**3GPP TSG-SA5 Meeting #154 *S5-242010d2***

Changsha, China, 15 - 19 April 2024 Revision of S5-241215

**Source: Ericsson Spain, Nokia**

**Title: pCR TR 28.879 Add definition of external MnS consumer concept**

**Document for: Approval**

**Agenda Item: 6.19.21**

# 1 Decision/action requested

***The group is asked to discuss and approve the proposal***

# 2 References

[1] S5-241213 Discussion paper on exposure

[2] 3GPP TR 28.879 Management and orchestration; Study on OAM for service management and exposure to external consumers (Release 19), v0.1.0, 2024-02.

[3] SP-231728 Study on Enhanced OAM for management exposure to external consumers.

[4] 3GPP [TS 28.530](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3273) Management and orchestration; Concepts, use cases and requirements

[5] 3GPP [TR 28.824](https://portal.3gpp.org/desktopmodules/Specifications/SpecificationDetails.aspx?specificationId=3881) Study on network slice management capability exposure

# 3 Rationale

The DP in [1] asks SA5 Working Group to agree on and endorse six (6) issues. The DP also highlights the intention to prepare different pCRs to capture the main insights of these issues.

The present pCR addresses issue #4, which notes the following: “it is needed to identify and list the specific functional entities that can become external consumers”.

The rationale behind this issue is that, as of today, **there does not exist a definition for external consumer concept**; actually, in the study item description [3], the only reference made on this concept is as follows: *“[…] external consumers (i.e. outside 3GPP)/verticals*”. This reference is clearly not sufficient, since:

1. It does not clarify what external consumer concept means and represents; without this information, it is difficult to contextualize and circumscribe/restrict the discussion within this study item.
2. It uses instances of a role (i.e., service consumer) and a stakeholder (i.e., vertical) interchangeably; this is not correct, because of two reasons. On the one hand, one stakeholder can be flexibly mapped into one or more roles (and the other way round), as per the actor-role model described in TS 28.530 [4]. On the other hand, 3GPP management system builds on the SBMA principles, focusing on service producer and consumer roles, regardless of which specific stakeholders take on these roles. The latter represents business-like discussions that shall be avoided in SA5, because they may engage both OAM and CH sub-groups in endless non-technical discussions that, in the best case, may lead to conclusions that has nothing to do with purposes related to interoperability and multi-vendor integration. Examples of these discussions include the landscape of stakeholders that can benefit from 3GPP management capabilities (see TR 28.824 [5], clause 4.2.1) and their business relationships (e.g., B2B, B2B2C); all of them shall be avoided in OAM and CH sub-groups.
3. The “outside 3GPP” wording can be interpreted in multiple different ways, since there are no clear boundaries of what 3GPP covers today or not, especially in the service and application layer, where 3GPP exposure framework (led by 3GPP SA6, see clause 3.1 in [1]) and Open Gateway initiative (led by GSMA, in cooperation with TM Forum and CAMARA, see clause 3.2 in [2]) compete for the same space. A clear example of this competition can be noticed between SEAL/VAE Layer and Open Gateway Transformation Function: both provide functionality to vertical customers and application service providers using service APIs; they differ in API design rules and consumption patterns, though.

In this regard, it is proposed to provide a definition of an external MnS consumer for 3GPP SA5, that:

* Does not dig into ‘behind-the-scene’ details of MnS consumer (e.g., who is the stakeholder behind this consumer, which is the business relationship with the operator, etc), thus complying with point 2.
* Does not dig into ‘outside/inside’ 3GPP, thus complying with point 3.
* Allows to set the demarcation point with the work done in other study items (e.g., FS\_eSBMA\_ph3) for discovery issues.

# 4 Detailed proposal

This contribution proposes to take action as detailed in the rationale, by providing in [2] a definition for the external MnS consumer concept. This definition will allow contextualize the SA5 discussion of exposure topic, aligning with SBMA principles that govern 3GPP management system architecture and associated mechanisms.

This contribution addresses WT-1 of FS\_MExpo.

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| **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".

[a] 3GPP TS 23.222 Common API Framework for 3GPP Northbound APIs; stage 2

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| **2nd Change** |

# 3 Definitions of terms, symbols and abbreviations

## 3.1 Terms

For the purposes of the present document, the terms 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].

**External MnS consumer**: An MnS consumer that has discovered an MnS via a discovery mechanism which is not defined in 3GPP SA5. CAPIF [a] is an example of a framework providing such discovery mechanism.

## 3.2 Symbols

For the purposes of the present document, the following symbols apply:

<symbol> <Explanation>

## 3.3 Abbreviations

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

 CAPIF Common API Framework