



TSG SA Update on Rel-18 and Rel-19

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Technical Specification Group – System and Service Aspects (TSG-SA)

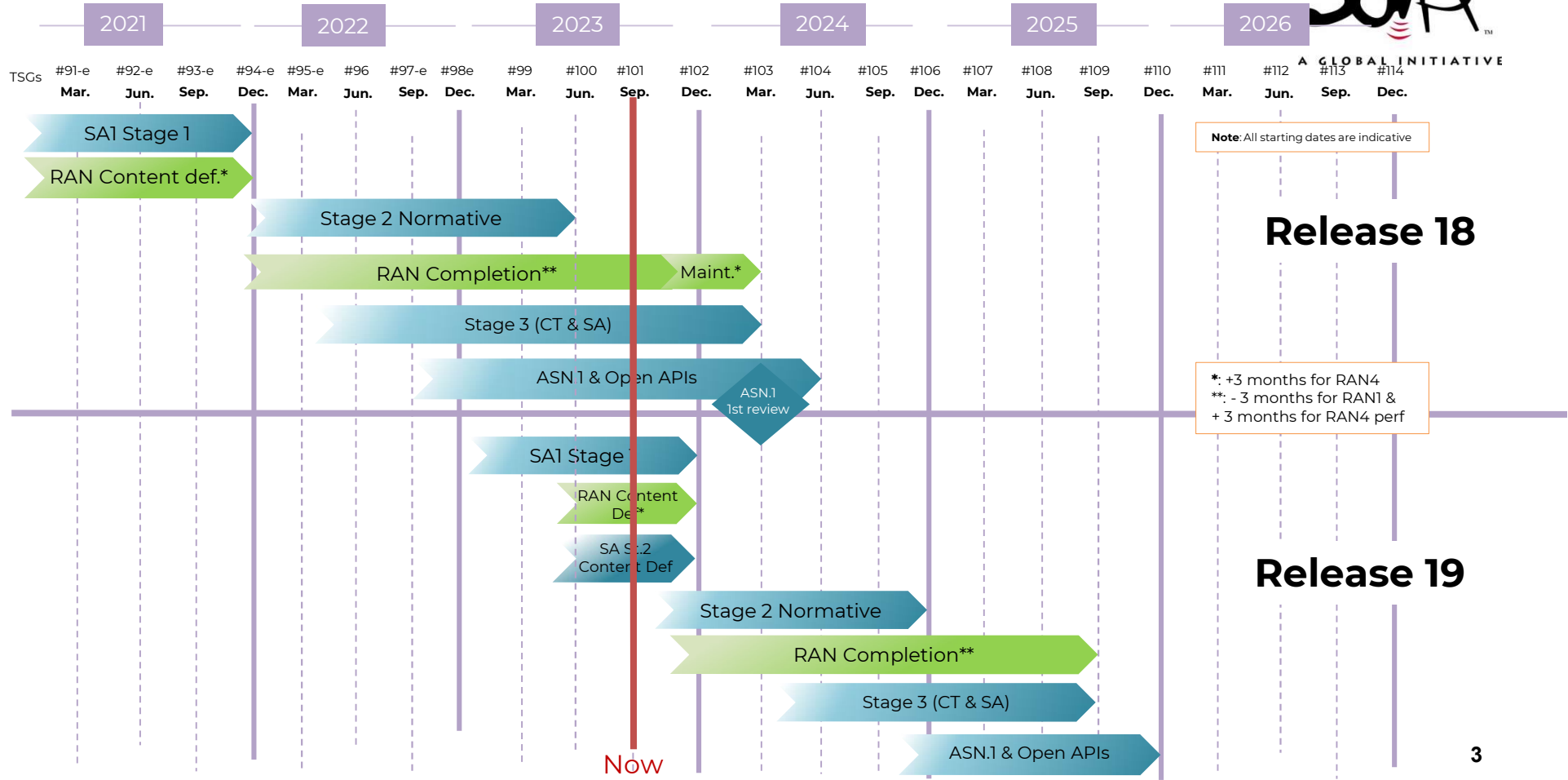


<u>Project Co-ordination Group (PCG)</u>		
<u>TSG RAN</u> Radio Access Network	<u>TSG SA</u> Service & System Aspects	<u>TSG CT</u> Core Network & Terminals
<u>RAN WG1</u> Radio Layer 1 (Physical layer)	<u>SA WG1</u> Services	<u>CT WG1</u> User Equipment - Core Network protocols
<u>RAN WG2</u> Radio layer 2 and Radio layer 3 Radio Resource Control	<u>SA WG2</u> System Architecture and Services	<u>CT WG3</u> Interworking with External Networks & Policy and Charging Control
<u>RAN WG3</u> UTRAN/E-UTRAN/NG-RAN architecture and related network interfaces	<u>SA WG3</u> Security and Privacy	<u>CT WG4</u> Core Network Protocols
<u>RAN WG4</u> Radio Performance and Protocol Aspects	<u>SA WG4</u> Multimedia Codecs, Systems and Services	<u>CT WG6</u> Smart Card Application Aspects
<u>RAN WG5</u> Mobile Terminal Conformance Testing	<u>SA WG5</u> Management, Orchestration and Charging	
	<u>SA WG6</u> Application Enablement and Critical Communication Applications	
<u>RAN AH1</u> RAN ad hoc group on ITU-R		

