

3GPP Newcomer Orientation

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Agenda



- About this event
- Roundcall
- Introduction to 3GPP
- Mentoring
- Questions & Answers

About



- This is the first ever Newcomer Orientation Session in 3GPP to be held
- The intention is to
 - provide basic background information to new delegates
 - answer questions of general nature about 3GPP
 - assign mentors & mentees
- Information at this moment has a SA/CT focus, RAN will follow-up
- Your feedback on this new process would be very much appreciated

Roundcall



Please state

- Your name
- Your company affiliation
- If you are a 3GPP official, your role
- How many years / meetings you have attended 3GPP
- Whether you regard yourself a newcomer

3GPP Introduction Slides



 Please open http://www.3gpp.org/ftp/tsg_sa/TSG_SA/TSGS_85/Docs/SP-190845.zip



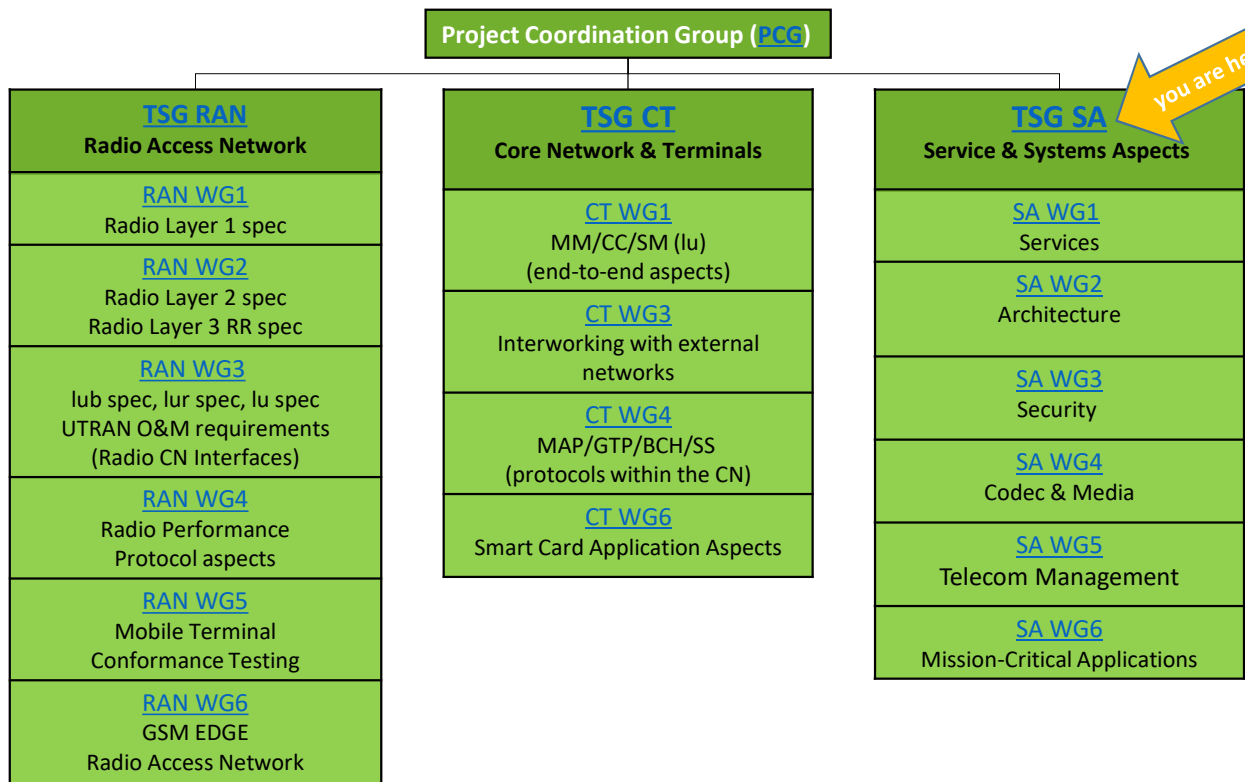
3GPP Introduction

About



- This slide set collects introductory & background information on 3GPP and specifically TSG SA
- Most of the information is available on the 3GPP websites, nevertheless it is seen as beneficial for (new) delegates to have it also available in a slide set.
- These slides are not intended to be presented during the TSG SA meeting.
- This document is intended to be a living document to which more information can be added over time. This document will be made available at every SA meeting.
- The document is also open to more practical information (e.g. how to request and submit tdocs)

