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**Universal Mobile Telecommunications System (UMTS);  
LTE;  
UICC-terminal interface;  
Physical and logical characteristics  
(3GPP TS 31.101 version 13.1.0 Release 13)**



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## Introduction

The present document defines a generic Terminal/Integrated Circuit Card (ICC) interface for 3GPP applications. The present document is based on ETSI TS 102 221 [1], which defines a generic platform for any IC card application. The functionality provided by this platform may be operated either over the electrical interface specified in ETSI TS 102 221 [1], or by transporting APDUs over the Inter-Chip USB Terminal/ICC interface specified in ETSI TS 102 600 [7].

Requirements that are common to all 3GPP smart card based applications are also listed in this specification.

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.

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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.

For the avoidance of doubt, references to clauses of ETSI TS 102 221 [1] include all the subclauses of that clause, unless specifically mentioned.

The target specification ETSI TS 102 221 [1] contains material that is outside of the scope of 3GPP requirements and the present document indicates which parts are in the scope and which are not.

A 3GPP ME may support functionality that is not required by 3GPP, but the requirements to do so are outside of the scope of 3GPP.

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# 2 References

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- [1] ETSI TS 102 221 V13.0.0: "Smart Cards; UICC-Terminal interface; Physical and logical characteristics".
- [2] 3GPP TS 31.102: "Characteristics of the USIM Application".
- [3] ETSI TS 101 220: "Smart cards; ETSI numbering system for telecommunication application providers".
- [4] Void.
- [5] ITU-T Recommendation T.50: "International Reference Alphabet (IRA) (Formerly International Alphabet No. 5 or IA5) - Information technology - 7-bit coded character set for information interchange".
- [6] 3GPP TS 24.008: "Mobile Radio Interface Layer 3 specification; Core Network Protocols; Stage 3".
- [7] ETSI TS 102 600 V7.6.0: "Smart cards; UICC-Terminal interface; Characteristics of the USB interface".