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Digital cellular telecommunications system (Phase 2) (GSM); Event and call data (GSM 12.05)

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ICS:

33.070.50	Globalni sistem za mobilno telekomunikacijo (GSM)	Global System for Mobile Communication (GSM)
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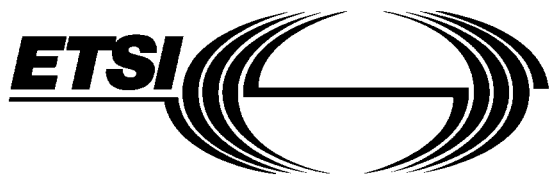
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**Digital cellular telecommunications system (Phase 2);
Subscriber related event and call data
(GSM 12.05)**

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Foreword

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

This ETS describes the administration of subscriber related event and call data within the Digital cellular telecommunications system. This ETS corresponds to GSM technical specification, GSM 12.05, version 4.2.1.

The specification from which this ETS has been derived was originally based on GSM Phase 1 documentation, hence the presentation of this ETS is not entirely in accordance with the ETSI/PNE rules.

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

Proposed transposition dates	
Date of adoption of this ETS:	06 June 1996
Date of latest announcement of this ETS (doa):	26 September 1996
Date of latest publication of new National Standard or endorsement of this ETS (dop/e):	27 March 1997
Date of withdrawal of any conflicting National Standard (dow):	27 March 1997

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1. Scope

This European Telecommunication Standard (ETS) is concerned with the administration of subscriber related event and call data. This includes both the collection of call data from, and the distribution of tariff data to, the network elements.

The subscriber (IMSI) and mobile equipment (IMEI) related call and event data collected is employed by a number of management activities including billing & accounting, statistical analysis and customer care.

The tariff data in the network elements is required to support the supplementary service "Advice of Charge".

The aim of this ETS is to describe both the network management functions required and the data involved.

2. Normative references

This ETS incorporates by dated or 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] CCITT D.93 (1988): " Charging & Accounting in the international land mobile telephone service provided via cellular radio systems".
- [2] CCITT E.164 (1988): " Numbering Plan for the ISDN Era".
- [3] CCITT M.3010: " Principles for a telecommunications management network".
- [4] CCITT M.3200: " TMN Management Services: Overview".
- [5] CCITT X.721 (ISO/IEC 10165-2) (1992): " Information technology - Open Systems Interconnection - Structure of management information: Definition of management information".
- [6] CCITT X.722 (ISO/IEC 10165-4) (1992): " Information technology - Open Systems Interconnection - Structure of Management Information: Guidelines for the definition of managed objects".
- [7] CCITT X.730 (ISO/IEC 10164-1): "Information technology - Open Systems Interconnection - Systems Management: Object Management Function".
- [8] CCITT X.731 (ISO/IEC 10164-2): "Information technology - Open Systems Interconnection - Systems Management: State Management Function".
- [9] CCITT X.733: "Information technology - Open Systems Interconnection - Systems Management: Alarm reporting function".
- [10] CCITT X.734 (ISO/IEC 10164-5): "Information technology - Open Systems Interconnection - Systems Management: Event Report Management Function".
- [11] CCITT X.735 (ISO/IEC 10164-6): "Information technology - Open Systems Interconnection - Systems Management: Log Control Function".
- [12] GSM 02.24 (ETS 300 510): "Digital cellular telecommunication system (Phase 2); Description of Charge Advice Information (CAI)".
- [13] GSM 02.86 (ETS 300 519): "Digital cellular telecommunication system (Phase 2); Advice of charge (AoC) supplementary services - Stage 1".

- [14] GSM 03.03 (ETS 300 523): "Digital cellular telecommunication system (Phase 2); Numbering, addressing and identification".
- [15] GSM 03.40 (ETS 300 536): "Digital cellular telecommunication system (Phase 2); Technical realization of the Short Message Service (SMS) Point to Point (PP)".
- [16] GSM 04.08 (ETS 300 557): "Digital cellular telecommunication system (Phase 2); Mobile radio interface layer 3 specification".
- [17] GSM 09.02 (ETS 300 599): "Digital cellular telecommunication system (Phase 2); Mobile Application Part (MAP) specification".
- [18] GSM 12.00 (ETS 300 612-1): "Digital cellular telecommunication system (Phase 2); Objectives and structure of Network Management (NM)".
- [19] GSM 12.01 (ETS 300 612-2): "Digital cellular telecommunication system (Phase 2); Common aspects of GSM Network Management (NM)".
- [20] GSM 12.02 (ETS 300 613): "Digital cellular telecommunication system (Phase 2); Subscriber, Mobile Equipment (ME) and services data administration".
- [21] ETS 300 196-1 (1993): "Integrated Services Digital Network (ISDN); Generic functional protocol for the support of supplementary services; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".

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3. Definitions

For the purposes of this ETS the following definitions apply.

accounting meter record: A record containing one or more counters employed to register the usage of resources en masse. Includes simple event counters and/ or cumulative call second counters.

advice of charge: The real-time display of the network utilisation charges incurred by the Mobile Station. The charges are displayed in the form of charging units. If a unit price is stored by the MS then the display may also include the equivalent charge in the home currency.

aoc service: A combination of one or more services, both basic and supplementary, together with a number of other charging relevant parameters to define a customised service for the purpose of advice of charge.

call data: One or more call records.

call record: A set of parameters related to one call attempt.

charging calendar: One or more date definitions each of which assigns a day class to a particular day.

charging destination: Also referred to as a destination for charging, this is a nominal reference defining the point of termination of a connection for charging purposes.

charging origin: A nominal reference defining the point of origin of a connection for charging purposes.

charging zone: A distance class (e.g. "local" and "long distance") defined by one or more combinations of charging origins and charging destinations.

day class: A group of days for which the same tariff switch-over pattern applies e.g. public holidays

event data: One or more event records.

event record: A set of parameters related to a single telecommunications event.

observed IMEI ticket: A record used to describe an EIR relevant event e.g. a blacklisted IMEI

service distance dependency: The relationship between an AoC service, a charging zone and the relevant tariff class.

successful call: A connection that reaches the communication or data transfer phase e.g. the "answered" state for speech connections. All other connection attempts are regarded as unsuccessful.

tariff: A set of parameters defining the network utilisation charges for the use of a particular service.

tariff class: A grouping of one or more service distance dependencies for the purpose of defining the corresponding tariff switching patterns.

tariff period: A part of one (calendar) day during which a particular tariff is applied. Defined by the time at which the period commences (the switch-over time) and the tariff to be applied after switch-over.

tariff switch-over pattern: A set of tariff periods defining the tariffs to be applied over one complete 24 hour period (calendar day).