

# 3GPP SA5 Introduction

Information session for  
OSS vendors

July 2<sup>nd</sup> 2010

A GLOBAL INITIATIVE

# What is 3GPP?



 It is ...

- An association of regional and national Standards Development Organizations (SDOs) from around the globe

 It is populated by ...

- Delegates representing member organizations of those SDOs
- Delegates of the SDOs themselves
- Delegates representing organizations considering becoming members

# What is not 3GPP?



 It is ***not*** ...

- A government agency
- A regulatory body
- An arm of the ITU or the United Nations
- An arm of the EU or of CEPT
- A certification body
- A frequency-allocation body
- A legally constituted entity

# Components of 3GPP

## Organizational Partners

- SDOs which have signed up to the 3GPP Agreement and which jointly set policy and are responsible for overall governance
- Senior officials of the OPs ordinarily meet twice a year to exercise these powers

<http://www.3gpp.org/partners>

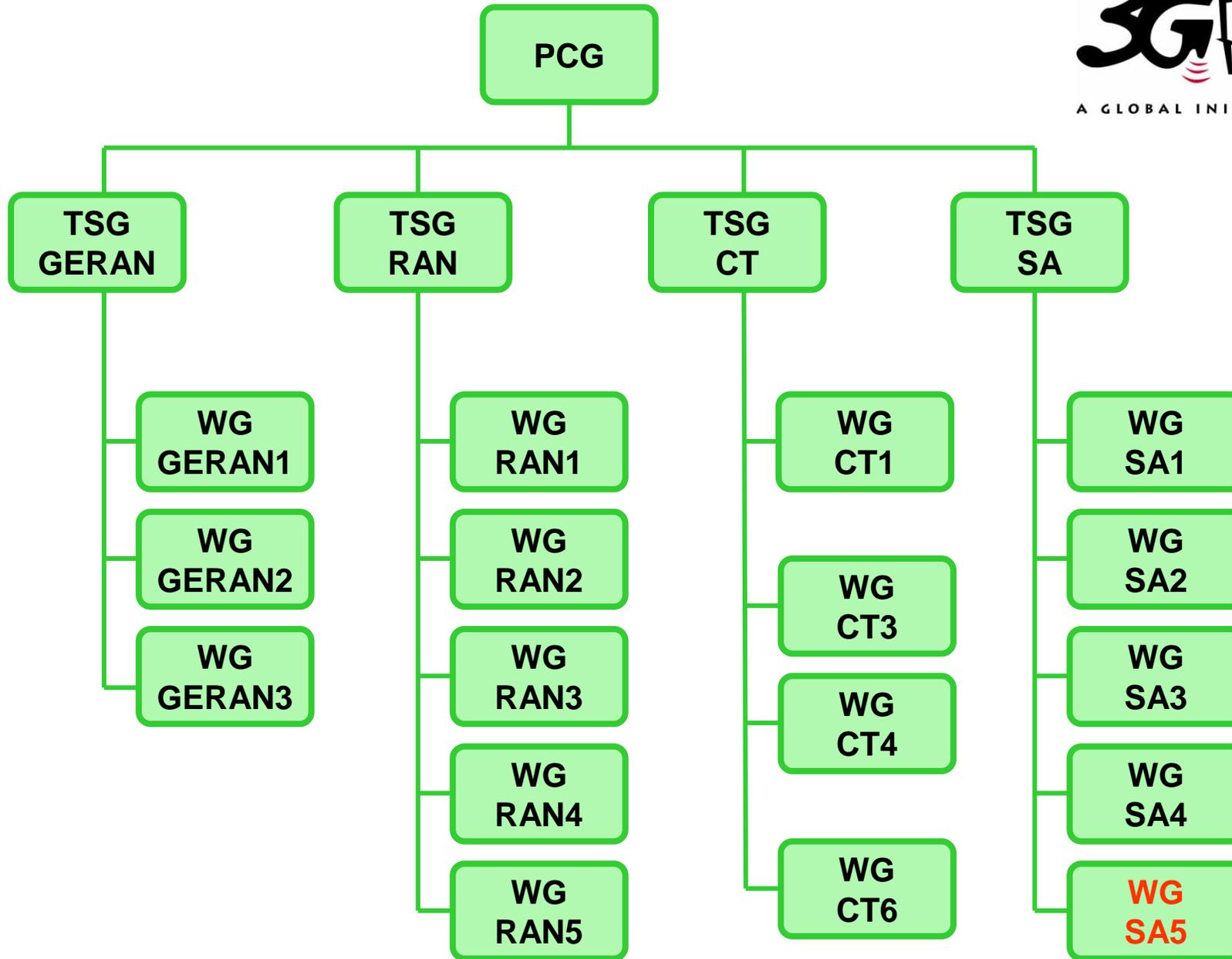
## Market Representation Partners

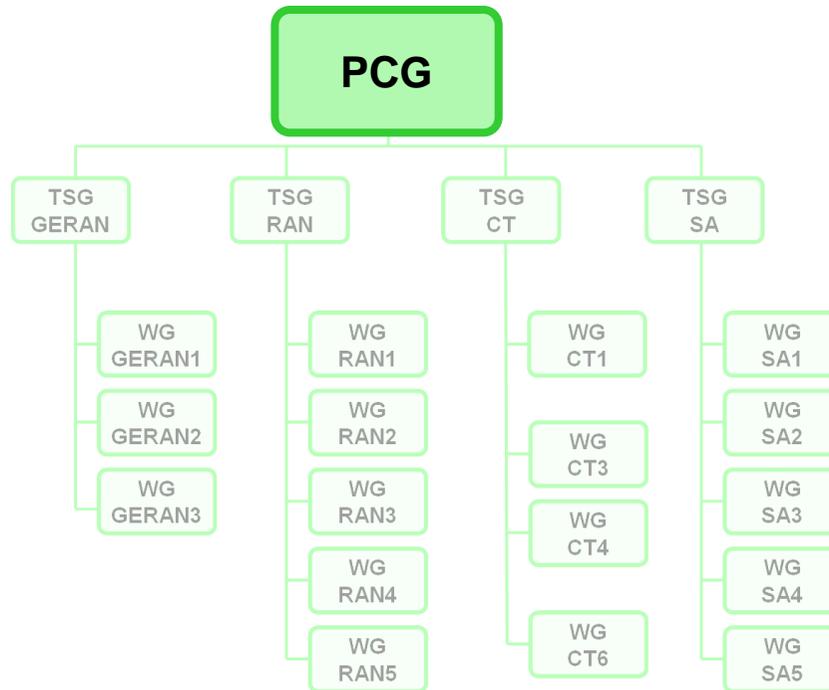
- Commercial organizations with an interest in furthering the technologies developed by 3GPP and with the capability to influence the market for such technologies

<http://www.3gpp.org/Market-Representation-Partners>

## 3GPP's mission

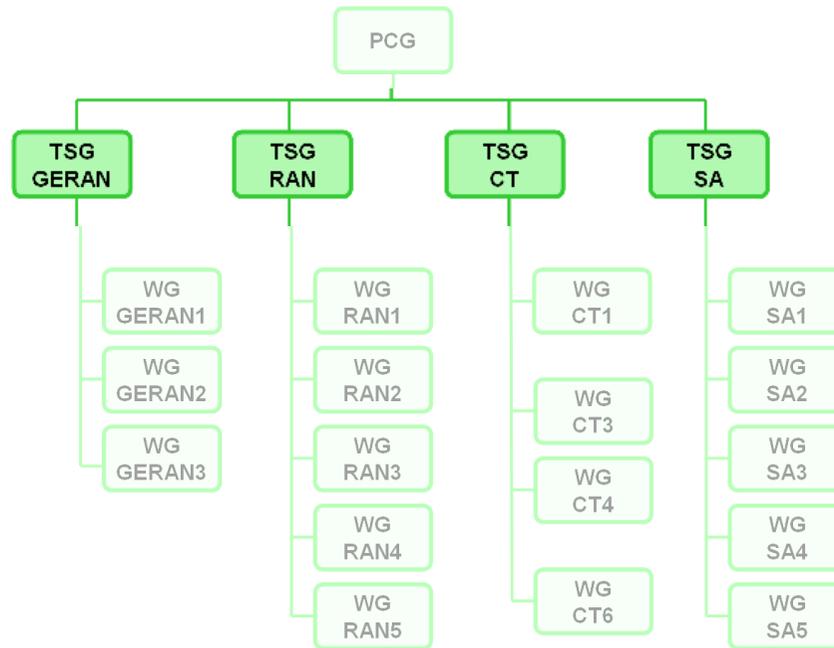
-  Prepare, approve and maintain Technical Specifications (TS) and Technical Reports (TR) for mobile telecommunications systems including the following radio technologies:
  - UTRA (third generation), FDD and TDD, plus its evolution including HSPA
  - GSM (second generation) including its enhancements EDGE and GPRS
  - Further evolution to LTE, LTE-Advanced (fourth generation) and the associated core network and other technologies, including IMS
  
-  **All 3GPP approved Specifications become automatically standards of the regional partner SDOs and hence true standards**





