

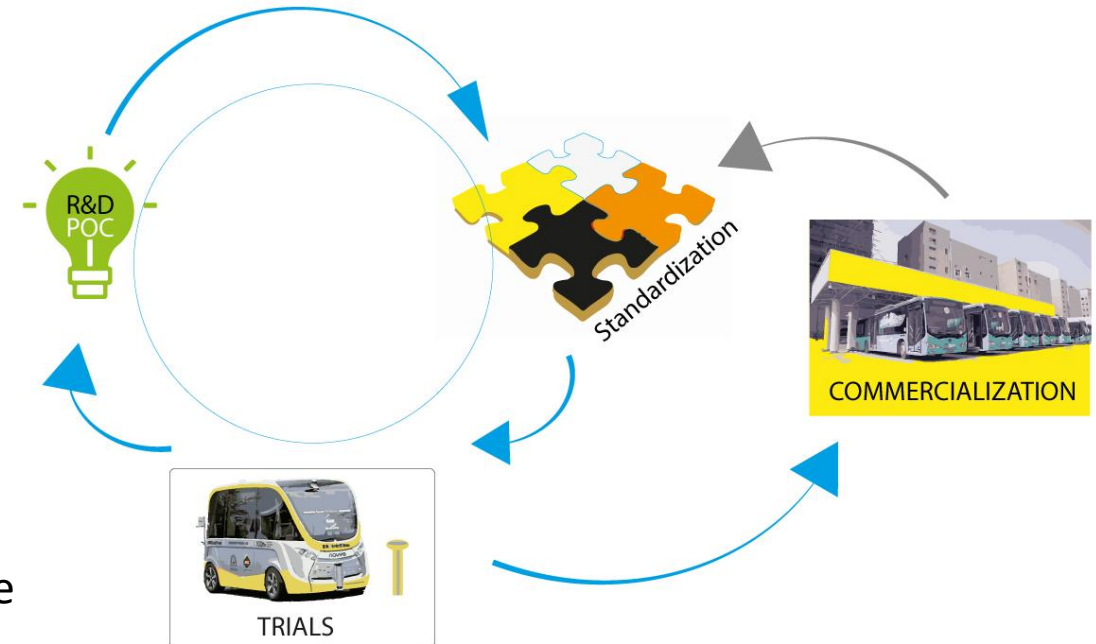
ETSI at the heart of 3GPP, 5G progress and dealing with the Pandemic

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Head of 3GPP Mobile Competence Centre (MCC),
Secretary - 3GPP Project Coordination Group

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Communications Officer

- Introduction to 3GPP
- Matching resources to the challenges of COVID?
- Changes made to ensure e-meetings have the same authority as physical meetings?
- The impact of moving to eMeetings, since March 2020 and outlook for 2021?
- Initial thoughts about 'beyond'

- Part of the invention, proof of concept, **standardization**, trials, commercialization ...cycle
- Specifications and Studies towards providing a complete **system description** for mobile telecommunications
- The system description is characterized by a number of **standardized interfaces**, **not** a description of standardized **deployment**
- This enables an interoperable, multi-vendor approach to deployment and generates mass market economies of scale





3GPP's Standards eco-system



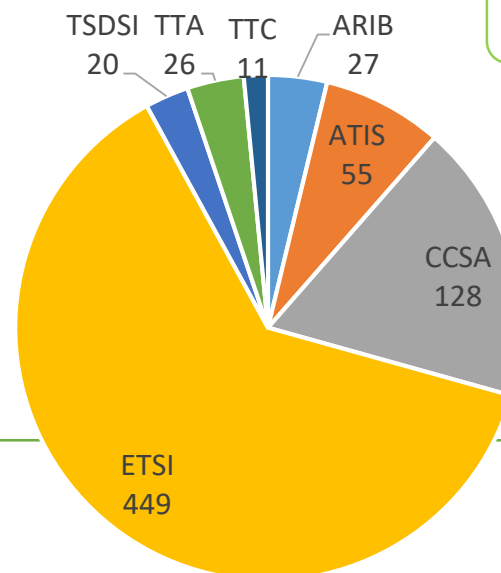
3GPP Organizational Partners (OPs)



The 3GPP **Organizational Partners (OP)** - from China, Europe, India, Japan, Korea and the United States.

