**3GPP TSG-SA3 Meeting #102-e *S3-210145***

**e-meeting, 18th – 29th January 2021** Revision of S3-2xxxxx

**Source: Nokia, Nokia Shanghai Bell, Samsung**

**Title: MUSIM privacy issues relating to Paging Cause exposure**

**Document for: Approval**

**Agenda Item: 5.19**

# 1 Decision/action requested

Approve the pCR for key issue relating to Paging Cause

# 2 References

# 3 Rationale

In LS S2-2006011 on System support for Multi-USIM devices, SA2 asked “Q1: Please confirm whether exposing the Paging Cause in cleartext poses any privacy/security issues. “

# 4 Detailed proposal

### \*\*\*\*\*\*\*\*\* START OF CHANGES \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

5.1 Key issue #x: Privacy aspects of exposing ‘paging cause’

5.1.1 Key issue details

In TR 23.761 [2], a Multi-USIM device with concurrent registrations over 3GPP RAT associated with multiple USIMs procedures is discussed. A multi-USIM device can efficiently perform some activity (e.g., listen to paging) in a system while communicating in another system.

The network sends a paging request to notify the UE of a pending MT service. The Paging indication may additionally contain a ‘paging cause’ value indicative of the type of service/data pending for the UE in the network. In TR 23.761, only one ‘paging cause’ value has been agreed, but privacy aspects of exposing multiple values, corresponding to different mobile terminated services and data need to be analyzed.

The UE may be registered for any type of services in the network, this means that all the QoS types need to be considered. This key issue studies only privacy aspects of exposing the ‘paging cause’ for voice service only.

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5.1.2 Threats

5.1.3 Potential security requirements

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