**3GPP TSG-SA3 Meeting #115Adhoc-e *S3-241263-r1***

**Online, 15th -19th April 2024**

**Source: Nokia, Nokia Shanghai Bell**

**Title: KI Security and privacy aspects of collection energy consumption information**

**Document for: Approval**

**Agenda Item: 5.16**

# 1 Decision/action requested

***It is requested to approve the Key Issue***

# 2 References

[1] 3GPP TR 33.766: "Study on security aspects of energy savings in 5G"

# 3 Rationale

This pCR introduces a new Key Issue for the study TR 33.766 [1].

# 4 Detailed proposal

**\*\*\*\*** START OF 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 23.700-66: "Study on Energy Efficiency and Energy Saving"

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**\*\*\*\*** NEXT CHANGE **\*\*\*\***

## 5.Y Key Issue #Y: Security and privacy aspects of collecting energy related information.

### 5.Y.1 Key issue details

TR 23.700-66 [2] studies the collection of energy related information for potential exposure. The information is collected by a centralised function in the core network. The authenticity, confidentiality and correctness of the data collected is of importance to produce correct analytics metrics.

Another aspect of collecting energy related information is the granularity at which it’s collected. Further information on the granularities can be found in TR 23.700-66 [2] . The sources produce assets which is sensitive to different actors in the ecosystem, i.e. the UE level energy related information is sensitive to the owner of the UE and the gNB, NF energy related information is sensitive to the MNO. Therefore, it’s important that the data is kept confidential when collected at the source.

The key issue aims to address the security and privacy issues, ensuring authenticity and confidentiality of information collected at all sources.

Editor’s Note: Further details are FFS.

### 5.Y.2 Security threats

Potential security threats are:

If the source of the energy related information is impersonated the metrics and potential actions taken based on these metrics can be biased.

If the energy related information is altered in transit from the source to the consumer, metrics and potentials actions taken based on these metrics can be biased.

If the energy related information is leaked in transit, user or business sensitive information may be disclosed.

Editor’s Note: Further security threats are FFS.

### 5.Y.3 Potential security requirements

The data in transit shall support confidentiality, integrity, and replay protection.Editor’s Note: Further requirements are FFS.

**\*\*\*\*** END OF CHANGE **\*\*\*\***