



SLOVENSKI STANDARD SIST ETS 300 506 E2:2003

01-december-2003

8 [[[HJb]`W] b]`hY`_ca i b]_UW`g_]`g]ghYa `fZuU&L`E`J Ufbcgfb]`j]X_]`f] GA`\$&`\$- ž
fUh`]]WJ(`("%&

Digital cellular telecommunications system (Phase 2); Security aspects (GSM 02.09
version 4.4.1)

iTeh STANDARD PREVIEW
(standards.iteh.ai)

Ta slovenski standard je istoveten z: **ETS 300 506 Edition 2**
<https://standards.iteh.ai/catalog/standards/sist/9cc021b1-71e4-410d-953e-d66c4df16f2e/sist-ets-300-506-e2-2003>

ICS:

33.070.50	Globalni sistem za mobilno telekomunikacijo (GSM)	Global System for Mobile Communication (GSM)
-----------	--	---

SIST ETS 300 506 E2:2003

en

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST ETS 300 506 E2:2003

<https://standards.iteh.ai/catalog/standards/sist/9ec021b1-71e4-410d-953e-d66c4df16f2e/sist-ets-300-506-e2-2003>



EUROPEAN
TELECOMMUNICATION
STANDARD

ETS 300 506

January 1998

Second Edition

Source: SMG

Reference: RE/SMG-010209PR1

ICS: 33.020

Key words: Digital cellular telecommunications system, Global System for Mobile communications (GSM)



**Digital cellular telecommunications system (Phase 2);
Security aspects
(GSM 02.09 version 4.4.1)**

ETSI

European Telecommunications Standards Institute

ETSI Secretariat

Postal address: F-06921 Sophia Antipolis CEDEX - FRANCE

Office address: 650 Route des Lucioles - Sophia Antipolis - Valbonne - FRANCE

X.400: c=fr, a=atlas, p=etsi, s=secretariat - **Internet:** secretariat@etsi.fr

Tel.: +33 4 92 94 42 00 - Fax: +33 4 93 65 47 16

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 1998. All rights reserved.

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST ETS 300 506 E2:2003

<https://standards.iteh.ai/catalog/standards/sist/9ec021b1-71e4-410d-953e-d66c4df16f2e/sist-ets-300-506-e2-2003>

Contents

Foreword	5
1 Scope	7
1.1 Normative references	7
1.2 Abbreviations	7
2 General.....	8
3 Security features provided in a GSM PLMN.....	8
3.1 Subscriber identity confidentiality.....	8
3.1.1 Definition	8
3.1.2 Purpose	8
3.1.3 Functional requirements.....	9
3.2 Subscriber identity authentication	9
3.2.1 Definition	9
3.2.2 Purpose	9
3.2.3 Functional requirements.....	9
3.2.4 Authentication during a malfunction of the network	10
3.3 User data confidentiality on physical connections (Voice and Non-voice).....	10
3.3.1 Definition	10
3.3.2 Purpose	10
3.3.3 Functional requirements.....	10
3.4 Connectionless user data confidentiality.....	11
3.4.1 Definition	11
3.4.2 Purpose	11
3.4.3 Functional requirements.....	11
3.5 Signalling information element confidentiality	11
3.5.1 Definition	11
3.5.2 Purpose	11
3.5.3 Functional requirements.....	11
History.....	12

Blank page

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST ETS 300 506 E2:2003](https://standards.iteh.ai/catalog/standards/sist/9ec021b1-71e4-410d-953e-d66c4df16f2e/sist-ets-300-506-e2-2003)

<https://standards.iteh.ai/catalog/standards/sist/9ec021b1-71e4-410d-953e-d66c4df16f2e/sist-ets-300-506-e2-2003>

Foreword

This European Telecommunication Standard (ETS) has been produced by the Special Mobile Group (SMG) of the European Telecommunications Standards Institute (ETSI).

This ETS defines security features within the digital cellular telecommunications system.

The specification from which this ETS has been derived was originally based on CEPT documentation, hence the presentation of this ETS may not be entirely in accordance with the ETSI/PNE Rules.

Transposition dates	
Date of adoption of this ETS:	5 December 1997
Date of latest announcement of this ETS (doa):	30 April 1998
Date of latest publication of new National Standard or endorsement of this ETS (dop/e):	31 October 1998
Date of withdrawal of any conflicting National Standard (dow):	31 October 1998

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST ETS 300 506 E2:2003](https://standards.iteh.ai/catalog/standards/sist/9ec021b1-71e4-410d-953e-d66c4df16f2e/sist-ets-300-506-e2-2003)

<https://standards.iteh.ai/catalog/standards/sist/9ec021b1-71e4-410d-953e-d66c4df16f2e/sist-ets-300-506-e2-2003>

Blank page

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST ETS 300 506 E2:2003

<https://standards.iteh.ai/catalog/standards/sist/9ec021b1-71e4-410d-953e-d66c4df16f2e/sist-ets-300-506-e2-2003>

1 Scope

Bearer and Teleservices, as respectively defined in GSM 02.02 and GSM 02.03, are the objects which the GSM PLMN operators offer to their customers. Besides these basic telecommunications services, features which aim at up-grading these basic services need also to be offered. Due to the use of radiocommunications in a PLMN, which are of a special nature compared to classical distribution transmission techniques used in the fixed networks, such a category of features is related to security aspects.

In a GSM PLMN, both the users and the network operator have to be protected against undesirable intrusion of third parties. However, measures should be provided for in order to insure maximum protection of the rights of the individuals concerns. As a consequence, a security feature is either a supplementary service to Tele or Bearer services, which can be selected by the subscriber, or a network function involved in the provision of one or several telecommunication services.

The purpose of this European Telecommunication Standard (ETS) is to define the security features which are to be available in a GSM PLMN, together with the associated levels of protection. This ETS is only concerned with those security features which aim at the up-grading of the security in a GSM PLMN. In particular, end-to-end security is outside the scope of this ETS.

The implementation aspects of security features are described in GSM 03.20.

1.1 Normative references

This ETS incorporates by dated and undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this ETS only when incorporated in it by amendment or revision. For undated references, the latest edition of the publication referred to applies.

- [1] GSM 01.04 (ETR 100): "Digital cellular telecommunications system (Phase 2); Abbreviations and acronyms".
- [2] GSM 02.02 (ETS 300 501): "Digital cellular telecommunications system (Phase 2); Bearer Services (BS) supported by a GSM Public Land Mobile Network (PLMN)".
- [3] GSM 02.03 (ETS 300 502): "Digital cellular telecommunications system (Phase 2); Teleservices supported by a GSM Public Land Mobile Network (PLMN)".
- [4] GSM 03.20 (ETS 300 534): "Digital cellular telecommunications system (Phase 2); Security related network functions".
- [5] GSM 11.11 (ETS 300 608): "Digital cellular telecommunications system (Phase 2); Specification of the Subscriber Identity Module - Mobile Equipment (SIM - ME) interface".

1.2 Abbreviations

Abbreviations used in this ETS are listed in GSM 01.04.