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Foreword

This Technical Specification has been produced by the 3rd Generation Partnership Project (3GPP).

The contents of the present document are subject to continuing work within the TSG and may change following formal TSG approval. Should the TSG modify the contents of the present document, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

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- y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.
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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 documents 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 in detail the Diameter based offline and online charging applications for 3GPP networks. It includes all charging parameters, scenarios and message flows..

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].