Ongoing Release timelines



A GLOBAL INITIATIVE



Note: All starting dates are indicative

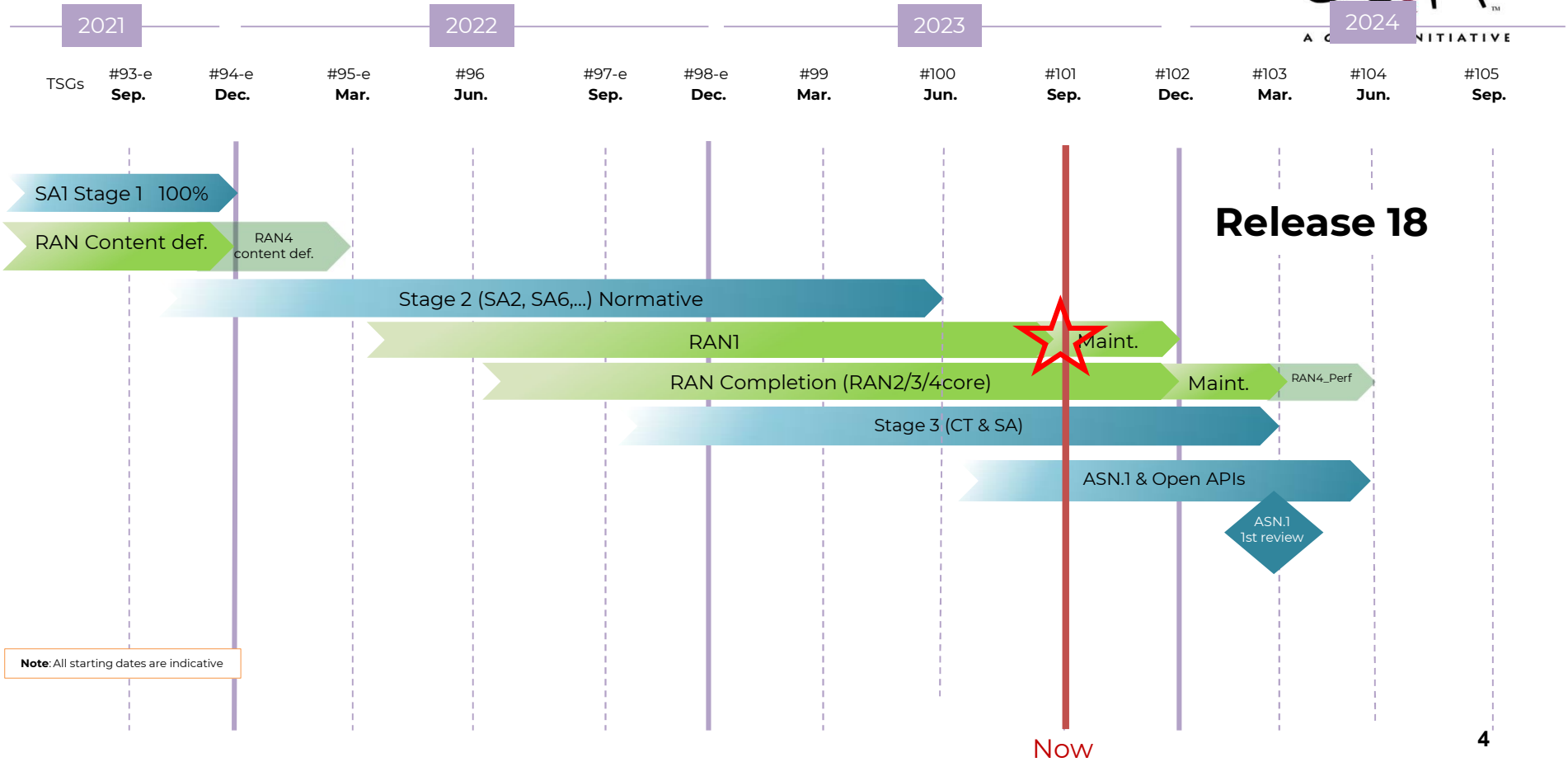
Release 18

*: +3 months for RAN4
 **: - 3 months for RAN1 & + 3 months for RAN4 perf

Release 19

Now