Companies join 3GPP via membership of one or more of the 7 OPs.

700+ companies



3GPP Market Representation Partners (MRPs)



Inputs on market requirements may come in to the Project via 3GPP **Market Representation Partners (MRP)**.

There is also a lot of additional **external liaison** activity with SDOs, Industry bodies, projects...

Certification Bodies



5G Projects

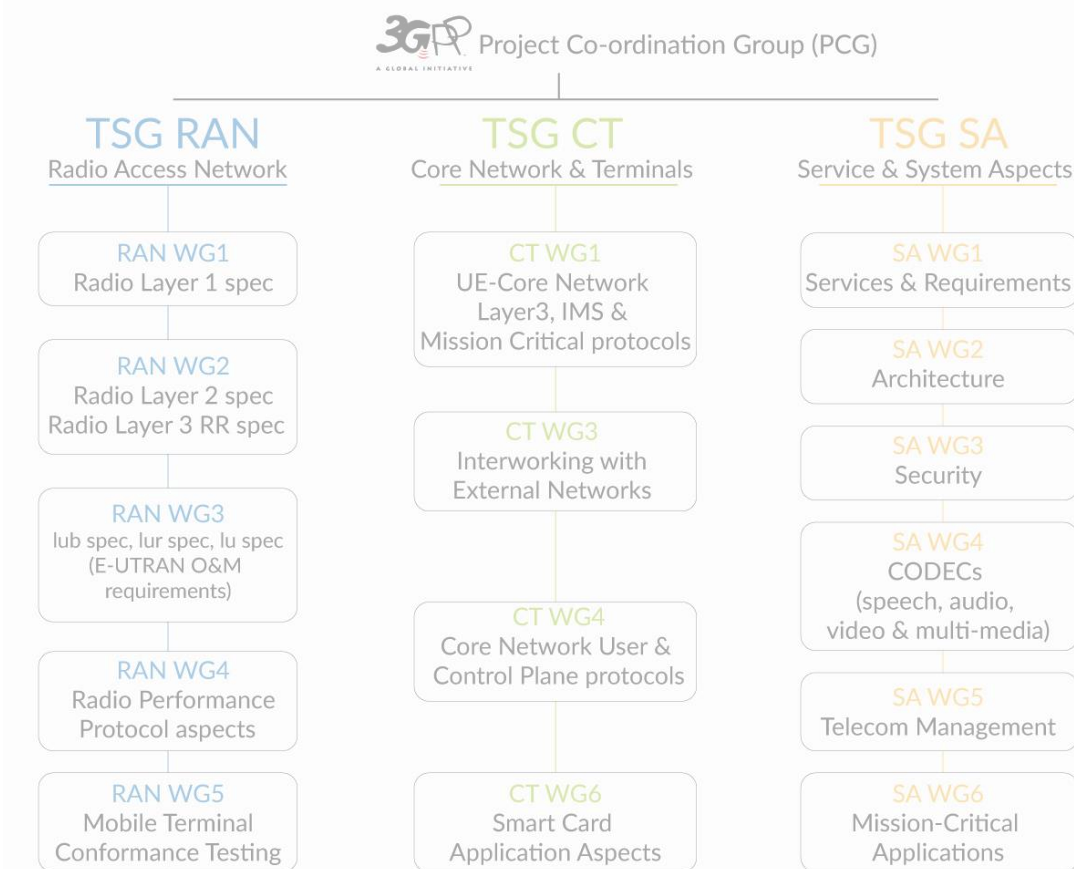
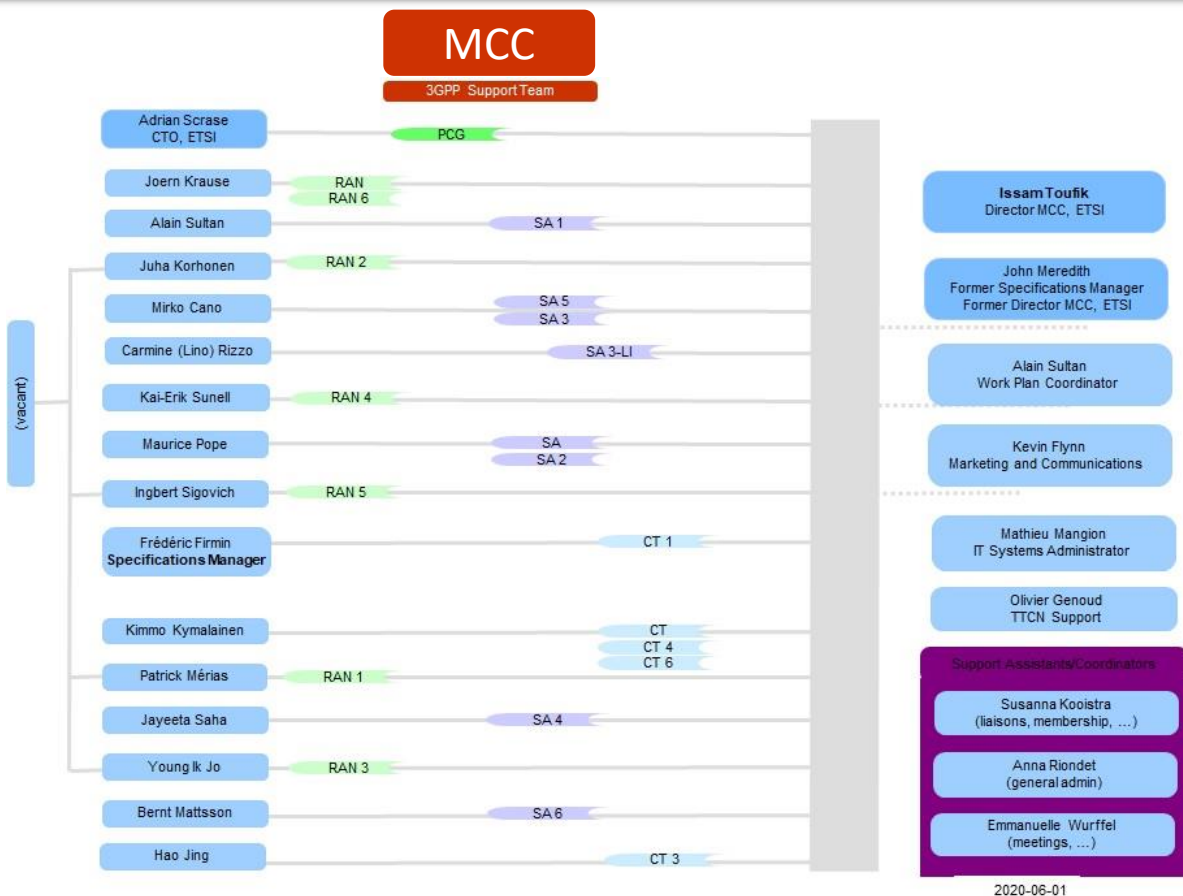


Official Liaisons (60+ groups):

