**3GPP TSG-SA5 Meeting #158 *S5-247110***

Orlando, USA, 18 - 22 November 2024

**Source:**  **Rakuten Mobile**

**Title: pCR TR 28.869 Fix normative text in TR**

**Document for: Approval**

**Agenda Item: 6.19.6**

# 1 Decision/action requested

***For approval***

# 2 References

1. 3GPP TR 28.869 v1.1.0 Study on cloud aspects of management and orchestration.

# 3 Rationale

The contribution proposes to fix normative text in this study

# 4 Detailed proposal

It is proposed to make the following changes to TR 28.869 [1].

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| **1st Change** |

### 5.2.1 Use case #1: 3GPP management architecture evolution to support LCM of NF Deployment instance

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#### 5.2.1.2 Potential requirements

**REQ \_LCM-1** The deployment management reference point should support the capability allowing the 3GPP management system to interact with an orchestration and management entity to perform the LCM of NF Deployment instance.

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| **2nd Change** |

### 5.2.2 Use case #2: data streaming for cloud native network function

#### 5.2.2.1 Description

Currently 3GPP management system support WebSocket based data streaming for PM, tracing and analytic [10] which establish point-to-point connection between the streaming data reporting MnS consumer and MnS producer. In cloud native deployment, a NF is realized in many micro-services whose workload instances are running in parallel, dynamically scaled in and out, and maybe distributed across multiple server nodes and cloud sites. In conventional WebSocket based solution, streaming data reporting MnS producer aggregate traffic from many distributed workloads generating large amount of data before streaming it to the streaming data reporting MnS consumer via the connection established. The streaming data reporting MnS consumer receive the aggregated traffic first via the connection before distributing to internal functions of the management system which may be also cloud native. This become a performance bottleneck, inefficient and difficult to be managed. Furthermore, cloud native applications are more sensitive to failures and system down time. If the connection between MnS producer and consumer fails due to any reason e.g. software failure, server hardware failure and transport network failure etc, it impacts the entire coverage area of the cloud.

In cloud native deployment, more efficient, highly scalable, and fault-tolerant streaming solution allowing parallel streaming from the micro-services may be needed. Furthermore, the management of streaming connections, resource allocations, scaling, and resiliency for data streaming in cloud native environment is a complicated task. The 3GPP management system can evolve to address the challenges considering the use of existing industry solutions.

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| **End of Changes** |