

Update on progress SA#87-e meeting

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COVID-19 Impact



Cancellation of all 3GPP face-to-face meetings, including plenaries

- so far Q1 and Q2/2020
- more f2f meetings might need cancelling in Q3 and beyond

All 3GPP meetings now conducted as e-meetings

- Less, but still stable and high-quality output
- Tooling and procedures are discussed and further aligned

Focus is on Completion of Rel-16

Rel-17 starting up on stage 2 level

3GPP Release 16



- Stage 3 Freeze Date shifted to June 2020 Plenary
- Coding Freeze Date stays June 2020
- This ensures that IMT-2020 timeline is met and product roll-out plans don't have to change

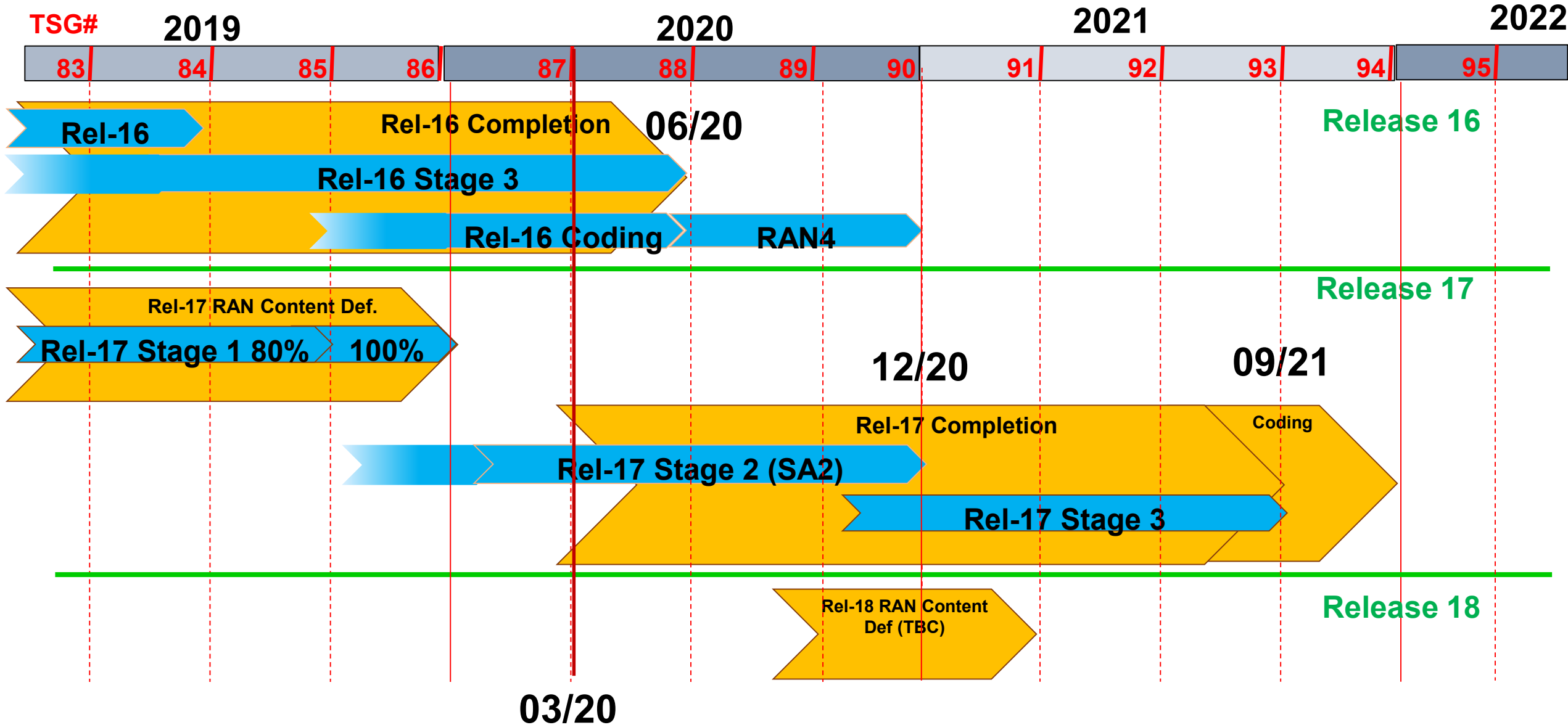
- Requirements (SA1) and Stage 2 are complete
- For Stage 2 some cross-WG issues are still discussed
- Exception sheets were endorsed by all impacted SA WGs

