SP-190862

Qualcoww

Rel.17 priorities

Source: Qualcomm Incorporated

SA2 work plan assessment

- Total number of TUs per SA2 meeting is 38 (+3 buffer)

- SA2 has to work in 3 major releases in parallel
  - Rel.15/16 maintenance/exceptions occupy from 28.5, 28, 19 Tus for a number of meetings before it drops to 14 TU
    - Aka SA2 meetings until Feb dominated by rel.15/16 (>= 50% of Tus)

- Current rel.17 schedule is for "15 months release" and **should be kept intact**:
  - Stage-1 freeze: Dec. 2019
  - Stage-2 freeze: Sep. 2020
  - Stage-3 freeze: March 2021

- Typical transition from study to normative work (6mo gap) ➔ Studies have to be completed (usually w/ some exceptions) by Feb. SA2#137 → 4 SA2 meetings

- Bottomline: Rel.17 SA2 available time is **very limited** we estimate that about **8-9 SA2 SIDs can be prioritised and maybe a couple more WIDs in Q2 2020** with some reasonable downscoping

Qualcomm's view of SA Release 17 (impacts in SA2)

SA2-led	
Multi-SIM / DSDS	Study - System enhancements to optimize performance of MSIM UEs. SA2 Study approved
5G MBS "Mixed Mode" Multicast and EnTV	Study - For V2X, IOT, PuBS, and EnTV SA2 study approved
Drone Enablements	Study - System enhancements to perform drone enablement in 5GS and EPS. SA2& SA6 study approved
NR Proximity Services/ Sidelink	Study - High-performance UE-UE offload link (NCIS), Public Safety. SA2 study approved Baseline with Public Safety as priority in rel.17 as adjustment to V2X architecture
Edge Services	Study - Gap analysis resulting optimizations in 5GS; would correspond to reqs under definition in SA1 & related work in SA2, SA6 & SA4
Vertical LAN "extensions"	Possibly 3 studies, 1) Enhancements for credentials provisioning, NW identification, 2) Time-sensitive Networking enh., 3) 5G LAN enhancements Studies agreed Qualcomm is interested in 1) only

SA2-led	
Enhancement of 5G UE Policy	Study - Roaming support; new trigger for policy provisioning; Nw detection of URSP enforcement; Interworking with EPS.

RAN-led with SA2 impacts	
Small data for NR	RAN Study - Small data and fast transition for RRC Inactive and Idle modes
NR V2X enhancements	Ultra reliability over PC5; P2V & V2I; Ranging Study - SA2 impacts potentially including: Ranging Support, V2P/V2I support, Relay support, multicast support (related to NR "Mixed Mode" multicast study)
NR Positioning enh.	Study - Support very low latency for IIoT and other user cases Enable local LMF support within NG-RAN Support low power positioning for CIoT

SA4-led with SA2 impacts	
Extensions to support XR	QoS enhancements and 5QIs for XR

Qualcomm SA2 priorities for rel.17 (without downscoping)

- Rel.17 SIDs – to start in Q4 2019
  - Study on supporting UAS Connectivity, Identification, and Tracking (FS_ID_UAS-SA2)
  - Study on architectural enhancements for 5G multicast-broadcast services (FS_5MBS)
  - Study on enhancement of support for Edge Computing in 5GC (FS_enh_EC)
  - Study on enhanced support of Non-Public Networks (FS_eNPN)
  - Study on enhancement of 5G UE Policy (FS_eUEPO)
  - Study on system enhancement for Proximity based Services in 5GS (FS_5G_ProSe)
  - Study on architecture enhancements for 3GPP support of advanced V2X services - Phase 2 (FS_eV2XARC_ph2)
  - Study on Enhancement to the 5GC LoCation Services - Phase 2 (FS_eLCS_ph2)
  - Study on system enablers for multi-USIM devices (FS_MUSIM)

- Rel.17 WIDs (w/ no need for study) – to start in Q2 2020
  - 5G System Enhancement for Advanced Interactive Services (5G_AIS)

Qualcomm SA2 priorities for rel.17 (with possible down scoping in SA2)

- Rel.17 SIDs – to start in Q4 2019
  - Study on supporting UAS Connectivity, Identification, and Tracking (FS_ID_UAS-SA2)
  - Study on architectural enhancements for 5G multicast-broadcast services (FS_5MBS)
    - Only WT#1 (-3 TUs)
  - Study on enhancement of support for Edge Computing in 5GC (FS_enh_EC)
    - Exclude WT#2, to be done in SA6 (- 2.5 TUs)
  - Study on enhanced support of Non-Public Networks (FS_eNPN)
  - Study on enhancement of 5G UE Policy (FS_eUEPO)
    - Only support for roaming and interworking with EPS (-5 TUs)
  - Study on system enhancement for Proximity based Services in 5GS (FS_5G_ProSe)
    - Only baseline for public safety adjusting existing V2X architecture (-12 TUs)
  - Study on architecture enhancements for 3GPP support of advanced V2X services – Phase 2 (FS_eV2XARC_ph2)
  - Study on Enhancement to the 5GC LoCation Services - Phase 2 (FS_eLCS_ph2)
  - Study on system enablers for multi-USIM devices (FS_MUSIM)

- Rel.17 WIDs (w/ no need for study) – to start in Q2 2020
  - 5G System Enhancement for Advanced Interactive Services (5G_AIS)
  - Time-sensitive Networking enhancements ONLY for Timing master tethered to UE instead of to network (as work item IIOT)