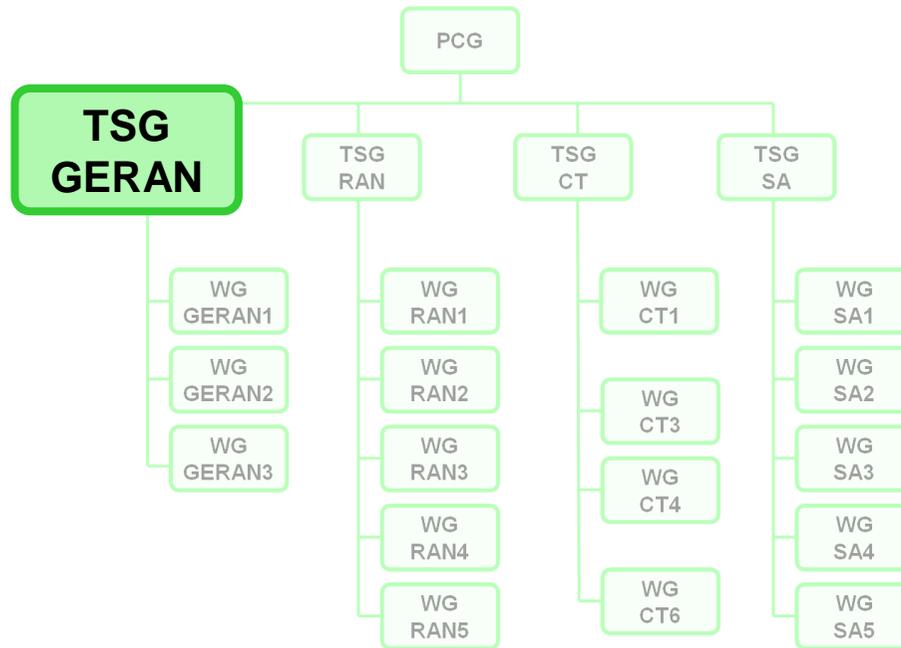
## Project Coordination Group

The PCG is responsible for overall governance of 3GPP. It sets high level policy, formally appoints elected TSG chairmen and vice-chairmen, ensuring regional balance, and – though very rarely called upon to act as arbiter of technical disputes – is the ultimate court of appeal within 3GPP.



## Technical Specification Groups

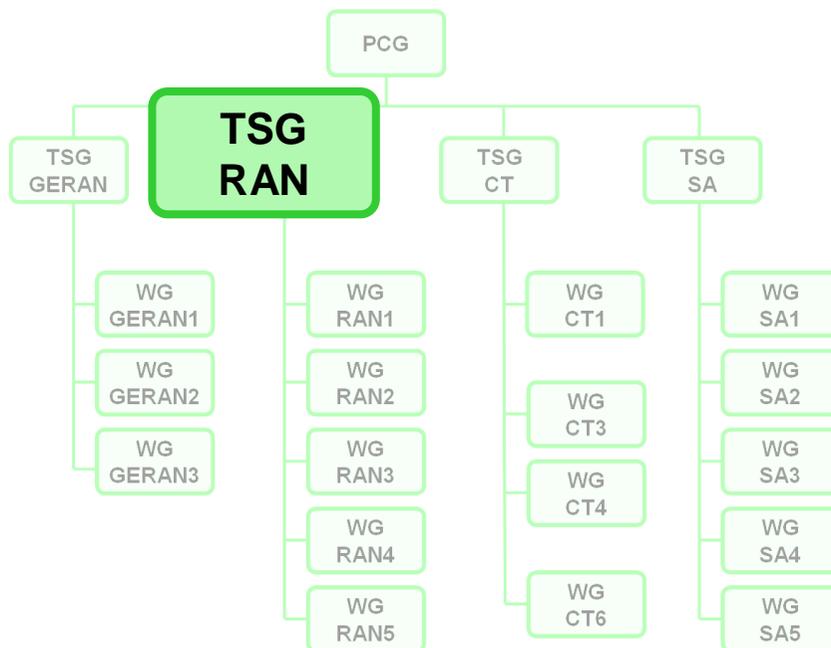
To avoid unnecessary delays in the development of 3GPP's technical work, four hierarchically equal TSGs exist, each responsible for a reasonably well defined and largely autonomous area of activity.



## Technical Specification Group GSM/EDGE Radio Access Network

Created on the closure of ETSI Technical Committee SMG in 2000, when all the GSM (2G) Specifications were transferred from ETSI to 3GPP.

Responsible for maintenance and enhancement of GSM/EDGE specifications. GERAN-based systems are still the most wide-spread cellular technology in the world.



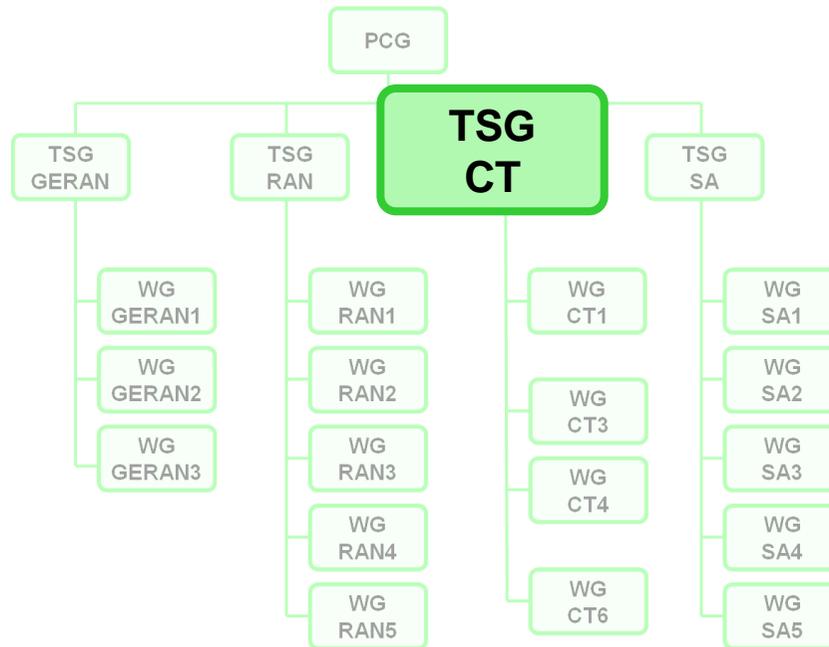
## Technical Specification Group Radio Access Network