3GPP Release 17



- 🌿 SA1 finished work as foreseen on stage 1 in Q4/19
- 🌿 SA2 prioritization & timeline
 - Content and timeline (“15 month release”) approved in 12/2019 SA Plenary
 - Coordination with RAN groups on details of content ongoing
- 🌿 Due to COVID-19 crisis R17 timeline was shifted by 3 months

Current Ongoing Releases timelines



Rel-17 SA1 Work Items



| | | | | |
|-----------------------------------------------------------------------------------|--------------|----|------|-----------|
| Stage 1 of ATRAC | ATRAC | S1 | 100% | SP-190931 |
| Stage 1 of CMED | CMED | S1 | 100% | SP-190306 |
| Stage 1 of eCAV | eCAV | S1 | 95% | SP-191043 |
| Complete Gap Analysis for Railways Mobile Communication System | MONASTERYEND | S1 | 100% | SP-190312 |
| Study on Future Railway Mobile Communication System3 | FS_FRMCS3 | S1 | 100% | SP-190321 |
| Stage 1 of AVPROD | AVPROD | S1 | 100% | SP-191041 |
| Stage 1 of EAV | EAV | S1 | 100% | SP-190308 |
| Broadcast / Multicast requirements supporting Mission Critical Services in 5G | 5MBS_eMC | S1 | 100% | SP-190942 |
| Stage 1 of REFEC | REFEC | S1 | 100% | SP-190307 |
| Stage 1 of NCIS | NCIS | S1 | 100% | SP-191039 |
| Stage 1 of MUSIM | MUSIM | S1 | 100% | SP-190309 |
| Multi-Device and multi-identity Enhancements | MuDE | S1 | 100% | SP-190823 |
| Stage 1 of MPS2 | MPS2 | S1 | 100% | SP-190561 |
| Verification-modified Calling Name Display | VMOD_DISPLAY | S1 | 100% | SP-190085 |
| Enhanced Calling Name Service Analytics Interworking | eCNAM_An | S1 | 100% | SP-190940 |
| Enhancement for the 5G Control Plane Steering of Roaming for UE in CONNECTED mode | eCPSOR_CON | S1 | 100% | SP-190941 |
| Study on MINT | FS_MINT | S1 | 100% | SP-190090 |
| Stage 1 of MINT | MINT | S1 | 100% | SP-190938 |
| IMS emergency support for SNPN | IESNPN | S1 | 100% | SP-191038 |