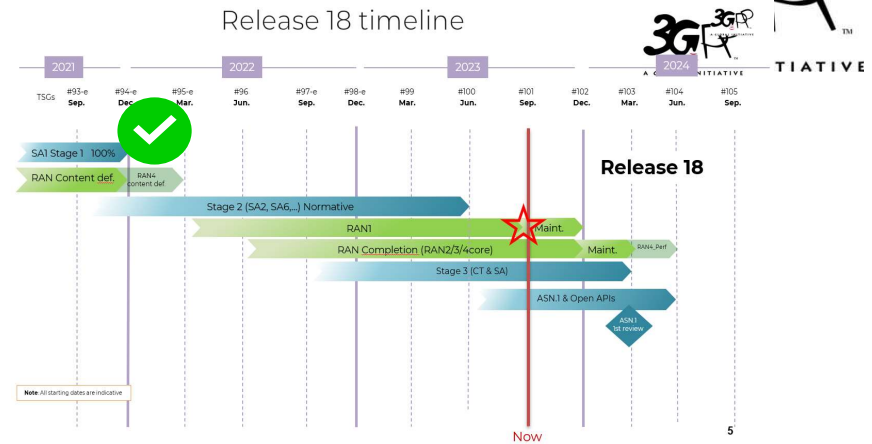
Release 18 timeline



Release 18 Progress: Stages 1 & 2

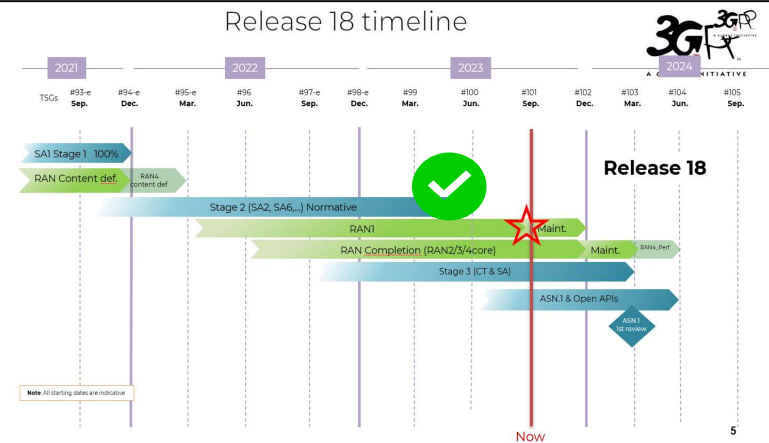


- Stage 1 and content definition:
 - Completed since TSG#94
 - In total, 25 normative items plus 14 studies.

