**3GPP TSG RAN WG1 #119-e R2-** **220xxxx**

**e-Meeting, August 17 – 26, 2022**

**Title:** Reply LS on UE Power Saving for XR and Media Services

**Response to:** R2-2204523 (S2-2203418) LS on UE Power Saving for XR and Media Services

**Release:** Rel-18

**Work Item:** FS\_XRM, FS\_NR\_XR\_enh

**Source:** Qualcomm [To be RAN2]

**To:** SA2

**Cc:** RAN1

**Contact Person:**

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

# **1. Overall Description:**

RAN2 would like to thank SA2 for the LS R2-2204523/S2-2203418 on UE Power Saving for XR and Media Services.

RAN2 made the following agreements regarding XR-awareness in RAN:

* RAN2 to adopt the current SA2 definition of PDU Set as an application media unit as working assumption, subjected to further guidance from SA2 and SA4.
* RAN2 assumes that PDU Set based parameters and PDU Set related information may be used for better support of XR services. RAN2 can consider both UL and DL directions.
* RAN2 will study PDU Set based parameters and PDU Set related information handling in Network and UE.
* XR awareness discussion in RAN2 should consider PDU set characteristics and how to use the information available on those (for UL and/or DL). Can also consider how to handle data bursts.
* RAN2 can study e.g. periodicity, arrival time, jitter and frame-size variations for XR awareness to enable power savings and capacity enhancements. Can study also how often such parameters change (i.e. how dynamic they are).

In addition, RAN2 discussed what types of information can be useful to RAN for UE power savings and identified the following:

For traffic flows based on PDU Sets

* Traffic pattern parameters (e.g. periodicity, start time, etc). This information is useful to RAN, e.g. in configuring DRX, and can be semi-statically signalled to RAN. FFS whether the traffic pattern parameters should be associated with PDU Sets or Data Bursts.
* Jitter information (e.g. range, etc). This information is useful to RAN, e.g. in configuring DRX, and can be semi-statically signalled to RAN. FFS whether the jitter information should be associated with PDU Set or Data Burst.
* Boundary indication for a media unit (e.g. start and/or end of a PDU Set or a Data Burst). This information can be used by RAN, e.g. in configuring DRX and timely termination of DRX active time. It can be dynamically signaled to RAN. FFS whether the indication should be for PDU Sets or Data Bursts.
* Information for identifying a PDU Set (e.g. sequence number for PDU Sets). It can be dynamically signalled to RAN.
* Explicit indications and/or conditions for RAN to decide on delivery vs discard of a media unit. It can be used by RAN/UE to avoid unnecessary transmission of obsolete PDUs and thus save UE power. FFS whether this media unit should be PDU, PDU Set or both and whether the indications should be signalled semi-statically or dynamically.

For XR traffic flows not based on PDU Sets

* RAN2 have identified that traffic periodicity, start offset of PDUs and range of jitters are useful to RAN for UE power savings.

RAN2 will provide further update to SA2 after RAN2 reach more conclusions on information useful to RAN for UE power savings for XR and media services.

# **2. Actions:**

**To: SA2**

**ACTION:** RAN2 respectfully asks SA2 to take the above information into account in the relevant work.

# **3. Date of Next RAN2 Meetings:**

TSG-RAN WG2 Meeting #119bis-e 10 – 10 October, 2022 E-Meeting

TSG-RAN WG2 Meeting #120 14 – 18 November, 2022 E-Meeting