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TECHNICAL SPECIFICATION

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Digital cellular telecommunications system (Phase 2+) (GSM);  
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Control Plane (CP) data transfer domain charging  
(3GPP TS 32.253 version 14.0.0 Release 14)**



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# 1 Scope

The present document is part of a series of documents that specify charging functionality and charging management in GSM/UMTS/LTE networks. The GSM/UMTS/LTE 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 / subsystem / service (offline charging);
- the content of real-time charging messages per domain / subsystem / service (online charging);
- the functionality of online and offline charging for those domains / subsystems / services;
- 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 and online charging description for Control Plane (CP) data transfer domain, based on the functional stage 2 description in TS 23.682 [243] for Non-IP Data Delivery (NIDD) using SCEF procedures. This charging description includes the offline and online charging architecture and scenarios specific to Control Plane (CP) data transfer domain, as well as the mapping of the common 3GPP charging architecture specified in TS 32.240 [1] onto the Control Plane (CP) data transfer 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 the CDRs are specified in TS 32.298 [51].
- A transaction based mechanism for the transfer of CDRs within the network is specified in TS 32.295 [54].
- 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].
- The 3GPP Diameter application that is used for Control Plane (CP) data transfer domain offline and online charging is specified in TS 32.299 [50].

Control Plane (CP) data transfer is also provided by Short Message Service (SMS), for which charging functionalities are not specified in the present document. SMS charging functionality is defined for Circuit Switched domain in TS 32.250 [10], for Packet Switched domain in TS 32.251 [11] and for SMS Nodes in TS 32.274 [34].

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# 2 References

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

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

[2] - [9] Void.

[10] 3GPP TS 32.250: "Telecommunication management; Charging management; Circuit Switched (CS) domain charging".