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## Foreword

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# Contents

Intellectual Property Rights .....	2
Foreword.....	2
Modal verbs terminology.....	2
Foreword.....	6
1 Scope .....	7
2 References .....	8
3 Definitions, symbols and abbreviations .....	10
3.1 Definitions .....	10
3.2 Symbols.....	12
3.3 Abbreviations .....	13
4 Architecture considerations .....	15
4.1 High level EPS architecture.....	15
4.2 PS domain offline charging architecture .....	16
4.3 PS domain online charging architecture.....	18
5 PS domain charging principles and scenarios .....	19
5.1 PS charging principles.....	19
5.1.1 Requirements .....	19
5.1.2 Charging information.....	21
5.1.3 Identifiers and correlation.....	22
5.2 PS domain offline charging scenarios .....	23
5.2.1 Basic principles.....	23
5.2.1.1 IP-CAN bearer charging .....	23
5.2.1.2 MM context charging .....	24
5.2.1.3 Flow Based bearer Charging (FBC).....	24
5.2.1.4 SMS charging.....	26
5.2.1.5 LCS charging .....	27
5.2.1.6 MBMS context charging for GPRS .....	27
5.2.1.6A MBMS context charging for EPS.....	27
5.2.1.7 IP Flow Mobility (IFOM) Charging.....	28
5.2.2 Rf message flows .....	28
5.2.2.1 Triggers for charging events from S-GW.....	28
5.2.2.2 Triggers for charging events from P-GW.....	28
5.2.3 CDR generation .....	29
5.2.3.1 Triggers for S-CDR charging information collection .....	30
5.2.3.1.1 Triggers for S-CDR Charging Information Addition .....	30
5.2.3.1.2 Triggers for S-CDR closure.....	31
5.2.3.2 Triggers for M-CDR charging information collection .....	31
5.2.3.2.1 Triggers for M-CDR charging information addition .....	32
5.2.3.2.2 Triggers for M-CDR closure .....	32
5.2.3.3 Triggers for SGW-CDR charging information collection.....	32
5.2.3.3.1 Triggers for SGW-CDR Charging Information Addition.....	33
5.2.3.3.2 Triggers for SGW-CDR closure.....	34
5.2.3.4 Triggers for PGW-CDR charging information collection.....	34
5.2.3.4.1 Triggers for PGW-CDR Charging Information Addition.....	35
5.2.3.4.2 Triggers for PGW-CDR closure .....	36
5.2.3.5 Triggers for SMS-CDR charging information collection.....	36
5.2.3.6 Triggers for LCS-CDR charging information collection .....	37
5.2.3.7 Triggers for S-MB-CDR and G-MB-CDR charging information collection for MBMS context charging for GPRS .....	37
5.2.3.7.1 Triggers for S-MB-CDR and G-MB-CDR Charging Information Creation.....	37
5.2.3.7.2 Triggers for S-MB-CDR and G-MB-CDR Charging Information Addition .....	37
5.2.3.7.3 Triggers for S-MB-CDR and G-MB-CDR closure.....	38