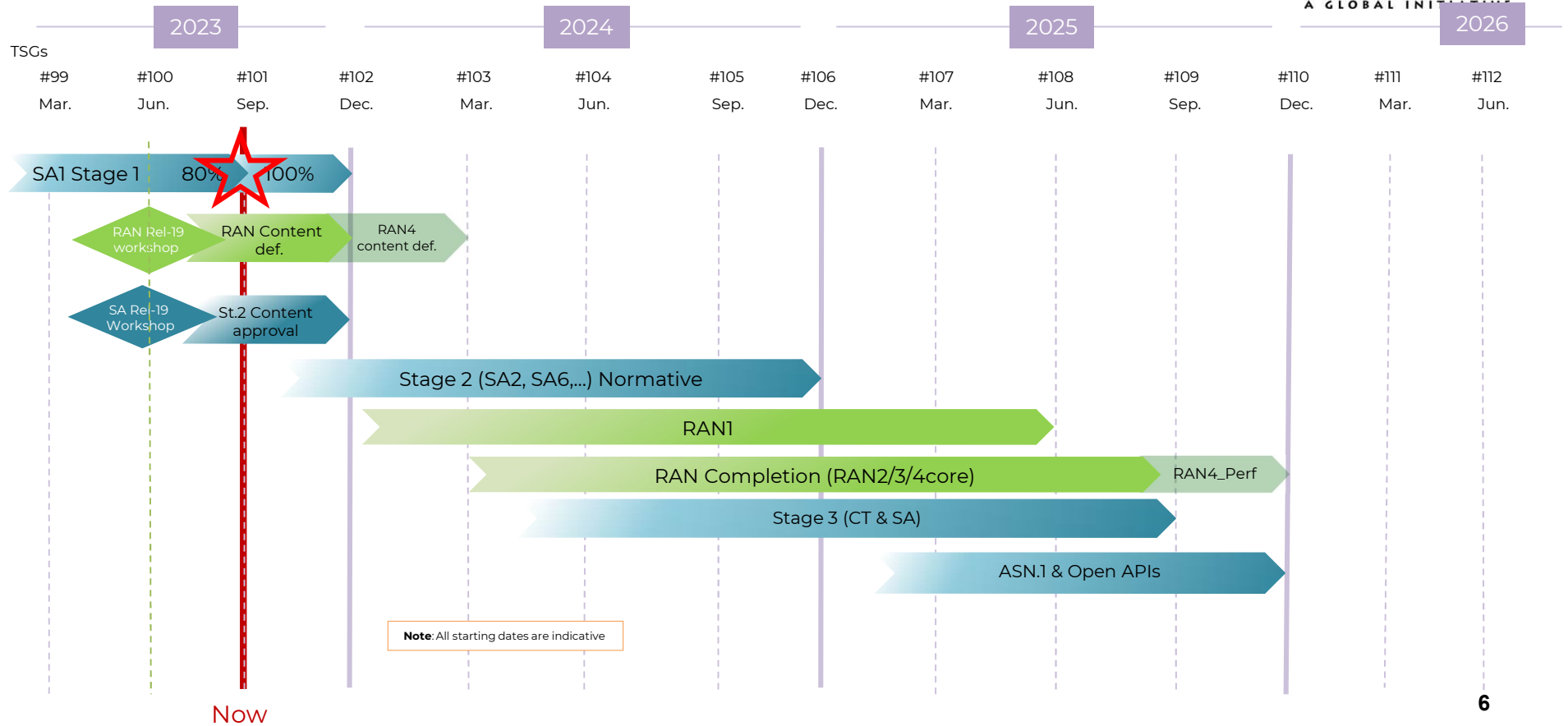


Stage 2 at SA2 and SA6:

- Stage 2 (at SA2 and SA6) studies :**
 - In total, 43 studies
 - Completed since TSG#99
 - except for EDGEAPP_EXT (UID 960011, SA6, now 65%, targeted for Dec.)
- Stage 2 (at SA2 and SA6) normative progress :**
 - In total, 57 tasks
 - Completed since TSG#100, including XRM (SA2, was 98% at TSG#100, now 100%)



Release 19 timeline

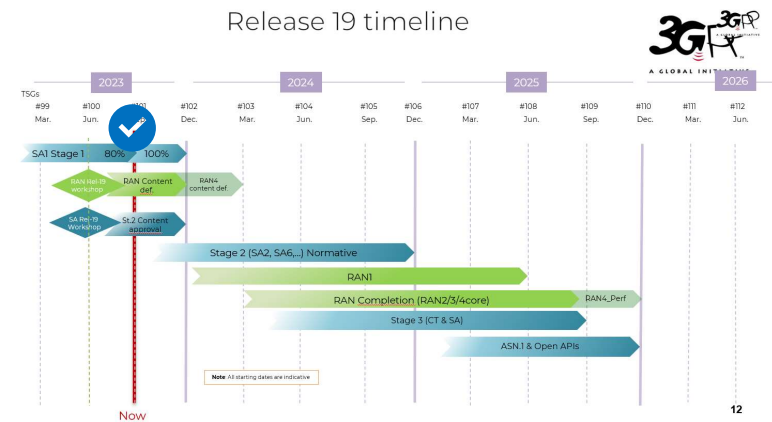


Release 19 progress overview



Stage 1 (SA1):

