**3GPP** **TSG SA WG3 Meeting 103-e S3-212257r6**

**Electronic meeting, 17-28 May 2021**

**Title: Reply LS on Small data transmission**

**Response to: LS S3-211426 (R2-2104401) on** **Small data transmissions**

**Release: Rel-17**

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

**Source: SA3**

**To:** **RAN2**

**Cc: SA2**

**Contact person: Alec Brusilovsky**

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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

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

RAN2 asked the following two 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?.

For both cases (same cell and different cell), SA3 would like to give the following feedback.

SA3 would like to point out that to avoid replay attacks, that keystreams are never reused. The inputs of keystreams include the following parameters: KEY, COUNT (e.g. PDCP count), MESSAGE, DIRECTION, and BEARER. One of the input changes will result in a different keystream.

RAN2 is encouraged to develop suitable solutions as long as the security principle for keystream reuse is satisfied.

# 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 CT WG1 meetings

TSG SA WG3 Meeting 103-Bis-e (TBC) 05-09 July 2021

TSG SA WG3 Meeting 104-e (TBC) 16-27 August 2021