450 MHz Alliance, AISG, Bluetooth, Broadband Forum (BBF), CableLabs, International Special Committee on Radio Interference (CISPR), CTIA, Digital Video Broadcasting (DVB) Project, Ecma International, Expert Group for Emergency Access (ESEA), Eurescom, COST 273, European Radiocommunications Committee (ERC), Fixed Mobile Convergence Alliance (FMCA), GCF, Global TD-LTE Initiative (GTDI), GPS Industry Council, GSM Association, HomeRF Forum, iDB Forum, IEEE, Internet Engineering Task Force (IETF), iDA, International Multimedia Telecommunications Consortium (IMTC), Internet Streaming Media Alliance, ISO/ITU expert group, ISO MPEG / JPES, ITU, JAIN Im (Javain API for Integrated Networks), The Java Community Process (JCP), Liberty Alliance Project, Metro Ethernet Forum (MEF), NENA, NGMN (Next Generation Mobile Networks), OneM2M, OMA (Open Mobile Alliance), Open Networking Foundation (ONF), Open IPTV Forum, Object Management Group (OMG), PCS Type Certification Review Board (PTCRB), Portable Computer and Communications Association (PCCA), Presence and Availability Management (PAM) Forum, RSA Laboratories, SDR Forum, Sun Microsystems Inc., Sterco, SyncML Initiative, Trusted Computing Group (TCG), TeleManagement Forum (TMF), TCCA, TTA /TK45, ITA/TRA7, ITU, TV-anytime Forum, Voice extensible Mark-up Language (VXML) Forum, Wi-Fi Alliance, Wireless Broadband Alliance (WBA), WLAN Smart Card Consortium, Wireless World Research Forum (WWRF), World Wide Web Consortium (W3C)

[Source: extract from <https://www.3gpp.org/about-3gpp/15-bodies-with-which-3gpp-has>]

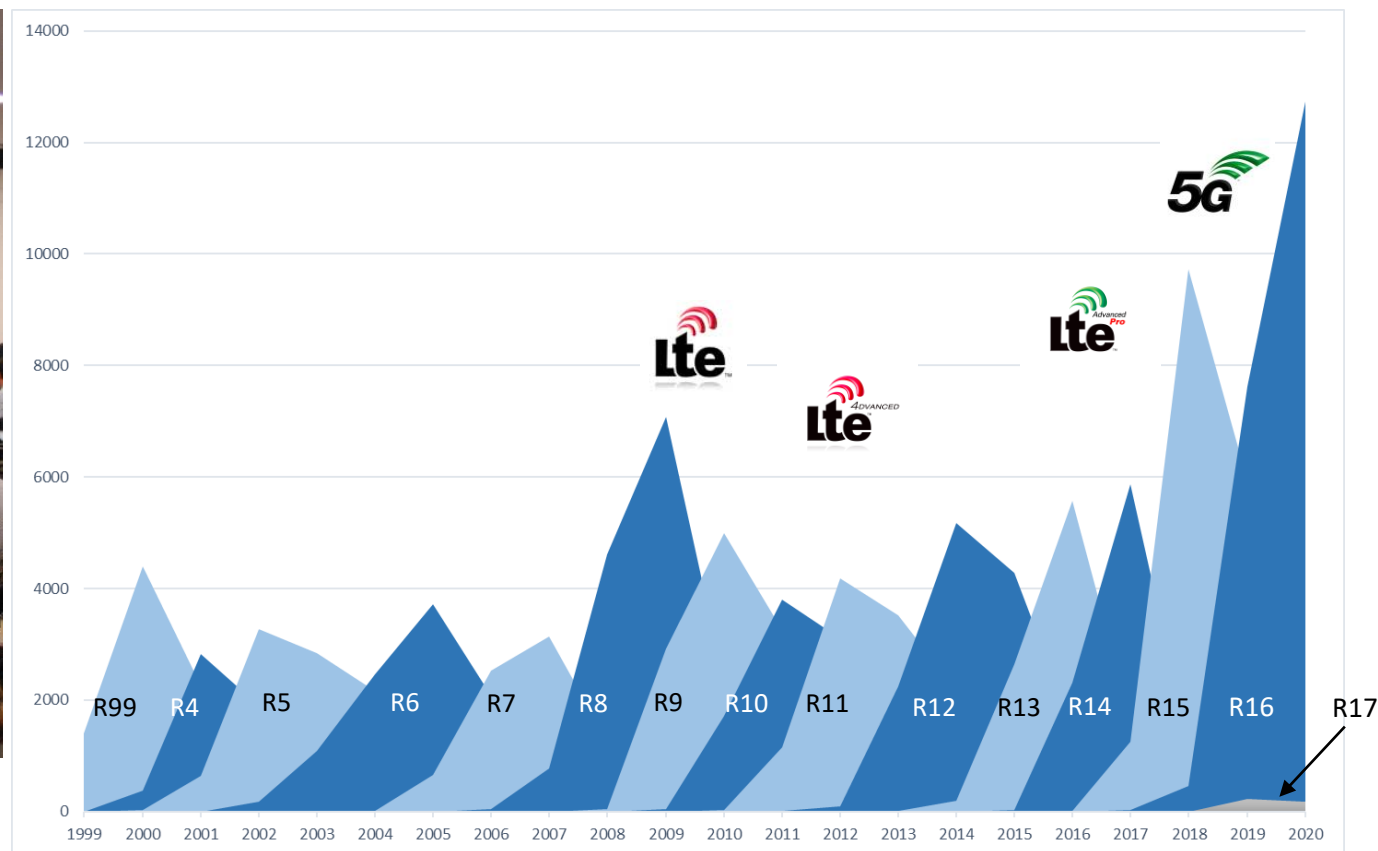
Matching resources to the challenges of COVID?