Rel-17 SA2 Studies & Work Items



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|------------------------------------------------------------------------------------------------------|----------------|----|-----|-----------|
| Study on enhancement of support for 5G LAN-type service | FS_5GLAN_enh | S2 | 0% | SP-190626 |
| Enhancement to the 5GC LoCation Services-Phase 2 | 5G_eLCS_ph2 | S2 | 0% | SP-200082 |
| Study on supporting Unmanned Aerial Systems Connectivity, Identification, and Tracking | FS_ID_UAS_SA2 | S2 | 25% | SP-200097 |
| Study on architecture aspects for using satellite access in 5G | FS_5GSAT_ARCH | S2 | 85% | SP-181253 |
| Integration of satellite components in the 5G architecture | 5GSAT_ARCH | S2 | 0% | SP-191335 |
| Study on enhanced support of Industrial IoT | FS_IIoT | S2 | 40% | SP-200298 |
| Study on V2X services – Phase 2 | FS_eV2XARC_Ph2 | S2 | 0% | SP-190631 |
| Study on Architectural enhancements for 5G multicast-broadcast services | FS_5MBS | S2 | 35% | SP-200092 |
| Study on Stage 2 (System Enablers) for MUSIM | FS_MUSIM | S2 | 45% | SP-200297 |
| Stage 2 of Multimedia Priority Service (MPS) Phase 2 | MPS2 | S2 | 0% | SP-200083 |
| 5G System Enhancement for Advanced Interactive Services | 5G_AIS | S2 | 0% | SP-190564 |
| Supporting Flexible Local Area Data Network | FLADN | S2 | 0% | SP-190563 |
| Study on Enhancement of Network Slicing Phase 2 | FS_eNS_Ph2 | S2 | 35% | SP-190931 |
| Study on System enhancement for Proximity based Services in 5GS | FS_5G_ProSe | S2 | 55% | SP-190443 |
| Study on enhancement of support for 5WWC | FS_5WWC_Ph2 | S2 | 0% | SP-190562 |
| Study on enhanced support of Non-Public Networks | FS_eNPN | S2 | 35% | SP-200094 |
| Study on Enablers for Network Automation for 5G - phase 2 | FS_eNA_Ph2 | S2 | 32% | SP-200098 |
| Study on enhancement of 5G UE Policy | FS_eUEPO | S2 | 0% | SP-190449 |
| Study on the Usage of User Identifiers in the 5G System | FS_UUI5 | S2 | 0% | SP-190450 |
| Study on service-based support for SMS in 5GC | FS_SB_SMS | S2 | 0% | SP-190184 |
| Study on enhancement of support for Edge Computing in 5GC | FS_enh_EC | S2 | 40% | SP-200093 |
| Study on UPF enhancement for control and SBA | FS_UPCAS | S2 | 0% | SP-190187 |
| Study on Access Traffic Steering, Switch and Splitting support in the 5G system architecture Phase 2 | FS_ATSSS_Ph2 | S2 | 15% | SP-200095 |
| Study on Multimedia Priority Service (MPS) Phase 2, Stage 2 | FS_MPS2_St2 | S2 | 0% | SP-190629 |

Rel-17 SA3 Studies and Work Items



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|-----------------------------------------------------------------------------|-------------------|----|-----|-----------|
| Integration of GBA into 5GC | GBA_5G | S3 | 0% | SP-190714 |
| Assurance Specification for IMS | SCAS_IMS | S3 | 0% | SP-191128 |
| Security Assurance Specification for 5G | eSCAS_5G | S3 | 0% | SP-200149 |
| Security Assurance Specification for Non-3GPP InterWorking Function (N3IWF) | SCAS_5G_N3IWF | S3 | 0% | SP-200146 |
| Security Assurance Specification for 5G NWDAF | SCAS_5G_NWDAF | S3 | 0% | SP-200147 |
| Security Assurance Specification for Service Communication Proxy (SECOP) | SCAS_5G_SECOP | S3 | 0% | SP-200148 |
| Lawful Interception Rel-17 | LI17 | S3 | 0% | SP-190983 |
| Study on 5G security enhancement against false base stations | FS_5GFBS | S3 | 75% | SP-180690 |
| Study on SECAM and SCAS for 3GPP virtualized network products | FS_VNP_SECAM_SCAS | S3 | 35% | SP-180696 |
| Study on User Plane Integrity Protection | FS_UP_IP_Sec | S3 | 65% | SP-181035 |
| Study on Security Impacts of Virtualisation | FS_SIV | S3 | 45% | SP-181236 |
| Study on Long Term Key Update Process (LTKUP) Detailed solutions | FS_LTKUP_Detail | S3 | 60% | SP-181038 |
| Study on authentication enhancements in 5GS | FS_AUTH_ENH | S3 | 40% | SP-190713 |

