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Technical Specification

**Digital cellular telecommunications system (Phase 2+);
Security mechanisms for SIM application toolkit;
Stage 2
(3GPP TS 03.48 version 8.9.0 Release 1999)**

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GLOBAL SYSTEM FOR
MOBILE COMMUNICATIONS

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Foreword

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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 TS 11.11 [5] and allows remote management of files on the Subscriber Identity Module (SIM) in conjunction with SMS and the SIM Data Download feature of TS 11.14 [6].

For SIM cards based on TS 03.19 [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 SIM cards 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 GSM PLMN and an entity in the SIM.

Secured Packets contain application messages to which certain mechanisms according to TS 02.48 [2] have been applied. Application messages are commands or data exchanged between an application resident in or behind the GSM PLMN and on the SIM. The Sending/Receiving Entity in the GSM PLMN and the SIM are responsible for applying the security mechanisms to the application messages and thus turning them into Secured Packets.

2 References

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2.1 Normative references

- [1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".
- [2] 3GPP TS 02.48: "Security Mechanisms for the SIM Application Toolkit - Stage 1".
- [3] 3GPP TS 23.040: "Technical realization of the Short Message Service (SMS) Point-to-Point (PP)".
- [4] 3GPP TS 24.011: "Point-to-Point (PP) Short Message Service (SMS) support on mobile radio interface".
- [5] 3GPP TS 11.11: "Specification of the Subscriber Identity Module - Mobile Equipment (SIM - ME) interface".
- [6] 3GPP TS 11.14: "Specification of the SIM Application Toolkit for the Subscriber Identity Module - Mobile Equipment (SIM - ME) interface".
- [7] ISO/IEC 7816-4: "Identification cards - Integrated circuit cards - Part 4: Organization, security and commands for interchange".
- [8] ISO/IEC 7816-6: "Identification cards -- Integrated circuit cards - Part 6: Interindustry data elements for interchange".
- [9] ISO 8731-1:1987 "Banking -- Approved algorithms for message authentication -- Part 1: DEA".