3GPP TSG RAN#86, December 2019



'Change Requests' per year by Release

Changes made to ensure e-meetings have the same authority as physical meetings?

Impact of moving to online only

- Discussion via email has been refined
 - Email Subject line contains the exact agenda item under discussion, CT example:

Subject: [\[AI#17.4\]](#) [\[CR pack\]](#) [\[CP-202184\]](#) comment: [revision of CR C1-205116](#)

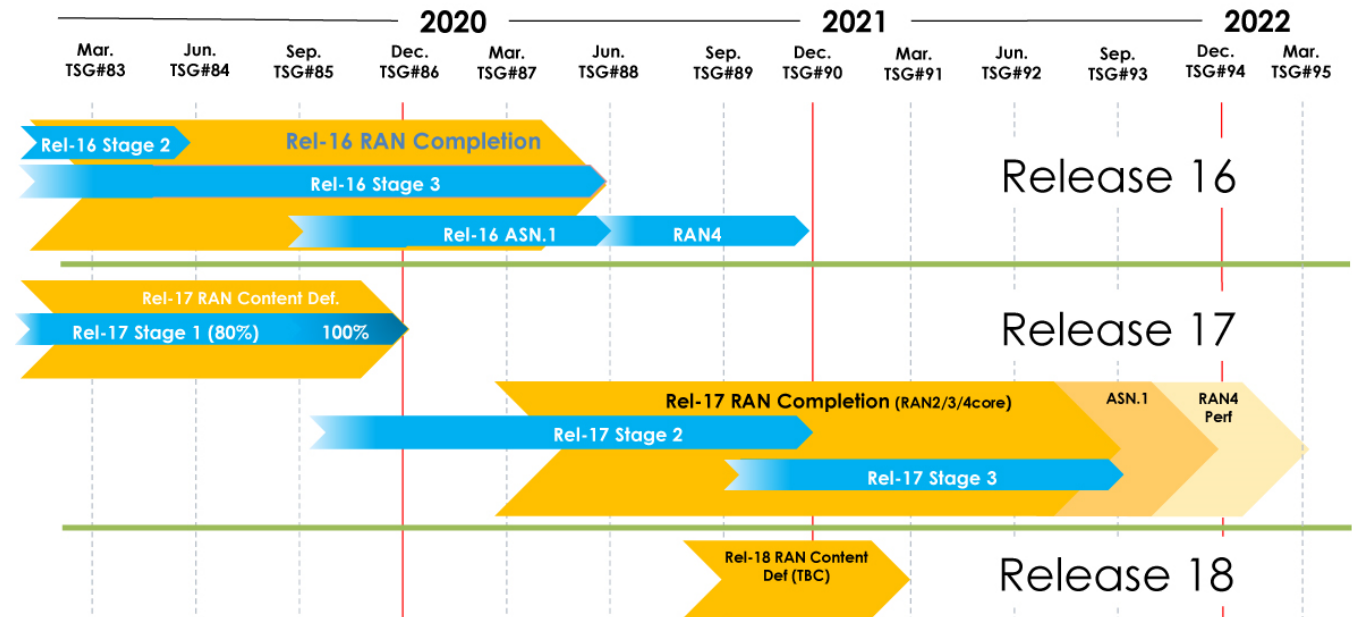
Structuring email discussions (example):