Created at the outset of 3GPP to develop the new 3G radio technology specifications.

Now responsible for

- UTRA and HSPA
- LTE™
- LTE-Advanced™

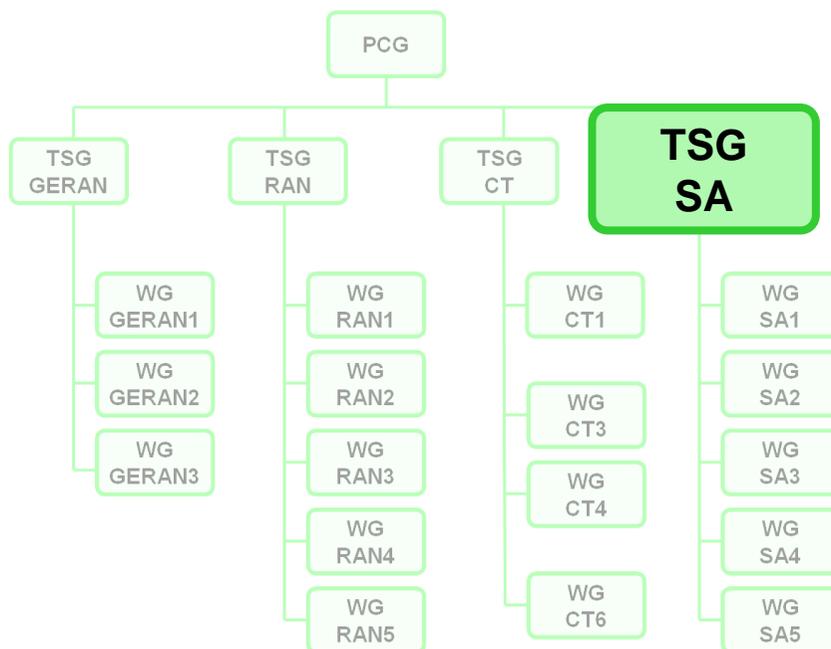
and thus bridging the gap between 3G and 4G.



## Technical Specification Group Core Network and Terminals

Created in 2005 on closure of two original TSGs Core Network (CN) and Terminals (T).

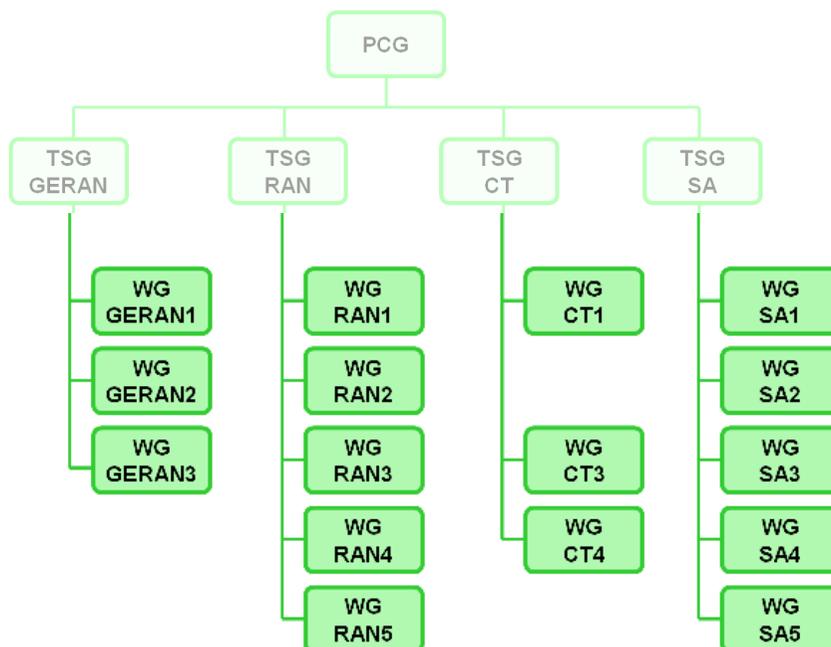
Responsible for the development of the fixed (“wired”) network aspects of 3GPP systems, including the Mobile Application Part (MAP) of ITU-T Signalling System No. 7, CAMEL and related Intelligent Network (IN) aspects and much more.