5.2.3.7A	Triggers for MBMS-GW-CDR charging information collection for MBMS context charging for EPS.....	38
5.2.3.7A.1	Triggers for MBMS-GW-CDR Charging Information Creation .....	38
5.2.3.7A.2	Triggers for MBMS-GW-CDR Charging Information Addition.....	38
5.2.3.7A.3	Triggers for MBMS-GW-CDR closure .....	39
5.2.4	Void .....	39
5.2.5	Ga record transfer flows .....	39
5.2.6	Bp CDR file transfer .....	39
5.3	PS domain online charging scenarios.....	39
5.3.1	Basic principles.....	39
5.3.1.1	IP-CAN bearer charging .....	40
5.3.1.2	Flow Based Bearer Charging .....	40
5.3.1.3	PS Furnish Charging Information procedure .....	41
5.3.1.4	Support of Failure Situations.....	41
5.3.2	Ro message flows .....	42
5.3.2.1	Triggers for IP-CAN bearer Online Charging.....	42
5.3.2.1.1	Void.....	42
5.3.2.1.2	Void.....	42
5.3.2.2	Triggers for FBC Online Charging .....	42
5.3.2.2.1	Triggers for starting and stopping an FBC Credit Control session.....	43
5.3.2.2.2	Triggers for providing interim information for an FBC Credit Control session.....	43
5.3.2.3	PS Furnish Charging Information procedure .....	44
5.3.2.4	Support of Failure Situations.....	44
6	Definition of charging information .....	45
6.1A	Rf message content .....	45
6.1A.1	Summary of Offline Charging Message Formats.....	45
6.1A.2	Structure for the Accounting Message Formats .....	45
6.1A.2.1	Accounting-Request Message .....	45
6.1A.2.2	Accounting-Answer Message.....	47
6.1B	CDR content description on Bp interface .....	47
6.1.1	IP CAN bearer charging data in SGSN (S-CDR) .....	48
6.1.2	IP CAN bearer charging data in S-GW (SGW-CDR).....	49
6.1.3	FBC IP CAN bearer charging data in P-GW (PGW-CDR) .....	51
6.1.4	Mobile Station mobility management data in SGSN (M-CDR) .....	53
6.1.5	SMS-MO data in SGSN (S-SMO-CDR) .....	54
6.1.6	SMS-MT data in SGSN (S-SMT-CDR) .....	55
6.1.7	Mobile terminated location request (LCS-MT-CDR).....	56
6.1.8	Mobile originated Location request (LCS-MO-CDR).....	57
6.1.9	Network induced Location request (LCS-NI-CDR) .....	58
6.1.10	MBMS bearer context charging data in SGSN (S-MB-CDR) .....	59
6.1.11	MBMS bearer context charging data in GGSN (G-MB-CDR).....	60
6.1.12	MBMS bearer context charging data in MBMS GW (MBMS-GW-CDR).....	60
6.2	Data description for PS Online Charging .....	61
6.2.1	Diameter message contents.....	61
6.2.1.1	Summary of Online Charging Message Formats .....	61
6.2.1.2	Structure for the Credit Control Message Formats.....	61
6.2.1.2.1	Credit-Control-Request Message .....	61
6.2.1.2.2	Credit-Control-Answer Message.....	62
6.2.2	Void .....	62
6.3	PS Charging Specific Parameters .....	62
6.3.1	Definition of PS charging information.....	62
6.3.1.1	PS charging information assignment for Service Information .....	63
6.3.1.2	Definition of the PS Information.....	63
6.3.2	Detailed Message Format for offline charging .....	65
6.3.3	Detailed Message Format for online charging .....	67
6.4	Void.....	69
6.5	Bindings for EPC Offline Charging .....	69
<b>Annex A (normative):</b>	<b>Charging Characteristics .....</b>	<b>71</b>
A.1	General .....	71
A.2	Charging Characteristics in Gn/Gp SGSN .....	73

A.3	Charging Characteristics in S4-SGSN.....	75
A.4	Charging Characteristics in MME.....	75
A.5	Charging Characteristics in S-GW .....	76
A.6	Charging Characteristics in P-GW .....	76
<b>Annex B (normative):</b>	<b>Tx expiration; Failure Handling procedure and session failover mechanism description .....</b>	<b>77</b>
<b>Annex C (informative):</b>	<b>Bibliography.....</b>	<b>79</b>
<b>Annex D (informative):</b>	<b>Change history .....</b>	<b>80</b>
History .....		84

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# Foreword

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# 1 Scope

The present document is part of a series of documents specifying charging functionality and charging management in Packet Switched networks (GSM/UMTS, EPS). The 3GPP core network charging architecture and principles are specified in 3GPP TS 32.240 [1], which provides an umbrella for other charging management documents 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 3GPP TS 32.240 [1].

The present document specifies the Offline and Online Charging description for the Packet Switched (PS) domain based on the functional stage 2 description in 3GPP TS 23.060 [201], 3GPP TS 23.401[208] and 3GPP TS 23.402 [209]. This charging description includes the offline and online charging architecture and scenarios specific to the PS domain, as well as the mapping of the common 3GPP charging architecture specified in TS 32.240 [1] onto the PS domain. It further specifies the structure and content of the CDRs for offline charging, and the charging events for online 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 PS domain offline and online charging is specified in TS 32.299 [50].

Note that a CAMEL based prepaid function and protocol is also specified for the PS domain (3GPP TS 23.078 [206] and 3GPP TS 29.078 [202]). CAMEL entities and functions are outside the scope of the present document.

All terms, definitions and abbreviations used in the present document, which are common across 3GPP TSs, are defined in 3GPP TR 21.905 [100]. Those that are common across charging management in PS domains, services or subsystems are provided in the umbrella document 3GPP 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 3GPP TS 22.115 [102].