**3GPP TSG-SA5 Meeting #158 *S5-247076***

Orlando, USA, 18 – 22 November 2024

**Source: Ericsson, Vodafone, Deutsche Telekom, Telecom Italia**

**Title: Signalling traffic monitoring Report Format of the drafted TS28.abc**

**Document for: Approval**

**Agenda Item: 6.19.22**

# 1 Decision/action requested

***For approval.***

# 2 References

[1] S5-245981 new WID signalling monitoring

[2] S5-245336, initial skeleton of draft TS28.abc signalling monitoring

# 3 Rationale

Defines Signalling traffic monitoring management report format

# 4 Detailed proposal

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# 2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non‑specific.

- For a specific reference, subsequent revisions do not apply.

- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

[1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".

[x7] IETF RFC8086: GRE-in-UDP Encapsulation

[x8] IETF draft-ietf-opsawg-pcapng-04: PCAP Next Generation (pcapng) Capture File Format

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## 7.1 Reporting format

### 7.1.1 Encapsulation

The STM report shall be encapsulated according to GRE-in-UDP. Other encapsulation methods may be possible based on operator’s policy.

### 7.1.2 GRE Encapsulation

Encoding of STM Payloads shall be performed using GRE in UDP Encapsulation as specified in IETF RFC8086 [x7]. The packet is encapsulated as IP header, UDP header, GRE header, and STM Payload.

The encapsulated STM Payload is shown in Figure 7.1.2-1.



Figure 7.1.2-1 STM encapsulation

|  |
| --- |
|  |
|  |
|  |  |  |

The STM payload contains the PCAPNG payload (IETF draft-ietf-opsawg-pcapng-04 [x8]). The PCAPNG payload contains PCAPNG header and the collected signalling messages. The STM payload has following attributes, as specified in the Table 7.1.2-2.

Table 7.1.2-2: STM Payload

|  |  |
| --- | --- |
| STM Payload attribute name | Description |
|  |  |
| PCAPNG Payload (M) | PCAPNG header and the collected signalling messages.The collected signalling message is sent before security encapsulation, or received after security decapsulation. |

Editor’s note: the identification of the peer NFs of the message is FFS.

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# Annex B (informative):Plant UML source code

## B.4 STM encapsulation

The following PlantUML source code is used to describe STM encapsulation. As depicted by Figure 7.1.2.-1:

@startuml

frame "STM encapsulation" {

rectangle "GRE header" as GRE

rectangle "STM Payload" as Payload

rectangle "UDP header" as UDP

rectangle "IP header" as IP

IP-[hidden]>UDP

UDP-[hidden]>GRE

GRE-[hidden]>Payload

}

@enduml

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