**3GPP TSG-SA5 Meeting #141-e *S5-221430***

**e-meeting, 17 - 26 January 2022**

**Source: Ericsson**

**Title: Update procedure for product on-boarding**

**Document for: Approval**

**Agenda Item: 6.5.2**

# 1 Decision/action requested

***In this box give a very clear / short /concise statement of what is wanted.***

# 2 References

*(Reference - in list form - should be made to previous related SA5/3GPP/etc. documents.)*

*(For changes against a draft TS/TR, a pseudo CR - a.k.a. pCR - will be provided using this Tdoc template. In this case, the number, name and version of the draft TS/TR used as base must be provided and the version must be the latest available version of the draft TS/TR.)*

<Examples of references, please delete when you have inserted your actual references:

[1] 3GPP TS 32.500 SON Concepts and Requirements

[2] 3GPP TS 99.999 This example has a very long name, because then we can see how thi References paragraph will handle paragraphs spanning more than one line.

[3] 3GPP TS 99.999 Title of the document

[4] S5-991234, CR 32.999 v10.1.1, Inverting architecture of SON

[5] [S5-100001](http://www.3gpp.com/ftp/TSG_SA/WG5_TM/TSGS5_69/Docs/S5-100001.zip), Agenda, 3GPP SA5#69 Comment>

# 3 Rationale

The procedure for product onboarding needs some clarifications as some of the terminology is not clear.

# 4 Detailed proposal

***1st Change***

# 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] TM Forum TMF622 Product Order API REST Specification

[3] TM Forum TMF641 Service Ordering API

[4] TM Forum TMF652 Resource Order Management API

[5] 3GPP TS 28.531: "Management and orchestration; Concepts, use cases and requirements"

[6] 3GPP TS 28.202: "Charging management; Network slice management charging in the 5G System (5GS); Stage 2"

[7] 3GPP TR23.700-99 “Study on Network Slice Capability Exposure for Application Layer Enablement (NSCALE)”

[8] 3GPP TS23.434 “Service Enabler Architecture Layer for Verticals (SEAL); Functional architecture and information flows.”

[9] 3GPP TS 28.541: "Management and orchestration; 5G Network Resource Model (NRM); Stage 2 and stage 3"

[x] 3GPP TS 28.537: "Management and orchestration; Management and orchestration; Management capabilities"

[y] TM Forum TMF633 Service Catalogue Management API

[z] TM Forum TMF620 Product Catalogue Management API

***2nd Change***

#### 4.1.4.5 Procedure for product onboarding



Figure 4.1.4.5.1 Procedure related to product onboarding

1. OSS\_SML obtains 3GPP management services in the network through management service discovery;
2. OSS\_SML governs the rules and policies of MnS and configures the available MnS (e.g. eMnS) to BSS\_NSP. For example, if the RAN NE is dedicated to external customers, the performance monitoring service of a RAN NE should be exposed. Otherwise, it should not be exposed;
3. Optional, the BSS\_NSP may send information to request the list of available services from OSS\_SML;
4. OSS\_SML provides the list of available services to BSS\_NSP;
5. BSS\_NSP configures (groups or package the services into a product) the services from OSS\_SML such that they can be exposed to NSC;
6. NSC should request the product catalog from BSS\_NSP.
7. BSS\_NSP provides product catalog to NSC.

 Editor’s Note: “EGMF can have the functionality of eMnS data Whether registration to an external discovery system is FFS.”

***3rd Change***

## 7.z Potential solution for product onboarding

This clause describes a solution for the procedure described in clause 4.1.4.5. For each step in the procedure Table 7.z.1 identifies the following:

- if an interface is Internal to an operator, i.e.internal to the NSP or External between a NSC and NSP, or None in case the step is an internal process and there is no interface requirement,

- which operation or notification is used by that step, and

- which specification describes the interface (stage 2 and stage 3).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Step** | **Description in step** | **Interface** | **Reference** | **Description in reference** |
| 1 | service discovery | Internal | 3GPP TS 28.537[x] | FFS |
| 2 |  | None | - | - |
| 3 | request list of available services | Internal | TM Forum TMF633[y] | Service Catalogue |
| 4 | provide list of available services | Internal | TM Forum TMF633[y] | Service Catalogue |
| 5 |  | None | - | - |
| 6 | product catalogue request | External | TM Forum TMF620[z] | Product Catalogue |
| 7 | product catalogue | External | TM Forum TMF620[z] | Product Catalogue |

Table 7.z.1 Solution for product onboarding

***rth Change***

A.5 UML code

@startuml

@startuml

skinparam sequence {

ArrowColor Black

ActorBorderColor Black

ActorBackgroundColor White

ParticipantBorderColor Black

ParticipantBackgroundColor White

LifeLineBorderColor Black

BackGroundColor <<BSS\_Prov>> Black

}

skinparam NoteBackgroundColor White

skinparam NoteBorderColor Black

skinparam shadowing false

hide footbox

actor NSC

participant BSS\_NSP

participant OSS\_SML

participant OSS\_NML

OSS\_SML--> OSS\_NML: 1. service discovery

OSS\_SML---> OSS\_SML: 2. configure the available MnS service

opt

 BSS\_NSP -->OSS\_SML: 3. request list of available services

end

OSS\_SML---> BSS\_NSP: 4. provide list of available services

BSS\_NSP --> BSS\_NSP: 5. configure the eMnS service for exposure

NSC --> BSS\_NSP: 6. product catalogue request

BSS\_NSP --> NSC: 7. product catalogue

@enduml

***End of Changes***