**3GPP TSG-SA5 Meeting #156 *S5-244489***

**Maastricht, Netherlands, 19 - 23 August 2024**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.3* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **32.256** | **CR** | **0039** | **rev** | **1** | **Current version:** | **18.4.1** |  |
|  | | | | | | | | |
| *For* [***HELP***](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)*.* | | | | | | | | |
|  | | | | | | | | |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network |  | Core Network | **x** |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | Rel-19 CR 32.256 Addition of NRF discovery reference | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Ericsson LM | | | | | | | | | |
| ***Source to TSG:*** | SA5 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | CHFSeg | | | | |  | ***Date:*** | | | 2024-08-22 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | **B** |  | | | | | ***Release:*** | | | Rel-19 |
|  | *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)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | The NRF discovery have been updated in TS 32.290. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Adding the reference to NRF discovery handling in TS 32.290. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | The CHF selection based on NRF will be incomplete. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 5.1.3, and A.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:*** | | Revision S5-244139 | | | | | | | | |

|  |
| --- |
| **First change** |

5.1.3 CHF selection

The CHF Address(es) selection by the AMF is done during the Registration process, this selection may be based on the following and with priority order depending on Operator's policies:

- CHF Address(es) used for UE context transferred from old AMF.

- CHF address(es) provided by the PCF as part of Access and mobility policy control information.

- UDM provided charging characteristics.

- NRF based discovery.

- AMF locally provisioned charging characteristics.

The UDM provided charging characteristics may be used to indicate CHF instance ID(s), CHF set ID(s) ), CHF Group ID. and that NRF based discovery shall be used, for charging characteristics see annex A and NRF based discovery see TS 32.290 [57] clause 6.1.

Once selected, these CHF Address(es) shall be used as long as the UE is registered in the AMF.

|  |
| --- |
| **Second change** |

A.1 General

A subscriber may have Charging Characteristics assigned to his subscription. Default Charging Characteristics may also be pre-provisioned on the AMF.

During UE Registration, the subscribed Charging Characteristics, if any, shall override the AMF pre-provisioned Charging Characteristics. The subscribed Charging Characteristics may be transferred from old AMF during UE context transfer or retrieved from UDM.

The Charging Characteristics parameter consists of a string of 16 bits designated as behaviours, freely defined by Operators. These behaviours may be things like:

- CHF addresses: to be used by the SMF, optionally with associated CHF instance ID(s), CHF set ID(s), CHF Group ID

- CHF selection method: this indicates how the SMF is to select the CHF instance e.g., local configuration, NRF

- Charging scenario: indicates the charging scenario to be used i.e., ECUR, IEC, PEC, or no charging

- Trigger: the default triggers for the Location reporting charging e.g., TAI, or Cell

One usage may be as a behaviour index associated to Registration, N2 connections and Location reporting in converged charging as described in the example in Table A.1:

**Table A.1.1: Example of Charging Characteristics behaviours for AMF**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  | **Registration charging** | **N2 connections charging** | **Location reporting charging** | |
| **Behaviour Index** | **CHF address** | **CHF selection method** | **Charging scenario** | **Charging scenario** | **Charging scenario** | **Level** |
| 0 | CHF Set ID 1 | NRF | ECUR | - | - |  |
| 1 | Primary & secondary CHF addr.  1 & 2 | Local config. | IEC | PEC | PEC | TAI, Cell |
| 2 | CHF Group ID 1 | NRF | PEC | - | PEC | Cell |
| 3 | Primary & secondary CHF addr. 3 & 4 | Local config. | - | PEC | PEC | TAI |
| … | … |  | … | … | …… | … |



|  |
| --- |
| **End of changes** |