**3GPP TSG-SA5 Meeting #130eS5-202279**

**e-meeting, 20 – 28 April 2020**

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| *CR-Form-v11.4* | | | | | | | | |
| **CHANGE REQUEST** | | | | | | | | |
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|  | **28.530** | **CR** | **0025** | **rev** | **-** | **Current version:** | **16.1.0** |  |
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| *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)*.* | | | | | | | | |
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| ***Proposed change affects:*** | UICC apps |  | ME |  | Radio Access Network | **X** | Core Network | **X** |

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| ***Title:*** | Cleanup Network Slice related definitions in OAM space | | | | | | | | | |
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| ***Source to WG:*** | Nokia, Nokia Shanghai Bell, Intel, Huawei | | | | | | | | | |
| ***Source to TSG:*** | S5 | | | | | | | | | |
|  |  | | | | | | | | | |
| ***Work item code:*** | TEI16 | | | | |  | ***Date:*** | | | 2020-04-10 |
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| ***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)* | |
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| ***Reason for change:*** | | network slice and network slice instance concept and usage in SA5 were not correctly reflected in their definitions in clause 3.1 of this specification. In addition, network slice instance and corresponding acronym “NSI” in SA5 have different meaning than the same term used by SA2, that is causing confusion. | | | | | | | | |
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| ***Summary of change:*** | | 1. Correct network slice definition in SA5 to reflect its concept in SA5. In SA5, network slice is object offered to network slice customer by network slice provider. It’s service view of logical network which exposed specific network capabilities and network characteristics. It is delivered to customer to support certain communication service, thus serving certain business purpose 2. Replace network slice instance with NetworkSlice instance which represents Managed Object Instance of NetworkSlice IOC. "network slice instance” used in existing SA5 specifications representing SA5::network slice will be replaced with network slice, "network slice instance” used in existing SA5 specifications representing Managed Object Instance (MOI) of SA5::NetworkSlice IOC will be replaced with NetworkSlice instance. | | | | | | | | |
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| ***Consequences if not approved:*** | | Incorrect definition of network slice and network slice instance caused. caused conceptual issues inside and outside 3GPP, and let existing specification not implementable. | | | | | | | | |
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| ***Clauses affected:*** | | 2, 3.1 | | | | | | | | |
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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 ... | | |
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| ***Other comments:*** | |  | | | | | | | | |

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| **Start of 1st modification** |

# 2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non‑specific.

- For a specific reference, subsequent revisions do not apply.

- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

[1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".

[2] 3GPP TS 22.261 "Service requirements for next generation new services and markets".

[3] 3GPP TS 23.501: " System Architecture for the 5G system".

[4] 3GPP TS 38.401 "NG-RAN; Architecture description".

[5] 3GPP TS 28.531: "Management and orchestration; Provisioning".

[x] 3GPP TS 28.541: "Management and orchestration ; 5G Network Resource Model (NRM); Stage 2 and stage3"

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| **End of 1st modification** |

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| **Start of 2nd modification** |

# 3 Definitions and abbreviations

## 3.1 Definitions

For the purposes of the present document, the terms and definitions given in 3GPP TR 21.905 [1] and the following apply. A term defined in the present document takes precedence over the definition of the same term, if any, in 3GPP TR 21.905 [1].

**Network Slice:** a logical network that provides specific network capabilities and network characteristics, supporting various service properties for network slice customers.

NOTE 1: NetworkSlice Information Object Class (IOC) (refer to TS 28.541 [x]) is used to model network slice.

NOTE 2: Represent Network Slice defined in TS 23.501 [3] with added service properties.

**NetworkSlice instance:** A Managed Object Instance of NetworkSlice IOC.

OTE 3a Network Slice exposed by the root NetworkSliceSubnet instance

**Network Slice Subnet:** a representation of a set of Network Functions and the required resources (e.g. compute, storage and networking resources) supporting network slice.

NOTE 4: (refer to TS 28.541 [x]) NSScore Network Functions and/or RAN Network Functions and/or other Network Slice Subnets, and the root Network Slice Subnet is exposed as network sliceThe Network Slice instance defined in TS 23.501 [3] can be represented by Network Slice Subnet.

**NetworkSliceSubnet instance:** A Managed Object Instance of NetworkSliceSubnet IOC.

**Service Level Specification:** a set of service level requirements associated with a Service Level Agreement to be satisfied by a network slice instance

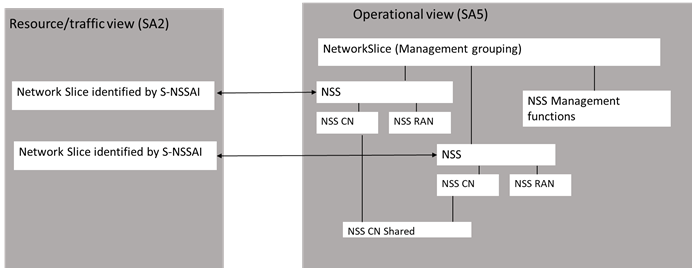
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| **End of 2nd modification** |

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Annex X (informative):

Below is a figure   Guess this shows two ”use case/services” that is mapped into one NS (here, likely two NSS are defined). We acknowledge that there is a one-to-one mapping between the NetworkSlice and the top-NSS.

The NSS has associated MEs/MFs, where the resource allocation are defined per ME/MF. Thus, the SA2 Network Slice Instance would be an instantiation of a SA5 NS/NSS with resources allocated per associated ME/MF.



Annex B (informative):  
Change history

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| **End of 3rd modification** |