## Technical Specification Group System Aspects and Architecture

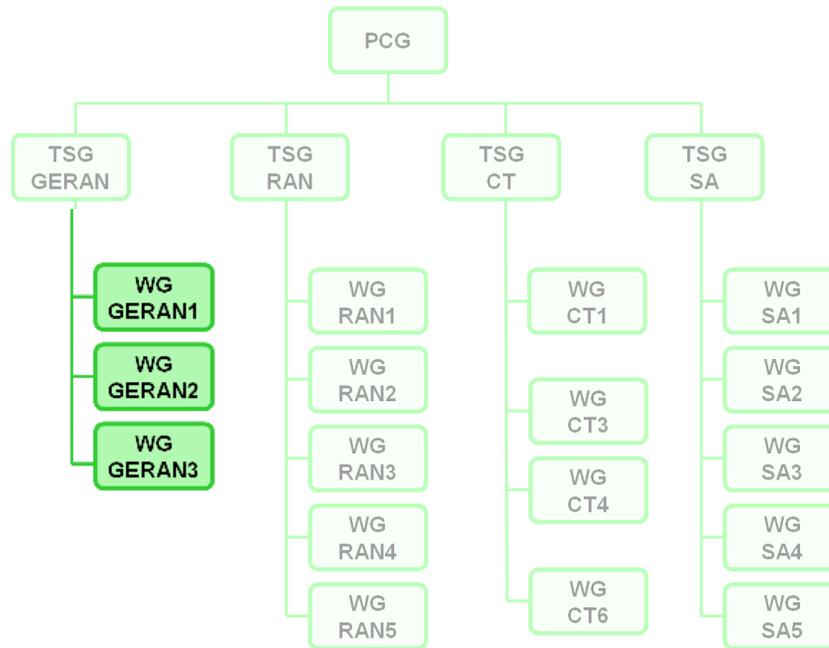
Created at the outset of 3GPP to handle common system aspects such as requirements, overall architecture, security, codecs, O&M.

SA also has a coordination role to ensure that all TSGs work in harmony. However, SA is not hierarchically above the other TSGs.



## The Working Groups

Each TSG has a number of subtending Working Groups, which are responsible for carrying out the detailed technical work and developing the publishable TSs and TRs.