- Studies :
 - 14 studies – same as at previous TSG
 - **OCI (St.1 Studies from SA1) = 94 %** (against 80% at previous TSG).
- Normative :
 - 23 tasks, including “miniWIDs”
 - **OCI (St.1 Normative from SA1) = 92 %**



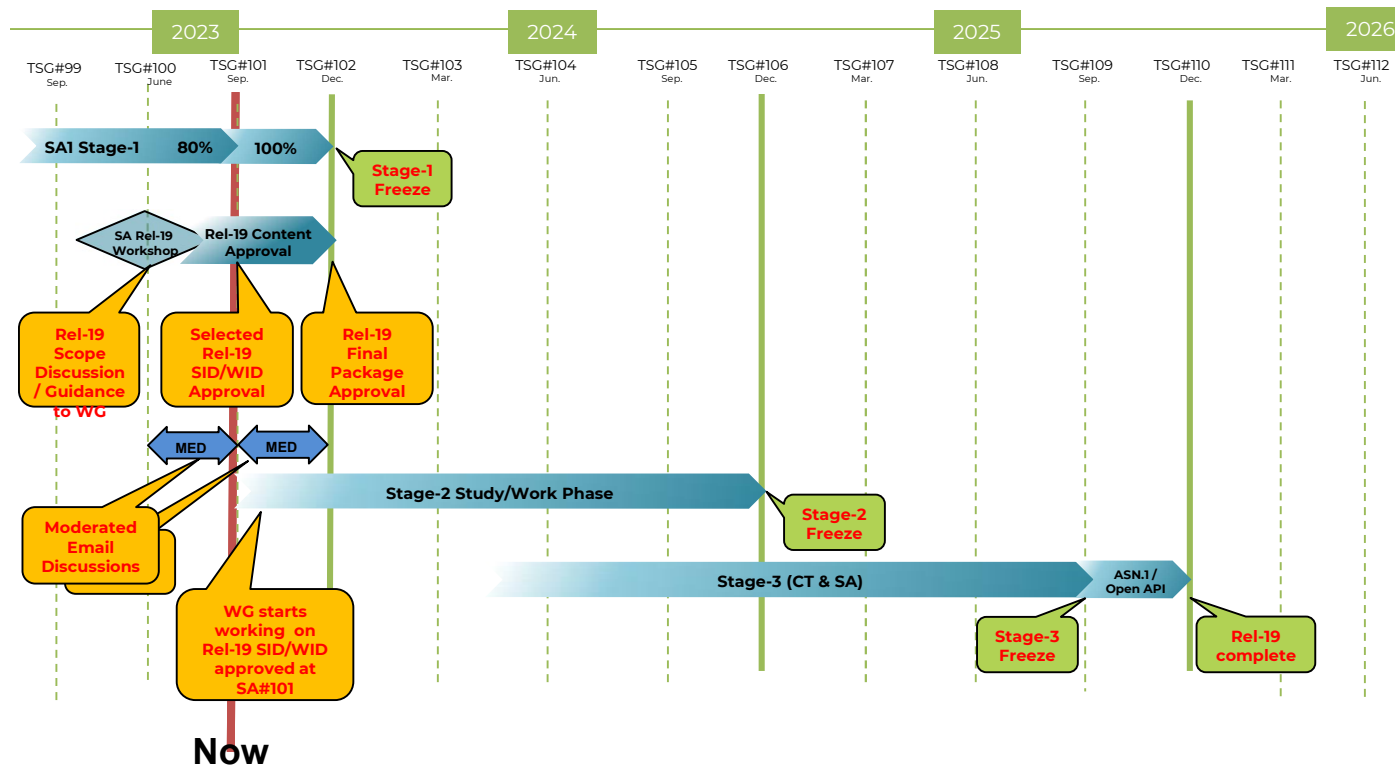
Stage 2 & 3:

- Studies :
 - 4 studies – one more than at previous TSG: 1 from SA4, 3 from SA6
 - **OCI = 15 %**
- Normative :
 - 8 tasks
 - **OCI = 3 %**

OCI = Overall Completion Index = sum of all % completion divided by the number of items



Rel-19 Content Definition Process (From SA#100)



SA2 Rel-19 candidate topics (from SA#100)