Rel-17 SA4 Studies and Work Items



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|----------------------------------------------------------------------------------|-------------------|----|------|-----------|
| Study on Multicast Architecture Enhancements for 5G Media Streaming | FS_5GMS_Multicast | S4 | 0% | SP-200238 |
| 5G Media Streaming stage 3 | 5GMS3 | S4 | 70% | SP-190464 |
| Support of Immersive Teleconferencing and Telepresence for Remote Terminals | ITT4RT | S4 | 35% | SP-180985 |
| Terminal Audio quality performance and Test methods for Immersive Audio Services | ATIAS | S4 | 15% | SP-190040 |
| EVS Codec Extension for Immersive Voice and Audio Services | IVAS_Codec | S4 | 27% | SP-170611 |
| VR QoE metrics | VRQoE | S4 | 100% | SP-190331 |
| Study on VR Streaming Conformance and Guidelines | FS_VR_CoGui | S4 | 10% | SP-190642 |
| Study on 5G Video Codec Characteristics | FS_5GVideo | S4 | 0% | SP-200052 |
| Study on the use of NBMP in FLUS | FS_FLUS_NBMP | S4 | 0% | SP-200053 |
| Study on Streaming Architecture extensions For Edge processing | FS_EMSA | S4 | 0% | SP-200056 |

Rel-17 SA5 Studies and Work Items



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| Enhancements on EE for 5G networks | EE5GPLUS | S5 | 0% | SP-200188 |
| Management of non-public networks | OAM_NPN | S5 | 0% | SP-200189 |
| Enhancement on Management Aspects of 5G Service-Level Agreement | EMA5SLA | S5 | 0% | SP-200190 |
| Management of MDT enhancement in 5G | e_5GMDT | S5 | 0% | SP-200191 |
| Additional NRM features | adNRM | S5 | 0% | SP-200192 |
| Enhancement of QoE Measurement Collection | eQoE | S5 | 0% | SP-200193 |
| Enhancements of Self-Organizing Networks (SON) for 5G networks | eSON_5G | S5 | 0% | SP-200194 |
| Closed loop SLS Assurance | eCOSLA | S5 | 0% | SP-200196 |
| IMS Charging in 5G System Architecture | 5GSIMSCH | S5 | 30% | SP-190367 |
| Intent driven management service for mobile network | IDMS_MN | S5 | 55% | SP-180899 |
| Study on network slice management enhancement | FS_NSMEN | S5 | 0% | SP-191192 |
| Study on enhancement of Management Data Analytics Service | FS_eMDAS | S5 | 30% | SP-190930 |
| Study on new aspects of EE for 5G networks | FS_EE5G | S5 | 0% | SP-200187 |
| Study on enhancements of edge computing management | FS_eECM | S5 | 0% | SP-200195 |

Rel-17 SA6 Studies and Work Items



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| Study on application layer support for Factories of the Future in 5G network | FS_FFAPP | S6 | 50% | SP-190724 |
| Enhancements to Application Architecture for the Mobile Communication System for Railways Phase 2 | eMONASTERY2 | S6 | 60% | SP-191104 |
| Study on application layer support for Unmanned Aerial System (UAS) | FS_UASAPP | S6 | 35% | SP-200111 |
| Study on enhancements to application layer support for V2X services | FS_eV2XAPP | S6 | 50% | SP-200110 |
| Study on Mission Critical services support over 5G System | FS_MCOver5GS | S6 | 45% | SP-181136 |
| Mission Critical Data | eMCData3 | S6 | 15% | SP-191106 |
| Study on Mission Critical services over 5G multicast-broadcast system | FS_MC5MBS | S6 | 100% | SP-190929 |
| Study on Application Architecture for enabling Edge Applications | FS_EDGEAPP | S6 | 100% | SP-190065 |
| Architecture for enabling Edge Applications | EDGEAPP | S6 | 20% | SP-200109 |
| MC services support on IOPS mode of operation | MCIOPS | S6 | 50% | SP-190944 |
| Enhanced Mission Critical Push-to-talk architecture phase 3 | enh3MCPTT | S6 | 0% | SP-200108 |
| Study on support of the 5GMSG Service | FS_5GMARCH | S6 | 40% | SP-190559 |

Thank You!



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