**3GPP TSG-SA5 Meeting #142-e *S5-222369rev2***

**e-meeting, 4 - 12 April 2022**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  |  | **CR** | **0080** | **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:*** | Add charging requirement for SMSF to support NR RedCap | | | | | | | | | |
| ***、*** |  | | | | | | | | | |
| ***Source to WG:*** |  | | | | | | | | | |
| ***Source to TSG:*** | S5 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | ARCH\_NR\_REDCAP | | | | |  | ***Date:*** | | |  |
|  |  | | | |  | |  | | |  |
| ***Category:*** |  |  | | | | | ***Release:*** | | |  |
|  | *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-15 (Release 15) Rel-16 (Release 16) Rel-17 (Release 17) Rel-18 (Release 18)* | |
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| ***Reason for change:*** | | According to clause 5.41 TS 23.501, The NFs interacting with CHF shall include the NR RedCap as RAT type. Therefore, SMSF shall provide the "NR RedCap" as RAT Type to the CHF. | | | | | | | | |
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| ***Summary of change:*** | | Add charging requirement to support NR RedCap. | | | | | | | | |
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| ***Consequences if not approved:*** | | No charging support for NR RedCap. | | | | | | | | |
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| ***Clauses affected:*** | | 5.1.X (New), 6.5.2 | | | | | | | | |
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|  | | **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** |

#### 5.1.X NR REDCAP Charging

For SMS converged online and offline charging scenarios, the SMSF provides for NR RedCap UE using NR the RAT Type NR\_REDCAP, according to clause 5.41 of 3GPP TS 23.501 [201].

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| **Next change** |

### 6.5.2 Definition of SMS charging information

SMS specific charging information used for SMS converged charging is provided within the SMS charging Information.

Table 6.5.2.1: Structure of SMS Charging information

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| Information Element | Category | Description |
| Originator Info | OM | This field is a grouped field and holds information on originator of the SMS |
| Originator SUPI | OM | This field holds the SUPI of the originator of the SMS, if available. This field is present if different from subscriber identifier field. |
| Originator GPSI | O**C** | This field holds the GPSI of the originator of the SMS, if available. |
| Originator Other Address | OM | This field holds the address of the originator of the SMS, when different from SUPI and GPSI, if available: e.g. email, short code.  This field may have multiple occurences. |
| Originator Received Address | O**C** | Described in table 6.3.1.2.1 |
| Originator SCCP Address | O**C** | Described in table 6.3.1.2.1 |
| SM Originator Interface | OM | Described in table 6.3.1.2.1 |
| SM Originator Protocol Id | O**C** | Described in table 6.3.1.2.1: SM Protocol Id information element |
| Recipient Info | OC | Described in table 6.3.1.2.1 |
| Recipient SUPI | OM | This field holds the SUPI of the recipient of the SMS, if available. This field is present if different from subscriber identifier field. |
| Recipient GPSI | O**C** | This field holds the GPSI of the recipient of the SMS, if available. |
| Recipient Other Address | OC | This field holds the address of the recipient of the SMS, when different from SUPI and GPSI, if available: e.g. email, short code.  This field may have multiple occurences |
| Recipient Received Address | OC | Described in table 6.3.1.2.1 |
| Recipient SCCP Address | OC | Described in table 6.3.1.2.1 |
| SM Destination Interface | OM | Described in table 6.3.1.2.1 |
| SM Recipient Protocol Id | OC | Described in table 6.3.1.2.1: SM Protocol Id information element. |
| User Equipment Info | OC | This field holds the identification of the terminal (i.e. PEI, MAC Address) used by the UE the SMS transaction, if available. |
| Roamer In Out | OC | This field holds an indication of the UE is an in-bound roamer. This field is present only if UE is identified as a roamer. |
| User Location Info | OC | Described in table 6.3.1.2.1 |
| UE Time Zone | OC | Described in table 6.3.1.2.1 |
| RAT Type | OC | Described in table 6.3.1.2.1  "NR RedCap" value is also applicable. |
| SMSC Address | OM | Described in table 6.3.1.2.1 |
| SM Data Coding Scheme | OM | Described in table 6.3.1.2.1 |
| SM Message Type | OM | Described in table 6.3.1.2.1 |
| SM Reply Path Requested | OC | Described in table 6.3.1.2.1 |
| SM User Data Header | OC | Described in table 6.3.1.2.1 |
| SM Status | OC | Described in table 6.3.1.2.1 |
| SM Discharge Time | OC | Described in table 6.3.1.2.1 |
| Number of Messages Sent | OC | Described in table 6.3.1.2.1 |
| SM Service Type | OC | Described in table 6.3.1.2.1 |
| SM Sequence Number | OC | Described in table 6.3.1.2.1 |
| SMS result | C | Described in table 6.3.1.2.1 |
| Submission Time | OC | Described in table 6.3.1.2.1 |
| SM Priority | OC | Described in table 6.3.1.2.1 |
| Message Reference | OM | Described in table 6.3.1.2.1 |
| Message Size | OM | Described in table 6.3.1.2.1 |
| Message Class | OM | Described in table 6.3.1.2.1 |
| Delivery Report Requested | OC | Described in table 6.3.1.2.1 |

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| **End of change** |