S.No.	Rel-19 Core Topics	Rel-19 Miscellaneous Topics
1	Satellite Architecture Enhancements	SBA framework enhancement / 5GS enhancement for Cloud Native Deployment
2	XRM Enhancements and Metaverse	Network Slicing
3	AI/ML Enhancements	5G SA Roaming services and Intermediaries (GSMA 5MRR request)
4	Multi-access (Dual 3GPP + ATSSS Enh)	Traffic Management (Monitoring + + QUIC)
5	Integrated Sensing and Communication	Enhancements in handling of Radio Capabilities
6	Ambient IoT	5GC enhancements for IP routing
7	Energy Efficiency / Energy Saving as a Service	Enhancing Emergency Services when Zero CS network coverage
8	IMS and NG_RTC enhancements	NPN enhancements
9	Edge Computing Enhancements	Ranging Phase 2
10	Proximity Services enhancements	LCS enhancements
11	TSC/URLLC/TRS enhancements	Mobile VPN
12	Network Sharing	Architecture Enhancements for Energy Utilities
13	User identities + identification of device behind RG/AP	eUEPO (UE Policy) Enhancements
14	5G Femto	Interworking of Non-3GPP Digital Terrestrial Broadcast Networks with 5GS Multicast Broadcast Services
15	UAS enhancements	RVAS (Roaming Value-Added Services)
16	VMR Enhancements	
17	UPEAS Enhancements	

SA1 Release 19 normative WIDs so far excluding miniWIDs



Unique_ID	Name	Acronym	%Complete	Hyperlink
1000026	Integrated Sensing and Communication	Sensing	80%	SP-230750
1010024	Ambient power-enabled Internet of Things	AmbientIoT	80%	SP-231016
1000028	Mobile Metaverse Services	Metaverse	80%	SP-230509
1000029	Indirect Network Sharing	NetShare	100%	SP-230511
1000031	FRMCS Phase 5	FRMCS_Ph5	50%	SP-230512
1000030	AI/ML Model Transfer Phase 2	AIML_MT_Ph2	80%	SP-230514
1000024	Satellite access Phase 3	5GSAT_Ph3	95%	SP-230516
1000032	Uncrewed Aerial System Phase 3	UAS_Ph3	95%	SP-230518
1010008	Application Architecture for UAS applications Phase 3	UASAPP_Ph3	0%	SP-230991
1010023	Upper layer traffic steering, switching and splitting over dual 3GPP access	DualSteer	80%	SP-231032
1000033	Energy Efficiency as Service Criteria	EnergyServ	75%	SP-230520
990051	Roaming Value-Added Services	RVAS	100%	SP-230231

SA2 Release 19 normative WIDs so far



Name	Acronym	%Complete	Hyperlink
Study on Architecture enhancement for XRM Ph2	FS_XRM Ph2	0%	SP-231198
Feasibility Study on 5GS Enhancement for Energy Efficiency and Energy Saving	FS_CNEES	0%	SP-231192
Study on Integration of satellite components in the 5G architecture Phase III	FS_5GSAT_ARCH_Ph3	0%	SP-231199
Study on system architecture for next generation real time communication services phase 2	FS_NG_RTC_Ph2	0%	SP-231196
Study on MPS for IMS Messaging and SMS services	FS_MPS4msg	0%	SP-231197

SA6 Rel-19 Work/Study Items



UID	Name	Acronym	Target (dd/mm/yyyy)	Old %	WID	New %
1000035	Study on enhanced application layer support for location services	FS_eLSAPP	Jun-2024	NA	SP-230778	15%
1000034	Study on Service aspects for supporting the eMMTel service	FS_eMMTelAPP	Sep-2024	NA	SP-230779	10%
1000039	enhMC – Enhanced Mission Critical Architecture for Rel-19	enhMC	Dec-2024	NA	SP-230695	5%
1000036	MCSHAC – Sharing of administrative configuration between interconnected MC service systems	MCSHAC	Dec-2024	NA	SP-230692	5%
1000038	FRMCS_Ph5 – Railways specific Enhancements to Mission Critical Services	FRMCS_Ph5	Dec-2024	NA	SP-230780	10%
1000037	5GMARCH_Ph3 – Application Architecture for MSGin5G Service Phase 3	5GMARCH_Ph3	Sep-2024	NA	SP-230781	0%
960011	Edge Application Standards in 3GPP and alignment with External Organizations	EDGEAPP_EXT	Jun-2023	50%	SP-220990	65%