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Technical Specification

**Digital cellular telecommunications system (Phase 2+);
Universal Mobile Telecommunications System (UMTS);
Security mechanisms for the (U)SIM application toolkit;
Stage 2
(3GPP TS 23.048 version 5.9.0 Release 5)**



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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
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1 Scope

The present document specifies the structure of the Secured Packets in a general format and in implementations using Short Message Service Point to Point (SMS-PP) and Short Message Service Cell Broadcast (SMS-CB).

Furthermore, the coding is specified for a set of common application commands within the secured packets. This set is a subset of commands specified in 3GPP TS 51.011 [5] and allows remote management of files on the UICC in conjunction with SMS and the Data Download to UICC feature of 3GPP TS 31.111.

For UICCs based on 3GPP TS 43.019 [15], the set of commands used in the remote applet management is defined in the present document. This is based on the Open Platform card management specification [14]. For UICCs based on other technologies, other loading mechanisms may be used.

The present document is applicable to the exchange of secured packets between an entity in a 3G or GSM PLMN and an entity in the UICC.

Secured Packets contain application messages to which certain mechanisms according to 3GPP TS 22.048 have been applied. Application messages are commands or data exchanged between an application resident in or behind the 3G or GSM PLMN and on the UICC. The Sending/Receiving Entity in the 3G or GSM PLMN and the UICC are responsible for applying the security mechanisms to the application messages and thus turning them into Secured Packets.

2 References

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- [1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".
- [2] 3GPP TS 22.048: "Security mechanisms for the (Universal) Subscriber Interface Module (U)SIM Application Toolkit; Stage 1".
- [3] 3GPP TS 23.040: "Technical realization of the Short Message Service (SMS)".
- [4] 3GPP TS 24.011: "Point-to-Point (PP) Short Message Service (SMS) support on mobile radio interface".
- [5] 3GPP TS 51.011 Release 4: "Specification of the Subscriber Identity Module - Mobile Equipment (SIM - ME) interface".
- [6] 3GPP TS 31.111: "USIM Application Toolkit (USAT)".
- [7] ISO/IEC 7816-4: "Information technology - Identification cards - Integrated circuit cards - Part 4: Organization, security and commands for interchange".
- [8] Void
- [9] ISO 8731-1 (1987): "Banking - Approved algorithms for message authentication - Part 1: DEA".
- [10] ISO/IEC 10116 (1997): "Information technology - Security techniques - Modes of operation for an n-bit block cipher".
- [11] 3GPP TS 23.041: "Technical realization of Cell Broadcast Service (CBS)".