- Initial Email discussions + moderator summary
- Intermediate Email discussions + moderator summary
- Final comments over email + moderator summary
- Email discussion quiet periods, while summaries prepared

- Daily online sessions using 'GoToWebinar' interface for live discussion
 - Using Tohru hand-raising tool in some meetings
- Extra days for the work
 - CT – Sunday to Wednesday
 - RAN – Monday to Friday
 - SA – Tuesday to Friday

The impact of moving to eMeetings, since March 2020 and outlook for 2021

- Massive effort to complete Rel-16 on time in 2020.
- E-meetings and COVID-19 are challenging the original schedule for Rel-17 (right).
- A decision on a firm Release 17 timeline will be made by December 11, 2020.
- E-meetings as default until June 2021
- 3GPP to a solid base for the work on future Releases, beyond Rel-17, as we plan a return to physical meetings.



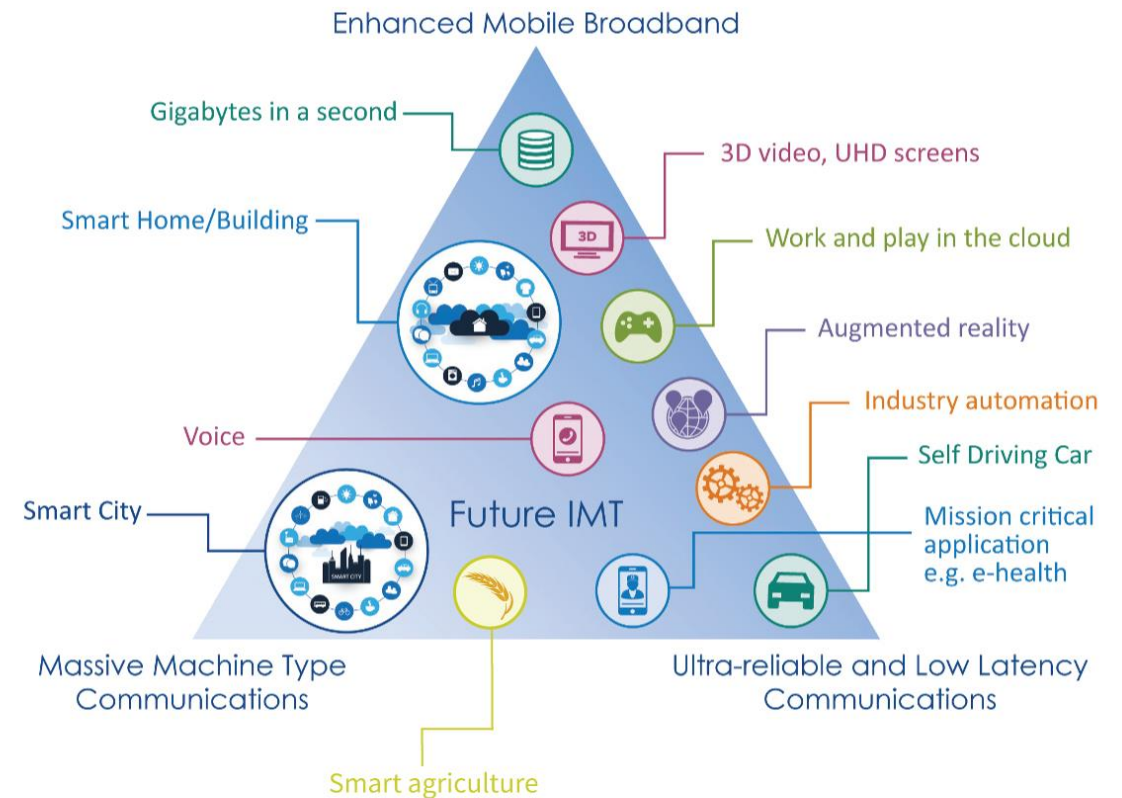
Source: 3GPP TSG SA#87e, 17-20 March 2020, e-meeting document SP-200222