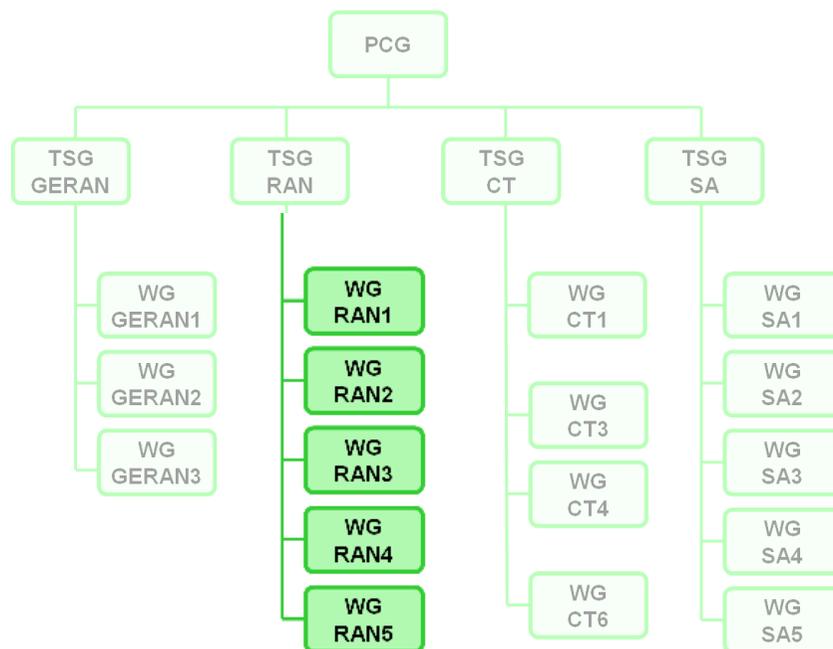


## GERAN Working Groups

G1 - Radio aspects

G2 - Protocols

G3 – Terminal testing



## RAN Working Groups

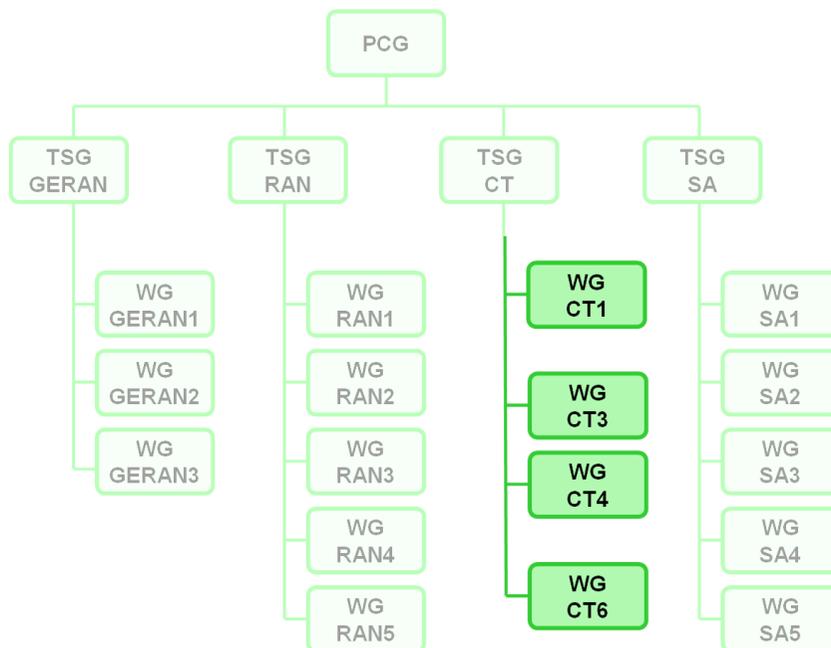
R1 - Radio aspects

R2 - Protocols

R3 - O&M

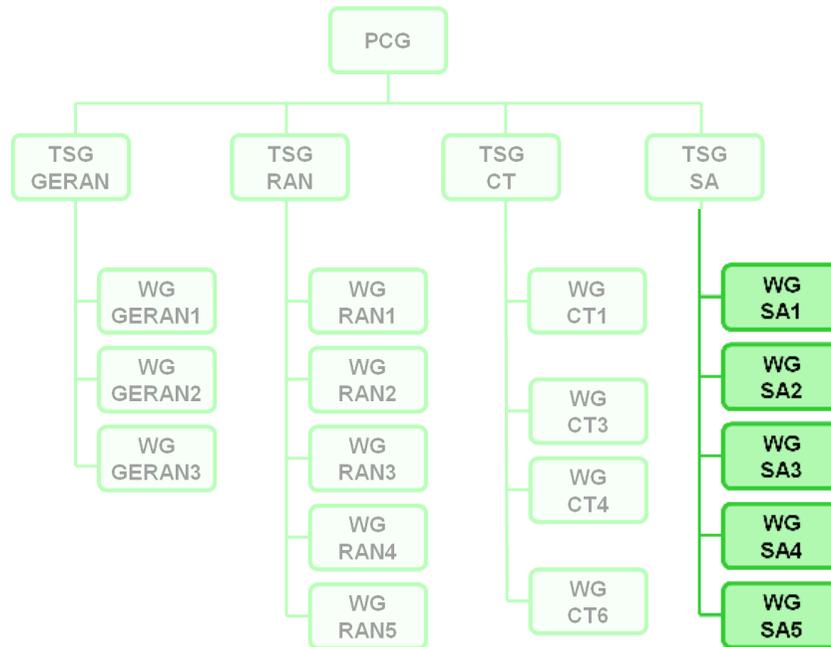
R4 - Radio performance,  
parameterization, network testing

R5 - Terminal testing



## CT Working Groups

- C1 - Terminal to core network protocols
- C3 - Interworking with external networks
- C4 - Intra-core-network protocols
- C6 - Smart-card applications (USIM)



## SA Working Groups

S1 - Services

S2 - Architecture

S3 - Security

S4 - Codecs

**S5 - Management**

# SA5 Leadership



## SA5

Christian Toche (Huawei)	Chair	since 08/2005
Istvan Aba (Deutsche Telekom)	VC	since 08/2007
Thomas Tovinger (Ericsson)	VC	since 08/2007

## Charging Sub-Working Group (SWG)

Gerald Görmer (Nokia Siemens Networks)	Chair	since 09/2009
Shan Mingjun (Huawei)	VC	since 08/2007
Alan McNamee (Openet)	VC	since 09/2009

