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

Goteborg, Sweden, 25 – 29 August 2025

**Source: LG Electronics**

**Title: Inputs to 6G study and SID preparation**

**Document for: Discussion**

**Agenda Item:**

# 1 Decision/action requested

***It is proposed to endorse the proposal detailed in this contribution.***

# 2 References

[1] [SP-250806](https://www.3gpp.org/ftp/Meetings_3GPP_Sync/SA/Inbox/SP-250806.zip), Study on Architecture for 6G System, 3GPP SA#108

# 3 Detailed proposal

These work tasks can be included in SA3 SID for 6G:

* WT1: 6G security framework based on 6G architecture
	+ WT1-1: Authentication and Authorization
		- Study how to support or enhance primary authentication and key agreement procedure.
		- Study how to support or enhance secondary authentication procedure.
	+ WT1-2: Security key management
		- Study how to support management of security keys in authentication and authorization procedure and mobility procedures.
	+ WT1-3: NAS layer security
		- Study how to protect NAS message and support support NAS security mode command procedure.

NOTE 1: The contents may have dependency or interaction with AEAD study.

* + WT1-4: AS layer security
		- Study how to protect RRC message and AS security mode command procedure.
		- Study how to provide security for user plane data.
		- Study how to protect MAC CE message.

NOTE 2: The contents may have dependency or interaction with AEAD study.

* WT2: Security support for non-3GPP accesses
	+ Study how to provide security to trusted and untrusted non-3GPP accesses.
* WT3: Security support on multiple accesses
	+ Study how to support security over simultaneous connection for 3GPP accesses and non-3GPP access.
* WT4: Security support on AI
	+ How to provide security to AI in 6G (e.g. AI agent, framework).

NOTE 3: The term AI agent refers to the general concept of agents autonomously performing tasks on behalf of users, systems, and/or applications as noted in SA2 6G SID [1].

* WT5: Security support on Data framework

Study how to provide security to data framework for all aspects related to efficient and scalable data handling.

* WT6: Security support on User consent framework
	+ Study any potential enhancements on system and procedure needed for user consent framework.
* WT7: Security support on Various features and frameworks
	+ Study how to provide security to the following aspects in 6G based on SA2 architectural work: the SBA framework, network slicing, network sharing, user plane architecture, network exposure framework, architecture for specific scenarios e.g. fixed wireless access, localized service access.

The work tasks related to system architecture and framework need coordination with SA2.

The work tasks with potential RAN impact need coordination with RAN WGs.

The work tasks with potential charging and OAM impact need coordination with SA5.

The work tasks with application enabler impact need coordination with SA6.