**3GPP TSG-SA5 Meeting #156 *S5-244658***

Maastricht, , 19 - 23 August 2024

**Title: Reply LS on improved KPIs involving end-to-end data volume transfer time analytics**

**Response to: R3-243941 Reply LS to SA5 on improved KPIs involving end-to-end data volume transfer time analytics**

**Release: REL-18**

**Work Item: NR\_AIML\_NGRAN-Core**

**Source: SA5**

**To: RAN3**

**Cc: SA2, CT3, CT4, RAN2**

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**Send any reply LS to: 3GPP Liaisons Coordinator,** **mailto:3GPPLiaison@etsi.org**

**Attachments:** S5-24xxxx, S5-243882

# 1 Overall description

SA5 thanks RAN3 for its LS on improved KPIs involving end-to-end data volume transfer time analytics in document R3-243941.

SA5 would like to response to the questions with the following:

 RAN3 evaluated carefully the two specifications and made the following observations with respect to TS 28.552 and TS 28.558:

1. TS 28.558 does not define M4 measurement.
2. There seems to be a misalignment between the two specifications with respect to which entity performs the measurements. In particular, RAN3 identified the following cases:
* The “Average delay DL air-interface” is measured by the gNB-DU in TS 28.552 and by NRCellCU (for non-split and 2-split scenario) and GNBCUUPFunction (for 3-split scenario) in TS 28.558.
* The “Average delay DL in gNB-DU” is measured by the gNB-DU in TS 28.552 and by NRCellCU (for non-split and 2-split scenario) and GNBCUUPFunction (for 3-split scenario) in TS 28.558.
* The “UL PDCP SDU Loss Rate” is measured by the GNBCUUPFunction and NRCellCU in TS 28.552 and by GNBCUUPFunction in TS 28.558.

From RAN3 perspective, the above misalignment should be corrected in TS 28.558 based on TS 28.552.

From SA5 perspective, the misalignment between TS28.558 and TS 28.552 has been corrected in TS28.558v18.1.0. The missing M4 measurement has be added into TS28.558 as attached.

For the following additional RAN3 observations on the S-TMSI identifier,

*Also, RAN3 made the following observations concerning the S-TMSI identifier:*

* *“S-TMSI” should be modified to “5G-S-TMSI”.*
* *S-TMSI is not available in the gNB-DU and in the gNB-CU-UP.*
* *S-TMSI may not be always available in the gNB-CU-CP.*

SA5 would like to thank RAN3 for the observation. NR MDT Trace Record Content and Trace Record Header are specified in TS32.423. SA5 agree that there is a benefit to have a (temporary) identifier in the management-based MDT measurement report. This identity shall be unique within the lifetime of the measurement session. So, some data analytics function (e.g., AIML related function) can have a better understanding that the collected data sets are measured from the same source. Therefore, it would be good to provide some kind of identifier to indicate the measurement was done in the same or different UE.

The bullet g specified in TS28.558 is the “Measured UE Identifier”. It is Trace Target which is sent in Trace Activation. As specified in TS 32.422, IMSI or IMEISV or IMEI-TAC or SUPI is used as Trace Target in signalling-based MDT activation procedure in 5GC and NG-RAN, and the Trace Target for management-based NR MDT activation has been defined in TS 28.622. So, the “Measured UE Identifier” parameter specified in TS28.558 is not applicable to NG-RAN UE level (MDT) measurements. Therefore, SA5 has agreed to add a clarification in TS28.558 that the measurement bullet g) is only applicable for management-based activation of 5GC UE level measurement collection, and the bullet g) in NG-RAN UE level measurements are set to “N/A” instead of “S-TMSI”, please see the agreed CRs attached.

# 2 Actions

**To RAN3**

**ACTION:** SA5 kindly asks RAN3 to take the above progress into account and provide further feedback if any

# 3 Dates of next TSG SA WG 5 meetings

SA5#157 14 - 18 October 2024 Hyderabad, IN

SA5#158 18 - 22 November 2024 Orlando, US