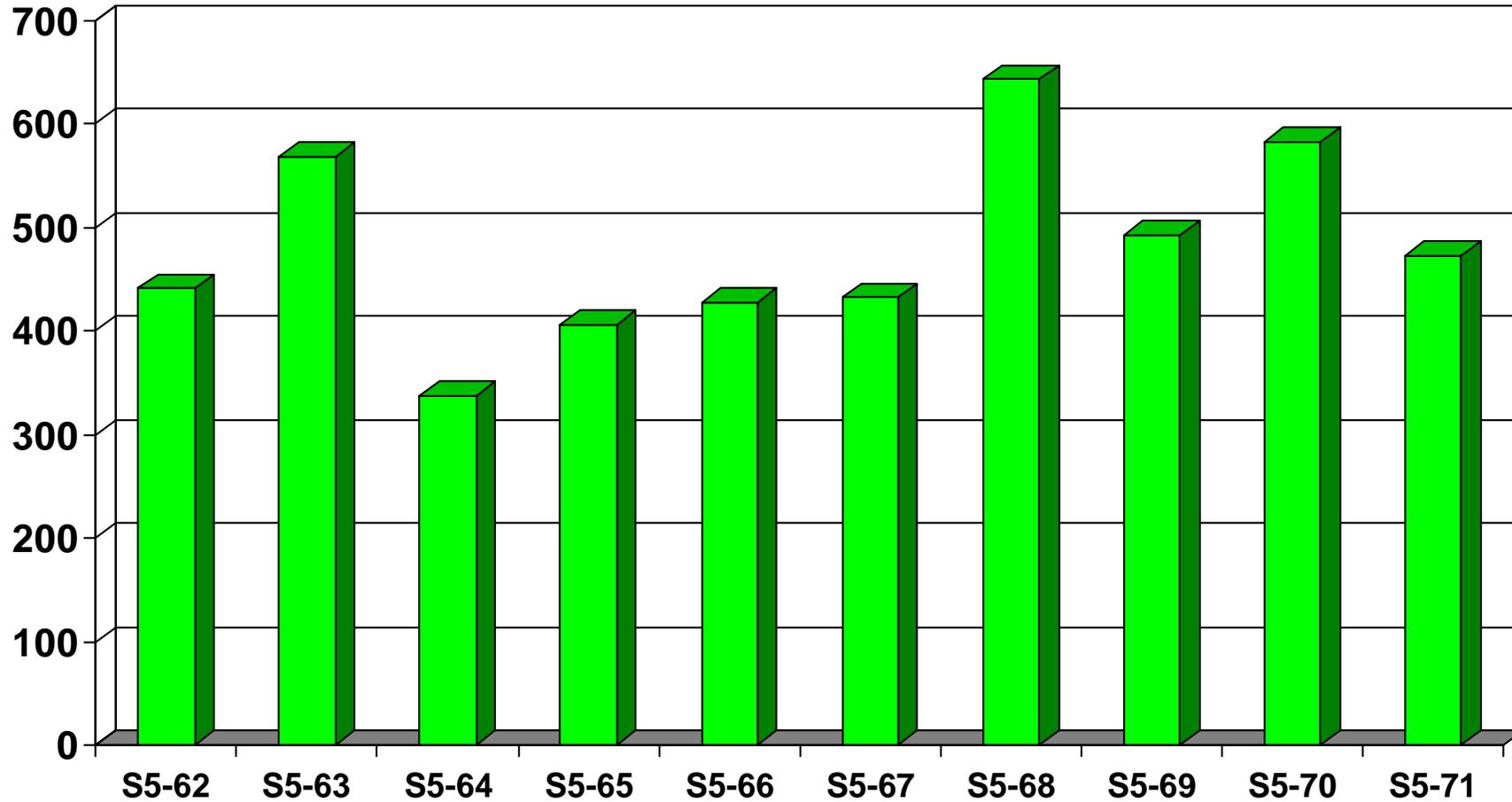
## OAM&P Sub-Working Group (SWG)

Huang Shuqiang (ZTE)	Chair	since 08/2007
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# SA5 Organisation

- Six face-to-face one-week plenary meetings per year
  - Two Asia, two Europe, two North-America
  - SWGs meet in parallel most of the time
  - Average 500 documents at every meeting
  - 50 to 60 delegates attending meetings
- Regular conference calls
  - Progress on ad hoc subjects
  - Growing development of e-meetings
- Work is based on agreed Work Items and company contributions
  - Need at least four supporting companies for creating a Work Item (WI)
  - Use of consensus rule for decisions
  - SA5 outputs are approved every quarter by TSG SA plenary
- 3GPP specifications are grouped into Releases
  - SA5 has about 230 Technical Specifications in Rel-9 (32.xxx series)
  - The current Release is Rel-10, planned closure date is March 2011
  - Previous Releases are under Change Control and are handled via the Change Request (CR) process

# SA5 Tdoc History



# OAM&P Cooperation (NGMN, TMF)



## NGMN

- SA5 has taken NGMN requirements as basis for the SON work
- SA5 is actively working on NGMN Top Ten Requirements

## Long history of cooperation with TMF

- MCCM, Wireless Service Measurements, COOP, SOAP, XML, JointSuM, Methodology, etc
- Outputs were introduced in SA5 specifications e.g. Bulk CM IRP was based on MCCM Catalyst Project

## Converged Wireless-Wireline Management

- Ongoing evaluation of alignment possibilities with TMF on Alarm Management and Resource Modelling
- SA5 Study Alignment 3GPP Generic NRM IRP and TMF SID
- SA5 Study Harmonization of 3GPP Alarm IRP and TMF TIP FM

# OAM&P Cooperation (3GPP2, BBF, ITU-T)

## Reuse by 3GPP2

- 3GPP2 is reusing a majority of SA5 Interface IRPs
- 3GPP2 is referencing SA5 specifications and producing a Delta Specification for NRM IRPs and Performance Measurements

