**3GPP TSG-RAN WG2 Meeting #131 R2-25XXX**

**Bengaluru, India, Aug 25th –29th, 2025**

**Title: [Draft] Reply LS on security parameter in paging request message**

**Response to: S3-252392**

**Release: Rel-19**

**Work Item: FS\_Ambient\_IoT\_solutions**

**Source: Huawei, HiSilicon [To be RAN2]**

**To: SA3**

**Cc: RAN3, SA2**

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

**Attachments:** **None**

1 Overall description

RAN2 thanks SA3 for the LS on security parameter in paging request message.

RAN2 further discussed this issue with below analyses:

The R2D messages (including paging message) have the maximum size as 1000bits, and it is not supported to segment the R2D messages. This 1000bits is supposed to carry the information bits from all WGs and possible future extensions. Some space pressures are observed. For example, the current RAN2 design in paging message includes more than 20bits for physical layer parameters from RAN1, up to 256bits for paging ID from CT4 and SA2, and more than 30bits for RAN2 overhead. The details can be referred to the TS 38.391.

In addition to the absolute limit on the maximum size, from RAN2 perspective, the less overhead in paging message, the better performance from signaling design perspective. For example, the overhead efficiency and better coverage can be achieved with less payload in R2D message. Therefore, RAN2 has been striving to reduce the payload of paging message.

**In conclusion, as to the security parameters mentioned in the LS:**

* **It is feasible from a signaling perspective to add the 128bit random number for security parameter.**
* **As to the additional security parameters, RAN2 kindly suggests that SA3 should avoid adding the additional parameters, if possible, to minimize the size.**

2 Actions

**To SA3**

**ACTION: RAN2 kindly asks SA3 to take above into account.**

3 Dates of next RAN2 meetings

TSG-RAN2 Meeting #131bis 13 - 17 Oct 2025 Prague, CZ

TSG-RAN2 Meeting #132 17 - 21 Nov 2025 Dallas, US