3GPP Organisation



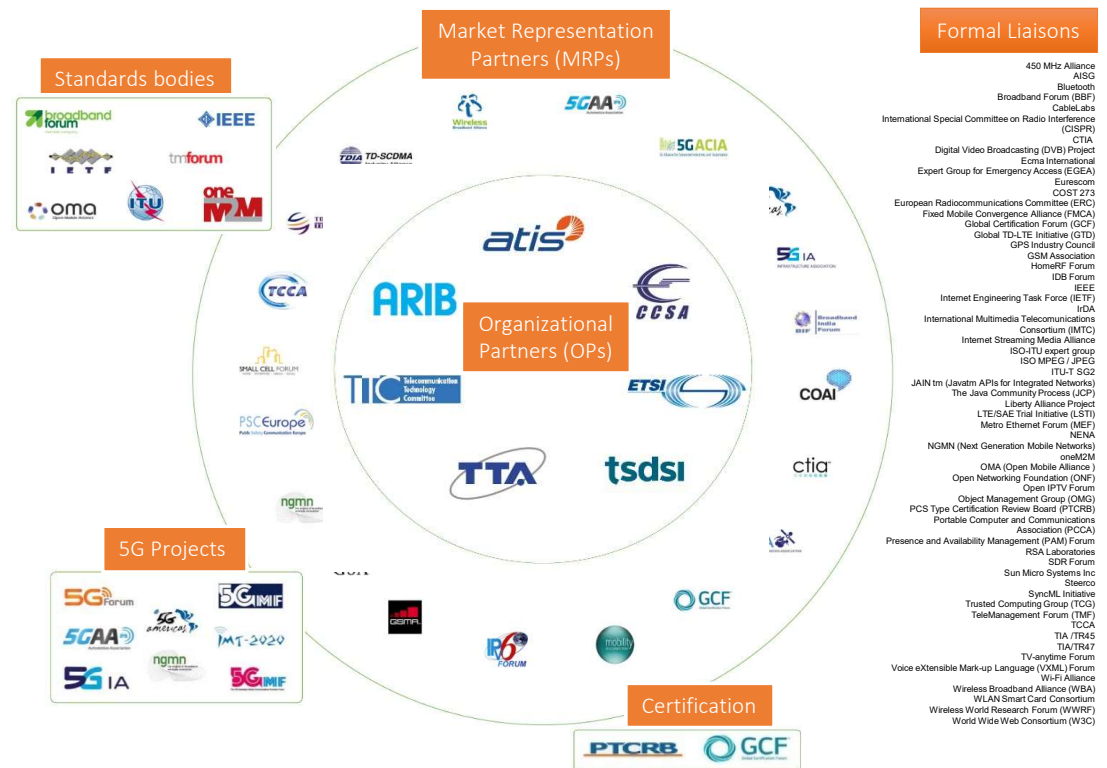
- 3GPP – The 3rd Generation Partnership Project (“the project”)
- PCG – Coordination of 3GPP by the Organizational Partners (OPs)
- Technical Specification Groups (TSGs) covering different aspects of 3GPP system & process
- TSGs are organized into **Working Groups (WGs)**
- TSGs meet 4 times a year in the so-called “Plenary meetings” (co-located)
- WGs meet once or more per plenary cycle (mostly not co-located)
- Each TSG and each WG elects its own leadership (2 year terms / 2 terms)
- Technical work is mostly done in WGs
- Overall planning and coordination in TSGs

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3GPP Eco-System



- The 3GPP Organizational Partners (OP) are the seven Standards Developing Organizations (SDOs) - from China, Europe, India, Japan, Korea and the United States.
- Participation in 3GPP is made possible by companies and organizations becoming Individual Members (IM) of one of the OPs.
- Specific inputs, in the form of market requirements may also come in to the Project via any of the twenty Market Representation Partners (MRP) in 3GPP. These organizations have all signed up to the 3GPP Project scope and objectives.
- Lots of external cooperation with other standards bodies and a broad variety of other groups, by way of formal Liaisons.



