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Digital cellular telecommunications system (Phase 2) (GSM); Organization of subscriber data (GSM 03.08)

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Foreword

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

This ETS defines the organisation of subscriber data for the Digital cellular telecommunications system (Phase 2). This ETS corresponds to GSM Technical Specification (GSM-TS) GSM 03.08 version 4.8.0.

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.

Reference is made within this ETS to GSM-TSs (NOTE).

Transposition dates	
Date of adoption of this ETS:	4 October 1996
Date of latest announcement of this ETS (doa):	31 January 1997
Date of latest publication of new National Standard or endorsement of this ETS (dop/e):	31 July 1997
Date of withdrawal of any conflicting National Standard (dow):	31 July 1997

NOTE: TC SMG has produced documents which give the technical specifications for the implementation of the Digital cellular telecommunications system. Historically, these documents have been identified as GSM Technical Specifications (GSM-TSs). These TSs may have subsequently become I-ETSS (Phase 1), or ETSSs (Phase 2), whilst others may become ETSI Technical Reports (ETRs). GSM-TSs are, for editorial reasons, still referred to in GSM ETSs.
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0 Scope

The scope of this ETS is to provide details concerning information to be stored in home location registers and visitor location registers concerning mobile subscriber.

Section 2 contains all details concerning the definition of the parameters, often given by reference to other specifications, and where the parameter is to be stored.

Table 1 in section 3 gives a summary overview and section 4 identifies the reference information required for accessing the information.

0.1 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)".
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- [4] GSM 02.04 (ETS 300 503): "Digital cellular telecommunications system (Phase 2); General on supplementary services".
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- [5] <https://standards.iteh.ai/stake/standard/sist/ets-300-523-a6035ccb6f7/sist-ets-300-523-e2-2003>
GSM 03.03 (ETS 300 523): "Digital cellular telecommunications system (Phase 2); Numbering, addressing and identification".
- [6] GSM 03.07 (ETS 300 525): "Digital cellular telecommunications system (Phase 2); Restoration procedures".
- [7] GSM 03.09 (ETS 300 527): "Digital cellular telecommunications system (Phase 2); Handover procedures".
- [8] GSM 03.12 (ETS 300 530): "Digital cellular telecommunications system (Phase 2); Location registration procedures".
- [9] GSM 03.15 (ETS 300 533): "Digital cellular telecommunications system (Phase 2); Technical realization of operator determined barring".
- [10] GSM 03.20 (ETS 300 534): "Digital cellular telecommunications system (Phase 2); Security related network functions".
- [11] GSM 03.40 (ETS 300 536): "Digital cellular telecommunications system (Phase 2); Technical realization of the Short Message Service (SMS) Point to Point (PP)".
- [12] GSM 03.81 (ETS 300 542): "Digital cellular telecommunications system (Phase 2); Line identification supplementary services - Stage 2".
- [13] GSM 03.82 (ETS 300 543): "Digital cellular telecommunications system (Phase 2); Call Forwarding (CF) supplementary services - Stage 2".

- [14] GSM 03.83 (ETS 300 544): "Digital cellular telecommunications system (Phase 2); Call Waiting (CW) and Call Hold (HOLD) supplementary services - Stage 2".
- [15] GSM 03.84 (ETS 300 545): "Digital cellular telecommunications system (Phase 2); MultiParty (MPTY) supplementary services - Stage 2".
- [16] GSM 03.85 (ETS 300 546): "Digital cellular telecommunications system (Phase 2); Closed User Group (CUG) supplementary services - Stage 2".
- [17] GSM 03.86 (ETS 300 547): "Digital cellular telecommunications system (Phase 2); Advice of Charge (AoC) supplementary services - Stage 2".
- [18] GSM 03.88 (ETS 300 548): "Digital cellular telecommunications system (Phase 2); Call Barring (CB) supplementary services - Stage 2".
- [19] GSM 03.90 (ETS 300 549): "Digital cellular telecommunications system (Phase 2); Unstructured supplementary services operation - Stage 2".
- [20] GSM 04.08 (ETS 300 557): "Digital cellular telecommunications system (Phase 2); Mobile radio interface layer 3 specification".
- [21] GSM 09.02 (ETS 300 599): "Digital cellular telecommunications system (Phase 2); Mobile Application Part (MAP) specification".
- [22] GSM 09.07 (ETS 300 604): "Digital cellular telecommunications system (Phase 2); General requirements on interworking between the Public Land Mobile Network (PLMN) and the Integrated Services Digital Network (ISDN) or Public Switched Telephone Network (PSTN)".
- [23] GSM 12.03 (ETS 300 614): "Digital cellular telecommunications system (Phase 2); Security management".
- [24] GSM 12.08 (ETS 300 627): "Digital cellular telecommunications system (Phase 2); Subscriber and Equipment Trace".
- [25] CCITT Recommendation Q.763: "Specifications of Signalling System No.7; Formats and codes".

0.2 Abbreviations

Abbreviations used in this specification are listed in GSM 01.04.

1 Introduction

1.1 Definition

The term subscriber data is used to designate all information associated with a subscription which is required for service provisions, identification, authentication, routing, call handling, charging, subscriber tracing, operation and maintenance purposes. Some subscriber data are referred to as permanent subscriber data, i.e. they can only be changed by administration means. Other data are temporary subscriber data which may change as a result of normal operation of the system.

Unless shown to be conditional, all data items are considered to be mandatory.

1.2 Storage facilities

This Technical Specification considers subscriber data stored in two types of functional unit:

- Home location register (HLR) which contains all permanent subscriber data and all relevant temporary subscriber data for all mobile subscribers permanently registered in the HLR.
- Visitor location register (VLR) which contains all subscriber data required for call handling and other purposes for mobile subscribers currently located in the area controlled by the VLR.

1.3 Subscriber data in functional units other than the HLR & the VLR

The individual Subscriber Authentication Key Ki defined in Technical Specification GSM 03.20 is stored in the Authentication Centre AuC; it is also stored in the SIM and therefore available in the MS. Version numbers of algorithms A3 and A8 may also be stored in the AuC.

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NOTE: It is for further study whether or not other types of functional units containing mobile subscriber parameters are to be included in this Recommendation. Such units could include encryption key distribution centres, maintenance centres, etc.

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