**3GPP SA3LI#89 *s3i230317***

**25-28 April 2023, Washington, DC (US)**

Title: LS on addition of filler IEI for User-Data Header

Response to: -

Release: Rel-17

Work Item: LI17

Source: SA3-LI

To: CT1

Cc: -

**Contact Person:**

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Attachments: -

**1. Overall Description:**

SA3-LI is discussing possible enhancements to the technical solution for interception of SMS and would ask CT1 support on the following specific issue.

In case the LI authorization (warrant) prohibits reporting of the content of communication, when the LI target receives/sends a SMS, all the user communication included in the SMS needs to be removed by the LI functions in the Operator Network, before delivering the SMS related information to the LEA.

On the other side, the TP-UD as specified in TS 23.040 also includes header information, some of the header information shall be provided to the LEA (e.g., SMS Control IEs), while header information containing user communication content shall be removed (e.g., EMS Control or EMS Content).

In order to fulfill the requirements above, SA3-LI sees the need to enhance LI functions and protocols in such a way that it can be possible at LI Mediation Function to replace IEs in a Header of the SMS, while retaining the original TP-UD Header Length (UDHL) and TP-UDL values, also giving the evidence that the specific original information was legally modified.

A possible solution identified by SA3-LI would make use of a new Information Element Identifier to be specified in TS 23.040, say e.g., “Filler” of classification “SMS Control”, to be used when there is a requirement to replace IEs in a Header while retaining the original TP-UD Header Length (UDHL) and TP-UDL values.

When such IE is used, the information element data octets shall be set to 0. A receiving entity would then ignore (i.e. skip over and commence processing at the next information element) the content of this IE.

Multiple occurrences of this IE may occur.

This new IE could also be used by non-LI systems that need to store a modified TPDU without the user content, such as network monitoring and diagnostics.

SA3-LI would appreciate if the above can be considered as a rel-17 enhancement.

**2. Actions:**

**To CT1 group.**

**ACTION:** SA3-LI kindly asks CT WG1 to introduce enhancements of TS 23.040 in line with the above needs.

**3. Date of Next [SA WG3-LI] Meetings:**

SA WG3-LI Meeting #90 27th – 30th June 2023 Prague, Czech Republic

SA WG3-LI Meeting #91 24th – 27th October Sydney, Australia