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Thoughts about 'beyond'

Work still on-going in a variety of areas covered by the IMT triangle

- Availability of a reliable low latency radio and a fully flexible network
- Artificial Intelligence and Automation
- Device revolution for Augmented Reality and Virtual reality
- The Vertical industries going cellular

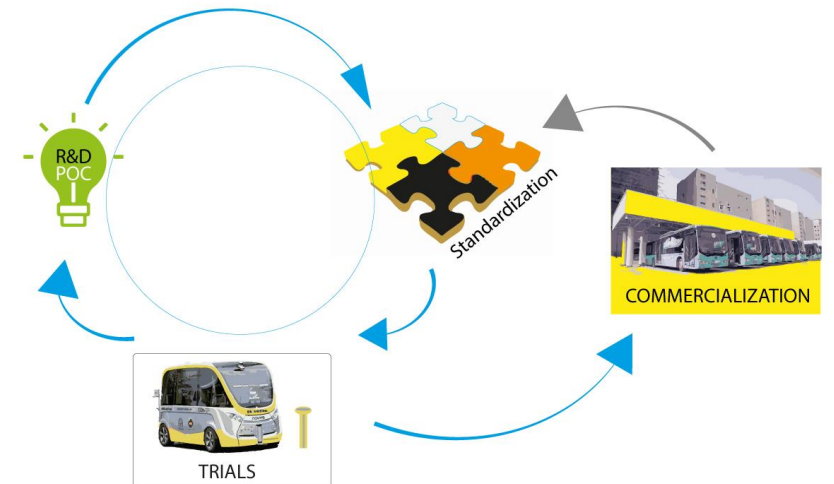


Release timing



Phases for the normative 5G work:

- Phase 1 (Rel-15) addresses the more urgent subset for commercial deployments
- Phase 2 (Rel-16) Completes the 3GPP IMT 2020 submission (ITU-R) and addresses all identified use cases & requirements
- Release 17 and Release 18 are 5G Releases too
- But... we will soon be faced with questions about the next step – driven by a variety of interested players