The Organizational Partners (OPs)



ARIB

www.arib.or.jp

The Association of Radio Industries and Businesses, Japan

ATIS

www.atis.org

The Alliance for Telecommunications Industry Solutions, USA

CCSA

www.ccsa.org.cn

China Communications Standards Association

ETSI

www.etsi.org

The European Telecommunications Standards Institute

TSDSI

<http://tsdsi.org/>

Telecommunications Standards Development Society, India



TTA

www.tta.or.kr

Telecommunications Technology Association, Korea

TTC

www.ttc.or.jp

Telecommunication Technology Committee, Japan

3GPP – How It Works



3GPP works based on

- Participation in face-to-face meetings
- Pro-activity & Contributions – you need written proposals to get attention
- Consensus – nobody says “no” in order to progress

Work organization

- Study Items, Work Items
- Releases with fixed time-lines, which are partially overlapping
- [Work Plan](#) (good overview)

3 stages, often overlapping

- Stage 1: Requirements
- Stage 2: Architecture
- Stage 3: Protocols

685 Companies actively participate in the 3GPP work

- From all over the world
- All major telecommunication companies – operators, network/device/chipset vendors
- More and more vertical industry representatives bring their work directly to 3GPP

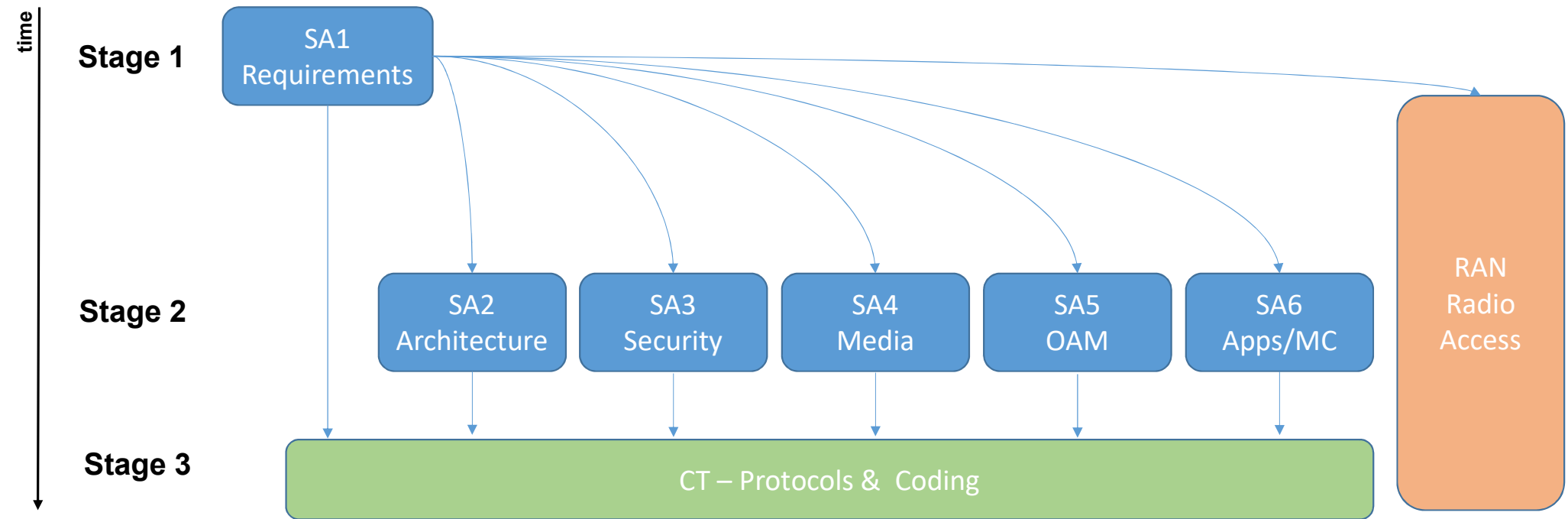
Amazing Track Record

- 3GPP started 1998, since then all major standards projects were deployed
- E.g. 3G/UMTS, 4G/LTE, VoLTE/IMS, NB-IoT, 5G
- Seamless migration from “old” to “new” technology generations

