3GPP TSG-RAN WG2 Meeting #127bis R2-2411116

Orlando, USA, November 18th – 22nd, 2024

**Agenda item: 8.1.4**

**Source: Interdigital**

**Title: [AT128][014][AIML] LS response to SA2 (Interdigital)**

**Document for: Discussion and Decision**

# 1. Introduction

This is a summary of the offline discussion:

**[AT128][014][AIML] LS response to SA2 (Interdigital)**

               Intended outcome: Approve LS response

               Deadline:  Tuesday

# 2. Discussion

The offline discussion was regarding the response in [1] regarding the first question from SA2 [2] regarding the involvement of the NG-RAN in the data collection controllability.

The question was [2]:

*Q1: Are there any aspects of the UE-data collection controllability, that required NG-RAN involvement? If so, what is the involvement of NG-RAN in UE-data collection controllability, e.g., what aspects of MNO controllability would require NG-RAN involvement and what would such involvement be?*

*As an example of the kind of feedback that is requested, some companies in SA2 understand that initiating (e.g., triggering), terminating collection of UE-side data and controlling data transfer may require NG-RAN involvement, and it is currently not clear what this involvement may be.*

The proposed response was [1]:

***Respond to SA2’s Q1 as below:***

***There is no conclusion/agreement in RAN2 regarding NG-RAN’s involvement in enabling UE data collection controllability.***

This was discussed during the online meeting and the following was captured by the chair [3]:

* *Confirm the answers for SA2 are related to 1b, 2, and 3.*
* *For data collection, we can copy our agreements that there is NG-RAN involvement for configuration between UE and NG-RAN*
* *For data transfer, RAN hasn’t studied/concluded NG-RAN involvement extensively as those discussions depend on SA2 potential solutions*
* *Explain what is meant by data collection and data transfer. Try to explain that data transfer can happen at any point in time as long as there are collected data available in the UE or explain that configuration may not always be needed*

Based on the above agreement, an attempt was made to update the proposal above, and the following was tentatively agreed as the response to SA2’s first question during the offline session:

**RAN2 wants to clarify the following for the discussion of the *UE side data collection for UE side model training*:**

**-        *Data collection* refers to the UE collecting data that involves the UE performing measurements (e.g., radio measurements).**

**-        *Data transfer* refers to the sending/transfer of the collected data from the UE to Server for data collection for UE-side model training/OTT server (as capture in Table 7.2.1.3.2-1) in TR38.843.**

**SA2 can assume that the NG-RAN is involved in providing radio measurement configuration (if needed) for the UE side data collection for the beam management use case, as captured in the following agreement in RAN2-127bis:**

***Data collection initiation and configuration for data collection is under network control.  FFS how the NW determines whether data collection should be initiated (e.g., via UE requests (UE directly or UE server))***

**Data transfer can happen at any point in time if there is collected data available in the UE. Furthermore, for data transfer, RAN2 hasn’t studied/concluded NG-RAN involvement as that depends on SA2 discussion on the potential solutions.**

**RAN2 will continue the discussion on data collection configuration and RAN2 will appreciate SA2 input on the data transfer process.**

The following comments were received via email regarding this proposal:

**Huawei**: mention also SA5 (e.g., “RAN2 will appreciate SA2/SA5 input”), and support above wording regarding data transfer.

**AT&T**: “Data transfer can *be initiated by the network**at any point in time* if there is collected data available in the UE”

**Charter**: Data transfer *is initiated by the network at any point in time* if there is collected data available in the UE”

**Qualcomm:** Data transfer can happen at any point in time with the network control if there is collected data available in the UE.

**Apple**: Keep the wording as agreed in online/offline on Monday

**T-mobile:** response was related to Q2. So not treated

**MediaTek:** remove the last part “as that depends on SA2 discussion on the potential solutions.”

**KDDI:** prefer “data transfer can be controlled by the network at any point in time”

**Summary:**

**The rapporteur understands the concern of the operators. However, the rapporetur’s understanding is that the sentence:**

***Data transfer can happen at any point in time if there is collected data available in the UE***

**clearly captures what was agreed online by the chairman and doesn’t imply anything about whether it is UE initiated or network initiated. So proposal is to keep the response tentatively agreed in the offline discussion (just adding the comment regarding adding SA5 as proposed by Huawei).**

# 3. Conclusions

In this offline discussion, the response to SA2’s question regarding NG-RAN involvement was performed and the following is proposed as a response to SA2’s Q1:

**RAN2 wants to clarify the following for the discussion of the *UE side data collection for UE side model training*:**

**-        *Data collection* refers to the UE collecting data that involves the UE performing measurements (e.g., radio measurements).**

**-        *Data transfer* refers to the sending/transfer of the collected data from the UE to Server for data collection for UE-side model training/OTT server (as capture in Table 7.2.1.3.2-1) in TR38.843.**

**SA2 can assume that the NG-RAN is involved in providing radio measurement configuration (if needed) for the UE side data collection for the beam management use case, as captured in the following agreement in RAN2-127bis:**

***Data collection initiation and configuration for data collection is under network control.  FFS how the NW determines whether data collection should be initiated (e.g., via UE requests (UE directly or UE server))***

**Data transfer can happen at any point in time if there is collected data available in the UE. Furthermore, for data transfer, RAN2 hasn’t studied/concluded NG-RAN involvement as that depends on SA2/SA5 discussion on the potential solutions.**

**RAN2 will continue the discussion on data collection configuration and RAN2 will appreciate SA2/SA5 input on the data transfer process.**

# 4. References

1. R2-2410504, [POST127bis][020][AI PHY] Reply LS to SA2/SA5 (InterDigital/Nokia), RAN2-128, November 2024
2. S2-2411191, Reply LS on AIML data collection, SA2 #165, October 2024
3. RAN2-128 Chairman Notes, November 2024