TP-000013		1	F	Coding of status words			
		TP-000013			В	Definition of application session related procedures			
		TP-000013			D	Collection of 31.101 editorial changes			
		TP-000013			С	Power consumption			
		TP-000013			F	Changes to UICC specific files			
		TP-000013			F	Reservation of file IDs			
2000-07	TP-08	TP-000094	011		F	Error detection and character repetition	3.1.0	3.2.0	
		TP-000094	012		F	Use of status codes 6200, 6400 and 6500			
		TP-000094	013		F	Correction of P2 value for the ACTIVATE and			
						DEACTIVATE commands			
		TP-000094			F	Clarification of the UICC characteristics byte			
		TP-000094			F	Correction of ACTIVATE/DEACTIVATE commands			
		TP-000094			F	Clarification of the file descriptor			
		TP-000094			F	Selection by path correction			
		TP-000094		1	F	Correction of ATR examples			
		TP-000094	019		F	SEARCH RECORD command: alignment with ISO/IEC 7816-9			
		TP-000094	020		F	Correction to T=0 mechanism			
		TP-000094	022		F	Correction of the application activation termination procedures			
2000-10	TP-09	TP-000151	023		F	Replacement of the technical contents with a reference to ETSI TS 102 221. (Note: ETSI TS 101 221 is identical in technical content to TS 31.101 v3.2.0 plus the addition of several changes as listed in the annex of TS 102 221)	3.2.0	3.3.0	
2001-03	TP-11					Issued as version 4.0.0 in order to create a complete set of specifications for release 4. The contents of version 4.0.0 are identical to the contents of version 3.3.0	3.3.0	4.0.0	
2002-09	TP-17					Issued as version 5.0.0 in order to create a complete set of specifications for release 5. The contents of version 5.0.0 are identical to the contents of version 4.0.0. This was required as there was a CR to release 4 creating release 6 of the specification.	4.0.0	5.0.0	

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History

Document history									
V5.0.0	September 2002	Publication							