**3GPP TSG-SA5 Meeting #132e *S5-204102rev2***

**e-meeting 17th 28th August 2020**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *CR-Form-v12.0* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
|  | | | | | | | | |
|  | **28.530** | **CR** | **0028** | **rev** | **2** | **Current version:** | **16.2.0** |  |
|  | | | | | | | | |
| *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)*.* | | | | | | | | |
|  | | | | | | | | |

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

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | |
| ***Title:*** | Rel-16 CR TS 28.530 Replacement of MF with manged function in the Slice profile description and addition of a corresponding definition | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Source to WG:*** | NEC | | | | | | | | | |
| ***Source to TSG:*** | S5 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | TEI16 | | | | |  | ***Date:*** | | | 5/08/2020 |
|  |  | | | |  | |  | | |  |
| ***Category:*** | F |  | | | | | ***Release:*** | | | Rel-16 |
|  | *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-12 (Release 12)* *Rel-13 (Release 13) Rel-14 (Release 14) Rel-15 (Release 15) Rel-16 (Release 16)* | |
|  |  | | | | | | | | | |
| ***Reason for change:*** | | The abbreviation term “MF” used to refer to “Managed Function” in the Slice profile description is inconsistent with the rest of document and has not been explicitly defined or listed as an acronym in this, or other relevant specifications of the 28.5xx series. The “managed function” is stage 2 specs term used to refer to network function in the network slice subnet descriptions. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Summary of change:*** | | 1. Change the term “MF” and “managed function” into “network function” in the description of Slice profile and network slice subnet related descriptions., | | | | | | | | |
|  | |  | | | | | | | | |
| ***Consequences if not approved:*** | | It could lead to potential confusion; for example with Management Function (MnF) specially by readers outside SA5. | | | | | | | | |
|  | |  | | | | | | | | |
| ***Clauses affected:*** | | 3.1, 4.6.1 | | | | | | | | |
|  | |  | | | | | | | | |
|  | | **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:*** | |  | | | | | | | | |

|  |
| --- |
|  |



|  |
| --- |
| **Start of 1st modification** |

### 4.6.1 Slice profile

The network slice subnet has an associated set of requirements (e.g. those derived from communication service requirements) that are applicable to the network slice subnet constituents, such set is called Slice Profile. TN requirements (e.g. set of QoS attributes for the links interconnecting network slice subnet constituent network functions) is an example of requirements that may be included in the Slice Profile. The slice profile may be common (applicable to all network slice subnet constituents, regardless of their types) or specific (applicable to only AN network function or only to CN network function network slice subnet constituents).

|  |
| --- |
| **Start of 2nd modification** |

### 4.4.1 General

From a management point of view a network slice is complete in the sense that it includes all the network function instances, with their supporting resources, to provide a certain set of communication services to serve a certain business purpose. In other words, the network slice is complete because it completely satisfies the associated SLS.

The following concepts are related to network slicing management:

a. Services which are supported by network slices (services whose service level requirements are satisfied by the SLS associated with the network slices).

b. Network slice subnet instances and networks composed of PNF, VNF or both and offered as network slices.

c. Network function (PNFs, VNFs) grouped into network slice subnets.

d. Resources which support the network (e.g. virtualized resource, non-virtualized resource)

The management aspects of the network slice are represented by management of the CN part, and AN part which are directly managed by the 3GPP management system, and management of non-3GPP part which is not directly managed by the 3GPP management system. The non-3GPP part includes TN parts. The 3GPP management system provides the network slice requirements to the corresponding management systems of those non-3GPP parts, e.g. the TN part supports connectivity within and between CN and AN parts. For the TN part, the 3GPP management system provides the TN topology requirements and individual TN links' QoS attributes requirements to the TN management system.

The 3GPP management system maintains the network topology and the related QOS requirements.



Figure 4.4.1.1: Example of an network slice

|  |
| --- |
| **Start of 3rd modification** |

## 4.5 Network slice subnet concepts

The network slice subnet represents a group of network functions (including their corresponding resources) that form part or complete constituents of a network slice. The grouping of the network functions allows the management of each group of network functions to be conducted independently of the network slice.

The network slice subnet concepts include the following aspects:

- An network slice subnet constituent may include Network Function(s) and other constituent network slice subnet(s).

- An network slice subnet may be shared by two or more network slices, this is called a shared constituent of network slice. This sharing may be direct or indirect. The direct sharing implies that the network slice subnet is offered as network slice multiple times. The indirect sharing implies that the network slice subnet is either a constituent of a network slice subnet shared by two or more network slices, or is shared by two or more network slice subnet(s) which are in turn offered as different network slices.

- An network slice subnet may be shared by two or more network slice subnet(s), this is also called a shared constituent of network slice subnet. The sharing may be direct or indirect. The direct sharing implies that network slice subnet is a constituent of two or more network slice subnets. The indirect sharing implies that network slice subnet is a constituent of a shared network slice subnet.

- An network slice subnet that is dedicated to one network slice and is not shared as a constituent by two or more network slice subnet(s) is called a non-shared network slice subnet.

- An network slice subnet may contain instances of CN Network Functions only, or instances of AN Network Functions only, or any combination thereof.

- An network slice subnet may additionally have information representing a set of links with capacities to provide connection between network functions. This information is also known as TN requirements of the network slice subnet.

- The resources used, and whose management aspects are represented by an network slice subnet comprise physical and logical resources. In case of virtualization, virtualized resources may be used.

|  |
| --- |
| **End of modifications** |