3GPP TSG SA WG4 Meeting #120-e TDoc S4-221115

E-Meeting, 17th – 26th August 2022

**Title: Draft Reply LS to SA5 on TS 28.404/TS 28.405 Clarification**

**Response to: LS S4-221072 (S5-223546)**

**Release: Rel-17**

**Work Item: eQoE**

**Source:** **3GPP SA4**

**To:** **3GPP SA5**

**Cc: 3GPP RAN2, 3GPP RAN3**

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**Attachments:**

# 1 Overall description

SA4 would like to thank SA5 for the reply LS on TS 28.404/TS 28.405 Clarification. SA4 understands that SA5 has eliminated the previous discrepancy between TS 28.404 and TS 28.405 regarding UE support for temporary stop and restart of QoE information reporting during RAN overload in NR, via agreed Rel-17 CR to TS 28.404.

Although unrelated to the above action taken by SA5, SA4 has noticed a suspected remaining error in the existing step 4 of the table in clause 5.4.8 of TS 28.404 as highlighted below.

|  |  |
| --- | --- |
| Step 4 (M) | When the UE receives the request from the RAN node, the UE access stratum informs the application to restart the QoE information reporting. |

According to the RAN2 LS to SA4 (and cc’d to SA3 and SA5) in [R2-2201862](https://www.3gpp.org/ftp/TSG_RAN/WG2_RL2/TSGR2_116bis-e/Docs/R2-2201862.zip), RAN2 has decided that there is no need for interaction between the UE’s Access Stratum (AS) layer and Application layer with regards to pause/resume mechanism in response to RAN overload (and subsequent recovery) condition. In other words, and as described in the RAN2 LS, the AS layer is responsible for supporting continued reception of QoE reports sent by the Application layer, and storage of those reports at its discretion, in the occurrence of UE reception of QoE pause indication from the RAN. Therefore, SA4 thinks that the description in the cited step 4 should be amended to reflect the RAN2 decision, e.g., by saying “*When the UE receives the request from the RAN node, the UE access stratum restarts the QoE information reporting*”.

SA5 may also wish to check the description in clause 4.5.4 of TS 28.405 since similar mistake exists regarding description of Application layer reporting behavior during temporary stop and start of QoE information reporting. For clarity, SA4 highlights the suspected parts in the description as shown below.

|  |
| --- |
| In case of overload in RAN, the gNB may temporarily stop the reporting from the UE by sending the RRCReconfiguration message [11] to relevant UEs. The RRCReconfiguration message [11] is including *measConfigAppLayerId* set to temporarily stopapplication layer measurement reporting in *otherConfig* [11]. The Access stratum sends +CAPPLEVMC AT command [5] to the application with the temporary stop request. The application stops the reporting.The application continues recording further information until the data storage capacity for the reporting is fully used or the UE request session ends. Then the recorded data is kept until it is reported or when the UE request session is ended.  When the overload situation in RAN is ended the gNB restart the reporting from the UE by send the RRCReconfiguration message [11] to relevant UEs. The RRCReconfiguration message is including *measConfigAppLayerId* set to restartapplication layer measurement reporting in *otherConfig* [11]. The Access stratum sends +CAPPLEVMC AT command [5] to the application with the restart request. The application restarts the reporting and recording if it was stopped. |

Note that the +CAPPLEVMCNR AT command as defined in TS 27.007 [5] does not contain any parameters in the unsolicited result code corresponding to temporary stop or restart (or “pause/resume”) directive regarding application level measurement reporting from the AS layer to the Application layer. The existing <start-stop\_reporting> parameter in the unsolicited result code pertains to indication of initiation or termination of an application level measurement reporting session.

# 2 Actions

**To SA5**

**ACTION:** SA4 kindly asks SA5 to take the above information into account, and provide feedback to SA4 if necessary.

# 3 Dates of next TSG SA WG 4 meetings

SA4#121 14th – 18th November 2022 EU

SA4#122 20th – 24th February 2023 EU