## Broadband Forum

- Cooperation on HNB and HeNB data models
- SA5 is the 3GPP focal point to BBF for HNB and HeNB data models
- BBF defines the data models according to SA5 requirements

## Management Interface Methodology

- Regular conference calls with ITU-T SG2, TISPAN WG8, TMF and ATIS TMOC
- Requirements and Information Service templates as well as UML Repertoire aligned in Rel-8
- Solution Set guidelines/templates currently evaluated by ITU-T for alignment

# Charging Cooperation (OMA, ITU-T)



## Open Mobile Alliance (OMA)

- 3GPP Charging architecture underlies OMA Charging architecture
- OMA Charging specs are reusing 3GPP diameter vendor ID and AVP
- New AVP codes are allocated and documented in SA5
- Ongoing collaboration with OMA on Charging features i.e. maintenance for BCAST, DCD, IM, MEM and definition for CPM, CAB, CPNS through AVP code assigning

## Telecommunication Standardization (ITU-T SG 13)

- Solution on policy-based charging control for future networks including mobile and NGN discussed with JCA-Mgt, ITU-T SG 3, ETSI TISPAN and ATIS TMOC
- Requirements and framework allowing accounting and charging capabilities in NGN are currently specified by ITU-T for alignment with 3GPP Charging specifications
- Recommendations/guidelines are currently exchanged via LS but follow-up with conference call/F2F ad hoc meeting is anticipated

# 2010 Meeting Calendar



MEETING	DATE	CITY	COUNTRY	HOST
SA5#69	18 - 22 Jan 2010	Valencia	Spain	EF3
SA5#70	01- 05 Mar 2010	Xiamen	China	Huawei
Ad hoc NGMN	6 - 7 May 2010	Montreal	Canada	NAF
SA5#71	10 - 14 May 2010	Montreal	Canada	NAF
SA5#72	12 - 16 Jul 2010	Bratislava	Slovakia	EF3
SA5#73	23 – 27 Aug 2010	New Delhi	India	ALU
SA5#74 - CH	08 - 10 Nov 2010	Paris	France	FT
SA5#74 - OAM	15 - 19 Nov 2010	Jacksonville	USA	NAF

# 2011 Meeting Calendar



MEETING	DATE	CITY	COUNTRY	HOST
SA5#75	24 - 28 Jan 2011	TBD	Europe	EF3
SA5#76	28 Feb - 04 Mar 2011	TBD	North America	NAF
SA5#77	09 - 13 May 2011	Kobe	Japan	JF3
SA5#78	11 - 15 Jul 2011 or 22 - 26 Aug 2011	TBD	TBD	TBD
SA5#79	10 - 14 Oct 2011	TBD	China TBC	TBD
SA5#80	14 - 18 Nov 2011	TBD	North America	NAF

## Useful Links (1/2)



### 3GPP SA5 specifications

<http://www.3gpp.org/ftp/Specs/html-info/TSG-WG--S5.htm>

[http://www.3gpp.org/ftp/Specs/latest/Rel-9/32\\_series/](http://www.3gpp.org/ftp/Specs/latest/Rel-9/32_series/)

[http://www.3gpp.org/ftp/Specs/latest/Rel-10/32\\_series/](http://www.3gpp.org/ftp/Specs/latest/Rel-10/32_series/)

[http://www.3gpp.org/ftp/Specs/archive/32\\_series/](http://www.3gpp.org/ftp/Specs/archive/32_series/)

[http://www.3gpp.org/ftp/tsg\\_sa/WG5\\_TM/Draft\\_Specs/](http://www.3gpp.org/ftp/tsg_sa/WG5_TM/Draft_Specs/)

<http://www.3gpp.org/ftp/Specs/Latest-drafts/>



### 3GPP SA5 meeting contributions

[http://www.3gpp.org/ftp/tsg\\_sa/WG5\\_TM/](http://www.3gpp.org/ftp/tsg_sa/WG5_TM/)



### 3GPP SA5 email lists

<http://www.3gpp.org/email-lists>

<http://list.etsi.org>

[http://list.etsi.org/3gpp\\_tsg\\_sa\\_wg5.html](http://list.etsi.org/3gpp_tsg_sa_wg5.html)

[http://list.etsi.org/3gpp\\_tsg\\_sa\\_wg5\\_oam.html](http://list.etsi.org/3gpp_tsg_sa_wg5_oam.html)

## Useful Links (2/2)

-  **3GPP Working Procedures**  
<http://www.3gpp.org/About/WP.htm>
-  **TSG working methods**  
<http://www.3gpp.org/ftp/Specs/html-info/21900.htm>
-  **Specification drafting rules**  
<http://www.3gpp.org/ftp/Specs/html-info/21801.htm>
-  **3GPP work plan**  
[http://www.3gpp.org/ftp/Information/WORK\\_PLAN/](http://www.3gpp.org/ftp/Information/WORK_PLAN/)

# Thank you!

