**3GPP TSG-SA3 Meeting #104-e *S3-212724***

**e-meeting, 16 – 27 August 2021**

**Title: [Draft]** **Reply LS on Small data transmissions**

**Response to: LS (S3-212428/R2-2104401) on Small data transmissions**

**Release: Rel-17**

**Work Item: NR\_SmallData\_INACTIVE-Core**

**Source: SA3**

**To:** **RAN2**

**Cc: SA2**

**Contact person: Wei Zhou**

[zhouwei@catt.cn](mailto:zhouwei@catt.cn)

**Alec Brusilovsky**

**[alec.brusilovsky@interdigital.com](mailto:alec.brusilovsky@interdigital.com)**

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

**Attachments:** none

# 1 Overall description

SA3 would like to thank RAN2 for their LS on Small data transmission.

RAN2 asked the following questions:

Q1: Can a CCCH message reusing the I-RNTI and resumeMAC-I be transmitted again in the same cell after SDT initiation, e.g., similar to legacy RRC Reject case (but without having received RRC Reject at the UE)?.

Q2: Can NCC and I-RNTI from a former cell in which an SDT procedure was initiated be reused to initiate a new SDT procedure in a new cell?

SA3 would like to state its preference for not reusing the same I-RNTI/resumeMAC-I for same cell and NCC/I-RNTI for new SDT in different cell when the same resumeMAC-I are calculated.

Furthermore, for both cases (same cell and different cell), SA3 would like to provide the following feedback:

to avoid replay attacks, the reuse of resumeMAC-I should be avoided. The input parameters for calculating resumeMAC-I are: KEY, PDCP COUNT, MESSAGE, DIRECTION, and BEARER. A change in any input parameter will be sufficient for producing a different resumeMAC-I and avoiding its reuse.

SA3 asks RAN2 to verify that the above requirements are met.

# 2 Actions

**To RAN2, SA2**

**ACTION:** 3GPP TSG SA WG3 would like RAN2 and SA2 to take the above feedback into account.

# 3 Dates of next TSG SA WG3 meetings

TSG SA WG3 meeting schedule is available at the following 3GPP link:

[https://portal.3gpp.org/Home.aspx?tbid=386&SubTB=386#/](https://portal.3gpp.org/Home.aspx?tbid=386&SubTB=386" \l "/)