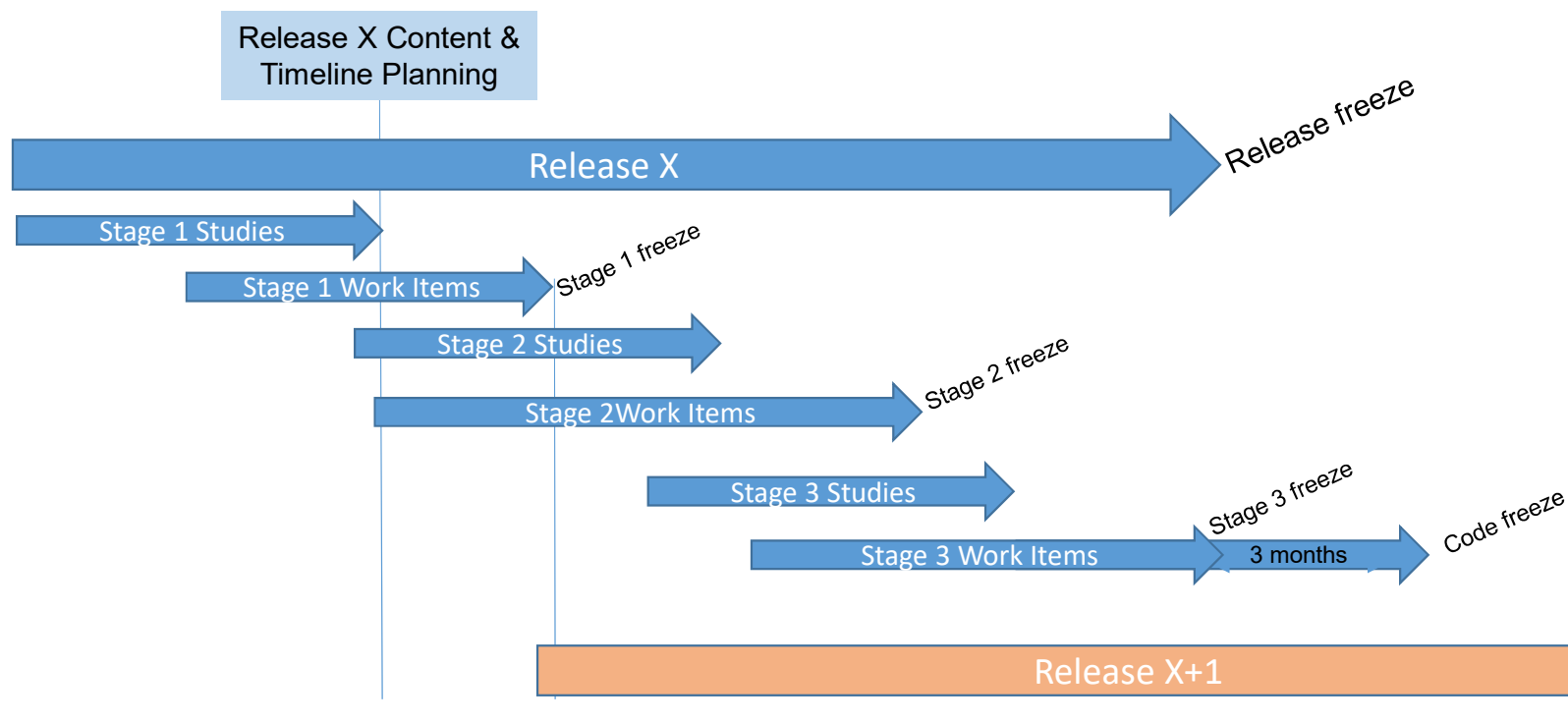
A new Release every 15 to 24 months

- Allows for reasonably fast standardization & deployment of new ideas
- Strong commitment to time-lines guarantees reliable planning and time-to-market
- New technologies get easily introduced (IP, IoT, AI ...)

