3GPP TSG SA WG5 Meeting #156 S5-244661

Maastricht, The Netherlands, 19 - 23 August 2024

**Source: China Mobile, Intel**

**Title: Reply LS on 5G Trace to support UE level measurement**

**Document For: Approval**

**Agenda Item: 6.1**

Title: Reply LS on 5G Trace to support UE level measurement

Response to: LS (C4-241558) on Trace to support UE level measurement

Release: Release 18

Work Item: PM\_KPI\_5G\_Ph3

Source: SA5

To: CT4

Cc: CT3

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Attachments: S5-243627/S5-243630/S5-243631/S5-245129/S5-245130

**1. Overall Description:**

SA4 thanks CT4 for the LS and the agreed CRs on 5G Trace to support UE level measurement.

Please find SA5’s answer below to the questions asked in the LS.

**Q1: *“How is the 5GC UE level measurements collection on SMF triggered/activated?***

*According to 3GPP TS28.558:*

*“The QoS monitoring can be initiated on SMF by management system via QFQoSMonitoringControl MOI (see TS 28.541 [3]), or by PCF via QoS Monitoring policy included in the PCC rule provisioning (see TS 23.503 [4]).”*

***Based on the definition, the 5GC UE level measurements collection on SMF is triggered/activated by management system or by PCF****.*

*According to clause 4.1.2.18 of 3GPP TS32.422:*

*“For the signaling Trace Session activation for UE level measurements collection in 5GC as part of the PDU Session Establishment procedure for the UE that has already been registered where SMF obtains trace control and configuration parameters from UDM via Nudm\_UECM\_Registration procedure”*

***However, it means the 5GC UE level measurements collection on SMF is triggered/activated by obtaining trace control and configuration parameter from UDM.”***

**SA5’s answer: SA5 will only keep the measurements collection activation specified in TS 32.422 to avoid the conflict and confusion. The attached SA5 CR (S5-243627) to remove the activation mechanism in TS 28.558 has been agreed in SA5.**

**Q2: “*What is the meaning of the following Information:***

*1) IE named “Trace reporting format” for 5GC UE level measurements collection? CT4 cannot find any definition on the “Trace reporting format” in 3GPP TS 32.422.*

*2) NE Types (CM) for UE level measurement, i.e. whether EP\_N3 and EP\_N9 are additional types of NE in the 3GPP TS 32.422 .*

*3) N4 Session Identifier. How will this IE be used in signalling-based activation of 5GC UE level measurements collection?”*

**SA5’s answer:**

**1) The “Trace reporting format” indicates reporting format of the Trace data, which is either streaming or file. However, the same information can be carried by the “Trace Collection Entity (TCE) IP Address” and “Trace Reporting Consumer URI” parameters, therefore the “Trace reporting format” parameter is not needed anymore.**

**The attached CR (S5-243630/S5-243631) to remove “Trace reporting format” parameter from TS 32.422 has been agreed in SA5.**

**2) The EP\_N3 and EP\_N9 are not necessarily the additoinal types of NE for 5GC UE level measurements collection using Trace mechanism defined in TS 32.422. But the measurements are collected and reported per EP\_N3 and EP\_N3 interface.**

**3) The N4 Session Identifier is not used in signalling-based activation of 5GC UE level measurements collection, but only used for management-based activation.**

**The attached CR (S5-245129/S5-245130) to clarify this in TS 28.558 has been agreed in SA5.**

**Q3: *“How is the 5GC UE level measurements collection on UPF triggered/activated? Can SMF re-use the existing Per QoS Flow per QoS Measurement mechanism as defined in clause 5.33.3.2 of 3GPP TS 23.501?”***

**SA5’s answer: SA5 needs to correlate the UE level measurements collected by UPF and other NFs/nodes for one specific UE, and using the TR/TRSR under the Trace mechanism defined by TS 32.422 can support this correlation.**

**The existing Per QoS Flow per QoS Measurement mechanism defined in clause 5.33.3.2 of 3GPP TS 23.501 cannot support the correlation with the measurements collected by other NFs/nodes for the UE.**

**2. Actions:**

**To SA5**

**ACTION:** SA5kindly asks CT4 to take the SA5’s answers above into consideration.

**3. Date of Next SA5 Meetings:**

SA5#157 14 October - 18 October 2024 Hyderabad, India

SA5#158 18 November- 22 November2024 Orlando, US