**3GPP TSG-SA3 Meeting #101e-Bis *draft\_S3-202827-r1***

**e-meeting, 09 - 20 November 2020**

**Title: [DRAFT]** Reply to R2-2005978 on the re-keying procedure for NR SL

**Response to:** R2-2005978 on the re-keying procedure for NR SL

**Release:** Release 16

**Work Item:** eV2XARC

**Source:** SA3

**To:** RAN2

**Cc:** CT1

**Contact Person:**

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

**Attachments:** to be S3-202952 (if agreed)

**1. Overall Description:**

SA3 would like to thank RAN2 for sending the LS R2-2005978 on the re-keying procedure for NR SL. SA3 has discussed RAN2's requirements on the security activation/deactivation procedure and defined the agreed procedures as follow:

1. The receiving UE provides the AS layer with the new security context and an indication of activation of the PC5 unicast signalling integrity protection for the PC5 unicast link before sending the Direct Security Mode Command message, and an indication of activation of the PC5 unicast signalling confidentiality protection (if applicable) for the PC5 unicast link after sending the Direct Security Mode Command message, respectively
2. The initiating UE provides the AS layer with the new security context and an indication of activation of the PC5 unicast signalling integrity and confidentiality protection (if applicable) for the PC5 unicast link after receiving Direct Security Mode Command message.
3. The receiving UE provides the AS layer with an indication of activation of the PC5 unicast user plane integrity and confidentiality protection for the PC5 unicast link (if applicable) after sending Direct Communication Accept (for connection setup) or Direct Link Rekeying Response (for rekeying) message to the initiating UE.
4. The initiating UE provides the AS layer with an indication of activation of the PC5 unicast user plane integrity and confidentiality protection for the PC5 unicast link (if applicable) after receiving Direct Communication Accept (for connection setup) or Direct Link Rekeying Response (for rekeying) message.

For the detailed information, please refer to S3-202952 that is attached with the LS.

**2. Actions:**

**To CT1 group.**

**ACTION:** SA3 kindly requests RAN2 to take the above conclusions into account.

**3. Date of Next TSG-SA WG3 Meetings:**

SA3#101Bis-e 18 - 22 January 2021 e-meeting

SA3#102-e 22 February - 5 March 2021 e-meeting