Stage 1/2/3 (very simplified SA view)



Releases (very simplified SA view)



3GPP Way of Working 1/2



Authority

- The Chairperson, assisted by vice-chairpersons, is responsible for the overall management of the technical work within the TSG/working group.
- The Chairperson may nominate officials to assist in the work, delegate tasks to the Vice Chairpersons or rapporteurs and may be assisted by the Support Team

In practice decisions are taken at scheduled meetings

- Additional authority may be arranged for decisions taken at electronic meetings (e.g. after a scheduled meeting by correspondence).

3GPP Way of Working 2/2



🌿 3GPP's success: collaborative of all member companies.

- Decisions mostly taken by consensus
 - With Exceptions: leadership election, some other specific 3GPP processes
- Reasonable effort to meet the concerns of all participants (if any)

🌿 At a last resort, if consensus cannot be achieved

- a formal vote is required
- The decision to approve requires a 71% or greater majority

🌿 General constructive attitude:

- 3GPP members are generally are willing to accept decisions taken by the group in order to make progress, even if they are not totally satisfied by a.

3GPP Specifications



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

- TS – Technical Specification
normative specification which might include informative material as well
e.g. 3GPP TS 23.228
- TR – Technical Report
informative specification
e.g. the outcome of a study item (SI)
spec-number second part starts with 8 or 9
e.g 3GPP TS 21.9xx
- 3GPP specifications are not standards, they have no legal standing. They become “official” standards once one or more of the OPs (national / international standards bodies) transposes them.

Links



- About 3GPP <https://www.3gpp.org/about-3gpp/about-3gpp>
- 3GPP User (3GU) Portal <http://portal.3gpp.org>
- 3GPP FAQ <https://www.3gpp.org/about-3gpp/3gpp-faqs>
- 3GPP News <http://www.3gpp.org/news-events>
- 3GPP TSG SA – Home <http://www.3gpp.org/specifications-groups/sa-plenary/sa-plenary/home>
- 3GPP Working Procedures http://www.3gpp.org/ftp/Information/Working_Procedures/3GPP_WP.pdf
- Liaison Statements <https://www.3gpp.org/specifications-groups/liaison-statements>
- 3GPP Awards <https://www.3gpp.org/about-3gpp/3gpp-award-roll-of-honour>

Some useful specs



📶 The essential rules of 3GPP:

- 3GPP Working Procedures
http://www.3gpp.org/ftp/Information/Working_Procedures/
- 3GPP TR 21.900 Technical Specification Group working methods
<http://www.3gpp.org/DynaReport/21900.htm>
- 3GPP TR 21.801 Specification drafting rules
<http://www.3gpp.org/DynaReport/21801.htm>

📶 Summary of Release content:

- Release 15 Overview – TR 21.915
<http://www.3gpp.org/DynaReport/21915.htm>
- Release 16 Overview (draft) – TR 21.916
<http://www.3gpp.org/DynaReport/21915.htm>

Abbreviations



3GPP – 3rd Generation Partnership Project
IM – Individual Member (of an OP)
MRP – Market Representation Partner (of 3GPP)
OP – Organizational Partner (of 3GPP)
PCG – 3GPP Project Coordination Group
SI – Study Item
TR – Technical Report (informative, e.g. for SI)
TS – Technical Specification (normative)
TSG – Technical Specification Group (of 3GPP)
WG – Working Group (under a TSG)
WI – Work Item
WP – Work Plan / Work Programme

3GPP Mentoring

Mentoring



- Mailing list: 3GPP_MENTORING (subscribe at <https://list.etsi.org>)
 - A group of 3GPP mentors (see next slides) is happy to answer your questions on basic 3GPP processes and to assist you during your first steps in 3GPP.
 - Either contact a mentor directly in person, per mail or ask your question on the list.
 - We are always looking for more mentors to support us!
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- Subscribe to the 3GPP_MENTORING list:
https://list.etsi.org/scripts/wa.exe?SUBED1=3GPP_MENTORING
 - Archive of the messages sent on the 3GPP_MENTORING list
https://list.etsi.org/scripts/wa.exe?A0=3GPP_MENTORING

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Questions & Answers



Thank You!



Please give us your feedback & improvement proposals

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