**3GPP TSG-SA3 Meeting #123 S3-25xxxx**

Goteborg, Sweden, 25 – 29 August 2025

**Source: Interdigital**

**Title:** **WT on MAC Layer Security for 6G**

**Document for: Endorsement**

**Agenda Item: 6.3**

# 1 Decision/action requested

***It is proposed to endorse this WT on MAC Layer Security for 6G***

# 2 References

[1] SP-240652 New WID on security aspects of NR mobility enhancement

[2] S3-251124 Reply LS on security handling for inter-CU LTM in non-DC cases

# 3 Rationale

As part of the work on LTM (SP-24065 [1]) SA3 agreed to allow NCC transmission in plain text via MAC CE message to address RAN2’s request to avoid RRC configuration between cell switches (as per Reply LS [2]), with the caveat that this compromise exposes the system to increased attack scenarios and probability of handover failure.

There is a need to study the support for MAC layer security for the 6G system to address this gap and considering potential increased usage of MAC layer for other usage (e.g., MAC layer provided configuration in lieu of RRC).

It is proposed to endorse the proposed Work Task for the MAC Layer security for the 6G system.

# 4 Detailed proposal

The Work Task aims at investigating support for MAC layer security for the 6G system. Specifically, the objectives include:

- Study the support for security and privacy at MAC Layer in 6G (e.g., LTM scenarios, other MAC level configuration anticipated scenarios).

NOTE: The work will be done in coordination with RAN WGs.