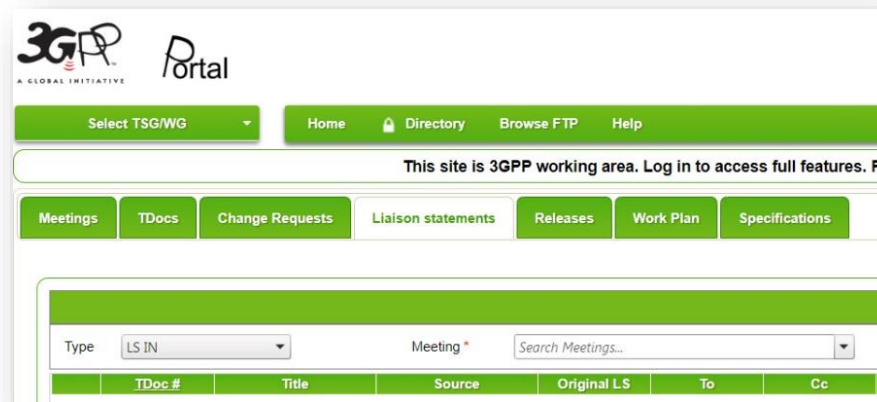




Thank you



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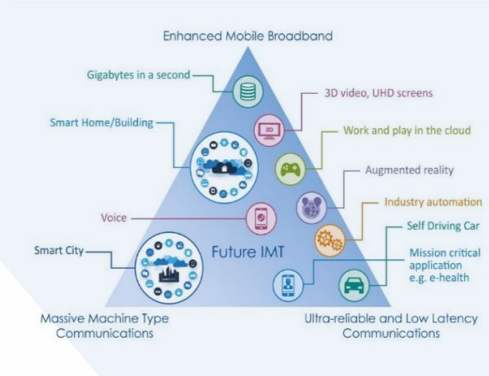
Newsletter



Register at www.3gpp.org/highlights



Bringing the work in to the 3GPP groups

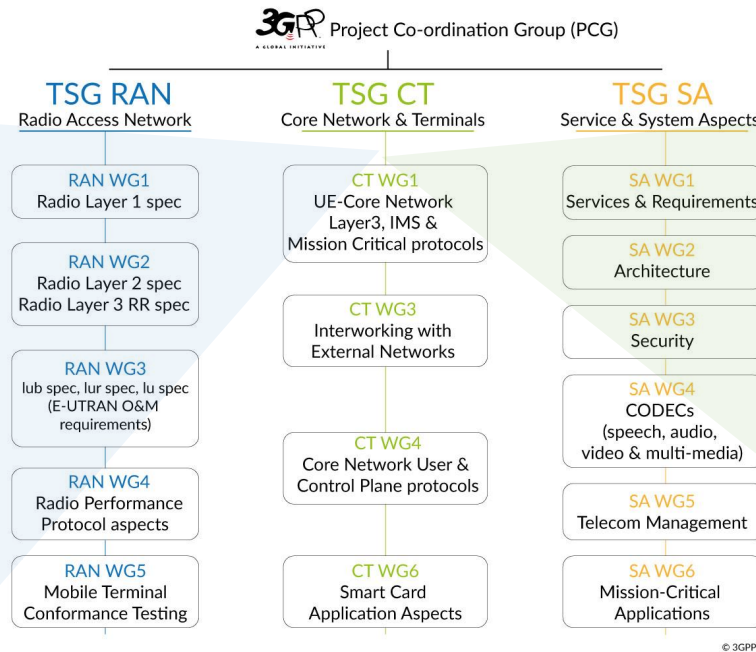


Use Case diversity

- High or Low data rates
- Higher user mobility
- Improved coverage

Overall Goals

- Enable new business
- Greater efficiency
- More flexibility – not one-size-fits-all systems



3GPP Specifications and Reports:

Requirements	21 series
Service aspects ("stage 1")	22 series
Technical realization ("stage 2")	23 series
Signalling protocols ("stage 3") - user equipment to network	24 series
Radio aspects	25 series
CODECs	26 series
Data	27 series
Signalling protocols ("stage 3") -(RSS-CN) and OAM&P and Charging (overflow from 32.- range)	28 series
Signalling protocols ("stage 3") - intra-fixed-network	29 series
Programme management	30 series
Subscriber Identity Module (SIM / USIM), IC Cards. Test specs.	31 series
OAM&P and Charging	32 series
Security aspects	33 series
UE and (U)SIM test specifications	34 series
Security algorithms	35 series
LTE (Evolved UTRA), LTE-Advanced, LTE-Advanced Pro radio technology	36 series
Multiple radio access technology aspects	37 series
Radio technology beyond LTE	38 series