

ETSI TS 131 101 V4.0.0 (2001-03)

Technical Specification

Universal Mobile Telecommunications System (UMTS); UICC-Terminal Interface; Physical and Logical Characteristics (3GPP TS 31.101 version 4.0.0 Release 4)



Reference

RTS/TSGT-0331101Uv4

Keywords

UMTS

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://www.etsi.org/tb/status/>

If you find errors in the present document, send your comment to:
editor@etsi.fr

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 2001.

All rights reserved.

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://www.etsi.org/ipr>).

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 the ETSI 3rd Generation Partnership Project (3GPP).

The present document may refer to technical specifications or reports using their 3GPP identities, UMTS identities or GSM identities. These should be interpreted as being references to the corresponding ETSI deliverables.

The cross reference between GSM, UMTS, 3GPP and ETSI identities can be found under www.etsi.org/key.

Contents

| | |
|---|----------|
| Foreword..... | 4 |
| Introduction | 4 |
| 1 Scope | 5 |
| 2 References | 5 |
| 3 Definitions, symbols, abbreviations and coding..... | 5 |
| 4 Physical and logical characteristics | 5 |
| Annex A (informative): Change history | 6 |

Foreword

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

The contents of the present document are subject to continuing work within the TSG and may change following formal TSG approval. Should the TSG modify the contents of the present document, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

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].

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.

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 | B | Security Attributes | 3.0.0 | 3.1.0 |
| | | TP-000013 | 002 | 2 | B | Incorporation of the USAT (USIM application toolkit) features. | | |
| | | TP-000013 | 003 | 3 | B | File Control Parameters | | |
| | | TP-000013 | 004 | 1 | F | Coding of status words | | |
| | | TP-000013 | 006 | | B | Definition of application session related procedures | | |
| | | TP-000013 | 007 | | D | Collection of 31.101 editorial changes | | |
| | | TP-000013 | 008 | | C | Power consumption | | |
| | | TP-000013 | 009 | | F | Changes to UICC specific files | | |
| | | TP-000013 | 010 | | F | Reservation of file IDs | | |
| | | 2000-07 | TP-08 | TP-000094 | 011 | | | |
| 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 | 014 | | | | F | Clarification of the UICC characteristics byte | | |
| TP-000094 | 015 | | | | F | Correction of ACTIVATE/DEACTIVATE commands | | |
| TP-000094 | 016 | | | | F | Clarification of the file descriptor | | |
| TP-000094 | 017 | | | | F | Selection by path correction | | |
| TP-000094 | 018 | | | 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 |

History

| Document history | | |
|-------------------------|------------|-------------|
| V4.0.0 | March 2001 | Publication |
| | | |
| | | |
| | | |
| | | |