**3GPP TSG-SA5 Meeting #138-e *S5-215430rev1***

**e-meeting, 23 - 31 August 2021**

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| *CR-Form-v12.1* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **28.531** | **CR** |  | **rev** | **-** | **Current version:** | **17.1.0** |  |
|  | | | | | | | | |
| *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 | **X** | Core Network | **X** |

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|  | | | | | | | | | | |
| ***Title:*** | Clarify service profile modification use case | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | Ericsson | | | | | | | | | |
| ***Source to TSG:*** | S5 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | NETSLICE-PRO\_NS | | | | |  | ***Date:*** | | | 2021-09-07 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | A |  | | | | | ***Release:*** | | | Rel-17 |
|  | *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)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | The allocateNsi operation is not so clear on how to handle in case the operation includes an already existing serviceProfileId.  The allocateNssi operation is not so clear on how to handle in case the operation includes an already existing sliceProfileId. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | Clarify how to handle in case serviceProfile and sliceProfielId exists | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | Misunderstanding of how to handle when allocateNsi/allocateNssi includes an existing or known serviceProfileId or sliceProfileId which may lead to incompatible software implementation. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 6.5.1, 6.5.1.1,  6.5.2, 6.5.2.1 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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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| **1st change** |

## 6.5. Operations of provisioning

### 6.5.1 AllocateNsi operation

#### 6.5.1.1 Description

This operation is invoked by allocateNsi operation service consumer to request the provider to allocate a network slice instance to satisfy network slice related requirements. The provider may create a new NSI or using existing NSI to satisfy the request. The requirements in the request are compared/matched against the actual capabilitites of all candidate NSIs by the provider. If an existing NSI can be found e.g. with the right coverage and with good enough latency, it is eligible for allocation. In case not, or if networkSliceSharingIndicator is equal to "non-shared", a new NSI is created with capabilities to host the service, provided that required NSSIs can be created. If the serviceProfileId already exists, the corresponding serviceProfile is updated.

#### 6.5.1.2 Input parameters

|  |  |  |  |
| --- | --- | --- | --- |
| Parameter Name | Support Qualifier | Information Type / Legal Values | Comment |
| attributeListIn | M | LIST OF SEQUENCE< attribute name, attribute value> | This parameter specifies the network slice related requirements defined in ServiceProfile in Clause 6.3.3 in TS 28.541 [6]. |

#### 6.5.1.3 Output parameters

|  |  |  |  |
| --- | --- | --- | --- |
| Parameter name | Support Qualifier | Matching Information / Legal Values | Comment |
| attributeListOut | M | LIST OF SEQUENCE< attribute name, attribute value> | This list of name/value pairs contains the attributes of the NSI which has been allocated and the actual value assigned to each. |
| status | M | ENUM (OperationSucceeded, OperationFailed) | An operation may fail because of a specified or unspecified reason. |
| nSId | M | An attribute uniquely identifies the network slice instance. | It specifies the unifique identifier of the NSI which has been allocated. |

### 6.5.2 AllocateNssi operation

#### 6.5.2.1 Description

This operation is invoked by allocateNssi operation service consumer to request the provider to allocate a network slice subnet instance to satisfy the network slice subnet related requirements. The provider may create a new NSSI or using existing NSSI to satisfy the request. The requirements in the request are compared/matched against the actual capabilitites of all candidate NSSIs by the provider. If an existing NSSI can be found e.g. with the right coverage and with good enough latency, it is eligible for allocation. In case not, a new NSSI is created with capabilities to host the service, if enough resoures are available. If the SliceProfileId already exists, the corresponding sliceProfile is updated if enough resources are available.

#### 6.5.2.2 Input parameters

|  |  |  |  |
| --- | --- | --- | --- |
| Parameter Name | Support Qualifier | Information Type / Legal Values | Comment |
| attributeListIn | M | LIST OF SEQUENCE< attribute name, attribute value> | This parameter specifies the network slice subnet related requirements defined in SliceProfile in Clause 6.3.4 in TS 28.541 [6]. |

#### 6.5.2.3 Output parameters

|  |  |  |  |
| --- | --- | --- | --- |
| Parameter name | Support Qualifier | Matching Information / Legal Values | Comment |
| attributeListOut | M | LIST OF SEQUENCE< attribute name, attribute value> | This list of name/value pairs contains the attributes of the NSSI which has been allocated and the actual value assigned to each. |
| status | M | ENUM (OperationSucceeded, OperationFailed) | An operation may fail because of a specified or unspecified reason. |
| nSSId | M | An attribute uniquely identifies the network slice subnet instance. | It specifies the unifique identifier of the NSSI which has been allocated. |

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| **End of change** |