

Release 18



TSG SA priorities*

SA2 led - System Architecture and Services

- XR (Extended Reality) & media services
- Edge Computing Phase 2
- System Support for AI/ML-based Services
- Enablers for Network Automation for 5G Phase 3
- Enh. support of Non-Public Networks Phase 2
- Network Slicing Phase 3
- 5GC LoCation Services Phase 3
- 5G multicast-broadcast services Phase 2
- Satellite access Phase 2
- 5G System with Satellite Backhaul
- 5G Timing Resiliency and TSC & URLLC enh.
- Evolution of IMS multimedia telephony service
- Personal IoT Networks
- Vehicle Mounted Relays

SA3 led - Security and Privacy

- Privacy of identifiers over radio access
- SECAM and SCAS for 3GPP virtualized network products and Management Function (MnF)
- Mission critical security enhancements Phase 3
- Security and privacy aspects of RAN & SA features

SA4 led - Multimedia Codecs, Systems and Services

Systems & Media Architecture:

- 5G Media, Service Enablers
- Split-Rendering
- 5G AR Experiences Architecture

Media:

- Video codec for 5G
- Media Capabilities for Augmented Reality Glasses
- Al / ML Study

Real-Time Communications:

- XR conversational services
- WebRTC-based services and collaboration models

Immersive Voice & Audio:

- EVS Codec Extension for Immersive Voice and Audio Services (IVAS Codec)
- Terminal Audio quality performance and Test methods for Immersive Audio Services (ATIAS)

Streaming & Broadcast services:

- 5GMS Enh. (Network slicing, Low latency, Background traffic, 5GMS Uplink)
- Further MBS Enh. (Free to air, Hybrid unicast/broadcast)

Access Traffic Steering, Switching & Splitting support in the 5G system architecture Phase 3

- Proximity-based Services in 5GS Phase 2
- UPF enh. for Exposure & SBA
- Ranging based services & sidelink positioning
- Generic group management, exposure & communication enh.
- 5G UE Policy Phase 2
- UAS, UAV & UAM Phase 2
- 5G AM Policy Phase 2
- RedCap Phase 2
- Support for 5WWC Phase 2
- System Enabler for Service Function Chaining
- Extensions to TSC Framework to support DetNet
- Seamless UE context recovery
- MPS when access to EPC/5GC is WLAN

SA5 led - Management, Orchestration and Charging

Operations, Administration, Maintenance and Provisioning (OAM&P):

- Intelligence and Automation: Self-Configuration of RAN NEs, Enh. autonomous network levels, Evaluation of autonomous network levels, Enh. intent driven management services for mobile networks, AI/ ML management, Enh. of the management aspects related to NWDAF
- Management Architecture and Mechanisms: Network slicing provisioning rules, Enh. service based management architecture
- Support of New Services: Enh. Energy Efficiency for 5G Phase 2, New aspects of Energy Efficiency for 5G networks Phase 2, Enh. management of Non-Public Networks, Network and Service Operations for Energy Utilities, Key Quality Indicators (KQIs) for 5G service experience, Deterministic Communication Service Assurance

Charging:

Charging Aspects for Enh. Support of Non-Public Networks

SA6 led - Application Enablement & Critical Communication Applications

Critical Communications:

- MCX Enhancements MC over 5GS (5MBS, ProSe) Adhoc group comm., MCPTT Enh.
- Railways Gateway UE, Interworking

Service Frameworks:

- Edge App Architecture Enh., SEAL Enh., Subscriber-Aware API (CAPIF Enh.)
- Fused location, Application Data Analytics, App Layer NW Slicing Enablers for Vertical Applications:
- Enhancements to V2X, UAS application-enablement
- Future Factories, Personal IoT networks, Capability exposure for IoT platforms

TSG RAN priorities*

RAN1 led - Radio Layer 1 (Physical layer)

- NR-MIMO Evolution
- AI/ML Air Interface
- Evolution of duplex operation
- NR Sidelink Evolution
- Positioning Evolution
- RedCap Evolution
- Network energy savings
- Further UL coverage enhancement
- Smart Repeater
- DSS
- Low power WUS
- CA enhancements

RAN2 led - Radio layer 2 & layer 3 Radio Resource Control

- Mobility Enhancements
- Enhancements for XR
- Sidelink Relay Enhancements
- NTN (Non-Terrestrial Networks) evolution NR
- NTN (Non-Terrestrial Networks) evolution IoT
- UAV (Uncrewed Aerial Vehicle)
- Multiple SIM (MUSIM) Enhancements
- In-Device Co-existence (IDC) Enhancements
- Small data
- MBS

RAN3 led - UTRAN/E-UTRAN/NG-RAN architecture & related network interfaces

- Additional topological improvements IAB/VMR
- AI/ML for NG-RAN WI
- AI/ML for NG-RAN SI
- SON/MDT Enhancements
- QoE Enhancements
- Resiliency of gNB-CU-CP

RAN4 led - Radio Performance and Protocol Aspects

- RAN4-led spectrum items
- <5MHz in dedicated spectrum

Rel-18 Workplan for TSG CT

CT will work on Stage 3 completion and ASN.1 code and OpenAPI freeze of Rel-17 until June 2022 (TSG#96).

Work Item discussion on Rel-18 Stage 2 / Stage 3 (under CT) from June 2022.

*These are preliminary lists (As at SA#94-e)