**3GPP TSG-SA3 Meeting #124 S3-253750-r1**

**Wuhan, China, 13 – 17 Oct 2025**

**Source: Samsung**

**Title: Security protection for sensing service operations between sensing entity and SF**

**Document for: Approval**

**Agenda item: 5.2.7**

**Spec: 3GPP TR 33.777**

**Version: 0.0.0**

**Work Item: FS\_Sensing\_SEC**

**Comments**

This document provides solution for security protection for sensing service operations.

\* \* \* First Change \* \* \* \*

# 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".

[2] 3GPP TR 23.700-14: "Study on Integrated Sensing and Communication; Stage 2".

[3] 3GPP TS 22.137: "Service requirements for Integrated Sensing and Communication; Stage 1".

[4] 3GPP TR 22.837: "Feasibility Study on Integrated Sensing and Communication".

[5] 3GPP TR 33.501: "Security architecture and procedures for 5G system".

[6] 3GPP TS 33.210: “Network Domain Security (NDS); IP network layer security”.

[7] 3GPP TS 33.310: “Network Domain Security (NDS); Authentication Framework (AF)”.

\* \* \* Next Change \* \* \* \*

## 6.X Solutions to KI#2

### 6.X.Y Solution #2.1.: **Security protection for sensing service operations between sensing entity and SF**

#### 6.X.Y.1 Introduction

This solution is for security protection for sensing service operations between sensing entity and Sensing Function (SF) Security.

#### 6.X.Y.2 Solution details

Security between SF (Sensing Function) and sensing entity is same as security procedures for non-service based interface security defined in clause 9 of 33.501 [5] using DTLS/IPsec.

Security profiles for DTLS implementation and usage shall follow the TLS profile given in clause 6.2 of TS 33.210 [6] and the certificate profile given in clause 6.1.3a of TS 33.310 [7].

Editor’s Note: This solution is under the assumption that deployment option is direct connection between sensing entity and SF. Need to update according to sensing architecture progress in TR 23.700-14.

#### 6.X.Y.3 Evaluation

Editor’s Note: Each solution should motivate how the potential security requirements of the key issues being addressed are fulfilled.

\* \* \* End of Changes \* \* \* \*