**3GPP TSG-SA5 Meeting #156 *S5-244082rev1***

Maastricht, Netherlands, 19 - 23 August 2024

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| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  |  | **CR** |  | **rev** |  | **Current version:** |  |  |
|  | | | | | | | | |
| *For* [***HE******LP***](http://www.3gpp.org/3G_Specs/CRs.htm#_blank)*on using this form: comprehensive instructions can be found at* [*http://www.3gpp.org/Change-Requests*](http://www.3gpp.org/Change-Requests)*.* | | | | | | | | |
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| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network |  | Core Network | **X** |

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| ***Title:*** | Rel-19 CR TS 32.240 Clarify charging specifications with Nchf | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | MATRIXX Software | | | | | | | | | |
| ***Source to TSG:*** | SA5 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | TEI18 | | | | |  | ***Date:*** | | | 2024-08-07 |
|  |  | | | |  | |  | | |  |
| ***Category:*** |  |  | | | | | ***Release:*** | | | Rel-18 |
|  | *Use one of the following categories:* ***F*** *(correction)* ***A*** *(mirror corresponding to a change in an earlier release)* ***B*** *(addition of feature),* ***C*** *(functional modification of feature)* ***D*** *(editorial modification)*  Detailed explanations of the above categories can be found in 3GPP [TR 21.900](http://www.3gpp.org/ftp/Specs/html-info/21900.htm). | | | | | | | | *Use one of the following releases: Rel-8 (Release 8) Rel-9 (Release 9) Rel-10 (Release 10) Rel-11 (Release 11) … Rel-17 (Release 17) Rel-18 (Release 18) Rel-19 (Release 19)  Rel-20 (Release 20)* | |
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| ***Reason for change:*** | | The Figure 1.1 "Charging specifications structure" provides the complete view of charging specifications series, however it is not visible to which ones Nchf in SBI framework is applicable. | | | | | | | | |
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| ***Summary of change:*** | | Clarify charging TSs Nchf is applicable to | | | | | | | | |
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| ***Consequences if not approved:*** | | It is misleading not ot be able to differentiate to which "domain/subsystem/service specific TSs" Nchf is applicable | | | | | | | | |
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| ***Clauses affected:*** | | 1 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **Y** | **N** |  | | | |  | | |
| ***Other specs*** | |  | **X** | Other core specifications | | | | TS/TR ... CR ... | | |
| ***affected:*** | |  | **X** | Test specifications | | | | TS/TR ... CR ... | | |
| ***(show related CRs)*** | |  | **X** | O&M Specifications | | | | TS/TR ... CR ... | | |
|  | |  | | | | | | | | |
| ***Other comments:*** | |  | | | | | | | | |
|  | |  | | | | | | | | |
| ***This CR's revision history:*** | |  | | | | | | | | |

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| **First change** |

# 1 Scope

The present document is part of a series of documents that specify charging functionality and charging management in 3GPP networks/systems. The 3GPP core network charging architecture and principles are specified in the present document, which thus provides an umbrella for other charging management TSs that specify:

- the content of the CDRs per domain / subsystem /service (offline and converged charging);

- the content of real-time charging events per domain / subsystem /service (online and converged charging);

- the functionality of online, offline and converged 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 purposes of the present document are:

- to lay down common principles of charging in the network; and

- to specify a logical common charging architecture that applies to all 3GPP domains, subsystems and services.

A set of domain/subsystem/service specific TSs covers the domains (CS, PS, 5GS), subsystem (IMS) and service (MMS, LCS, PoC, MBMS, SMS, MMTel, TSN etc.) levels, respectively, in the TS 32.25x, TS 32.26x, TS 32.27x and TS 32.28x TS number ranges. Network Slicing is covered under TS 28.201[70], TS 28.202 [71], TS 28.203 [72] and TS 28.204 [73].These TSs describe the mapping of the common architecture specified in the present document onto the specific domain/subsystem/service and the scenarios and information for online, offline and converged charging that are specific to the domain/subsystem/service. They are commonly referred to as the middle tier charging TSs.

A set of TSs in the TS 32.28x range covers common services, such as the Advice of Charge service.

A set of TSs in the TS 32.29x range covers common aspects, such as CDR parameter and syntax descriptions, online and offline charging applications, converged charging API, and the charging interactions within the network (CDR transfer) as well as between the network and the Billing Domain (CDR file transfer).

The complete document structure for these TSs is outlined in the following figure 1.1:



Figure 1.1: Charging specifications structure

NOTE: TSs which are indicated with "Nchf" in Figure 1.1 are those which include the converged charging architecture.

In addition to 3GPP core networks/systems charging architecture and principles, this document encompasses charging architecture and principles for the convergent scenario (i.e. both the Fixed Broadband Access network and Evolved Packet Core (EPC) owned by a single operator), which is specified in annex C.

All terms, definitions and abbreviations used in the present document, that are common across 3GPP TSs, are defined in the 3GPP Vocabulary, TR 21.905 [100]. Those that are common across charging management in 3GPP network domains, services or subsystems are provided in the present document (umbrella TS), and are copied into clause 3 of the other TSs depicted in the figure 1.1, 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].

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| **End of change** |