

ETSI TS 132 250 V13.0.0 (2016-02)



**Digital cellular telecommunications system (Phase 2+);
Universal Mobile Telecommunications System (UMTS);
LTE;
Telecommunication management;
Charging management;
Circuit Switched (CS) domain charging
(3GPP TS 32.250 version 13.0.0 Release 13)**



Reference

RTS/TSGS-0532250vd00

Keywords

GSM,LTE,UMTS

ETSI

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Foreword

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Foreword

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1 Scope

The present document is part of a series of Technical Specifications (TSs) that specify charging functionality and charging management in GSM/UMTS networks. The GSM/UMTS core network charging architecture and principles are specified in TS 32.240 [1], which provides an umbrella for other charging management TSs that specify:

- the content of the CDRs per domain and subsystem (offline charging);
- the content of real-time charging messages per domain / subsystem (online charging);
- the functionality of online and offline charging for those domains and subsystems;
- the interfaces that are used in the charging framework to transfer the charging information (i.e. CDRs or charging events).

The complete document structure for these TSs is defined in TS 32.240 [1].

The present document specifies the Offline Charging description for the 3GPP Circuit Switched domain, based on the functional descriptions of the 3GPP bearer-, tele- and supplementary services in TS 22.002 [200], TS 22.003 [201] and TS 22.004 [202], respectively. This charging description includes the offline charging architecture and scenarios specific to the CS domain, as well as the mapping of the common charging architecture specified in TS 32.240 [1] onto the CS domain. It further specifies the structure and content of the CDRs for offline charging. The present document is related to other 3GPP charging TSs as follows:

- The common 3GPP charging architecture is specified in TS 32.240 [1];
- The parameters, abstract syntax and encoding rules for these CDR types are specified in TS 32.298 [51].
- The file based mechanism used to transfer the CDRs from the network to the operator's billing domain (e.g. the billing system or a mediation device) is specified in TS 32.297 [52].

Note that online charging for the CS domain is solely based on CAMEL (TS 23.078 [207] and TS 29.078 [213]) and therefore outside the scope of the 32 series of charging specifications.

All terms, definitions and abbreviations used in the present document, that are common across 3GPP TSs, are defined in TR 21.905 [100]. Those that are common across charging management in GSM/UMTS domains, services or subsystems are provided in the umbrella document TS 32.240 [1] and are copied into clause 3 of the present document for ease of reading. Finally, those items that are specific to the present document are defined exclusively in the present document.

Furthermore, requirements that govern the charging work are specified in TS 22.115 [101].

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
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- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

[1] 3GPP TS 32.240: "Telecommunication management; Charging management; Charging architecture and principles".

[2]-[22] Void.

[23] 3GPP TS 24.086: "Advice of Charge (AoC) Supplementary Service; Stage 3".