# GERAN status

Frank Mueller, WI rapporteur

- **What is GERAN**
- **What is our scope**
- **How do we work**
- **Time scale**

- GERAN is a term used to describe a GSM and EDGE (Enhanced Data rates for GSM Evolution) based 200 kHz radio access network. The GERAN is based on GSM/EDGE Release 99, and covers all new features for GSM Release 2000 and subsequent releases, with full backward compatibility to previous releases.

- So GERAN will release 00 will maintain A and Gb interface, but will be enhanced with Iu ps and possibly Iu cs

- **Ensure support for IP Multimedia**
  - New protocol stack to support the four radio access bearer classes
  - Optimized physical layer design for radio bearers
  - Handover for PS domain
  - RR signaling procedures and support for MM

- **Alignment with UMTS/UTRAN architecture, bearer services and QoS handling**
  - The same type of services as offered by UTRAN should be offered with GERAN
    - Alignment of bearer classes with UTRAN
    - Alignment of QoS mechanism with UTRAN.
    - Common RAN - CN interface and functional split for UTRAN and GERAN
    - Support of inter system hand over

- **spectrum efficiency and performance improvements**
  - Support for multiplexing of real-time and non-realtime data from the same user
- **Specification flexibility for future enhancements**
  - Ensure that "hooks" for future enhancements are in place

- **In July 3GPP TSG-GERAN has been created, which will have four working groups with the first meeting in the end of August**
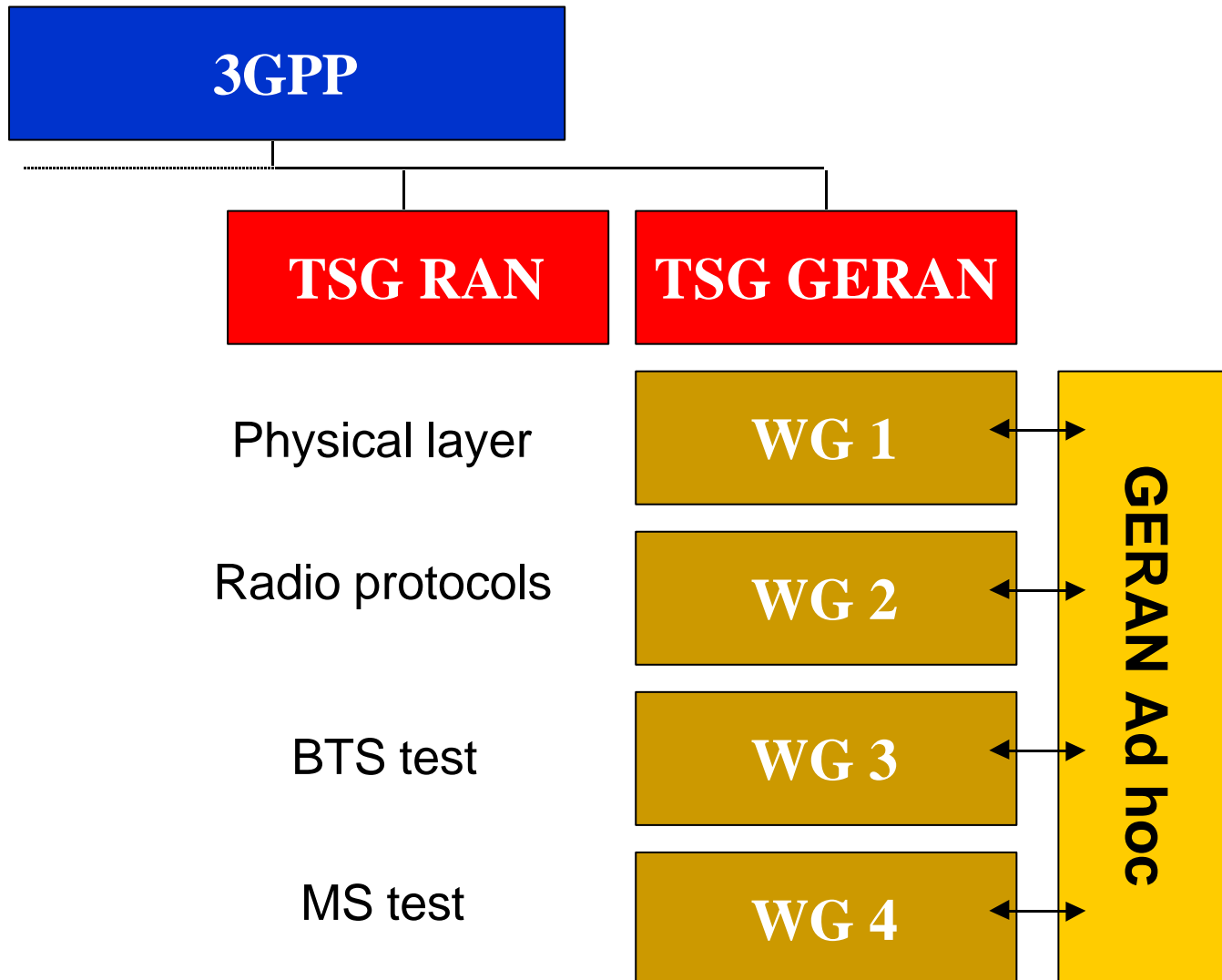
- **GERAN Ad hoc meets regularly on 2 month basis and prepares consensus and input for TSG GERAN**
- **Participation mainly from manufacturer and operators**
- **Around 60-70 participants per meeting, 70-80 documents**
- **Next meetings:**
  - **7-11 of August 2000**
  - **9-13th of Ocotber**
  - **probably 2nd week of December**
- **Mailing list SMG2GERAN@list.etsi.fr, but will be changed to 3GPP mailing list**

- **Large amount of work ahead of us**

- **Detailed time plan will be processed on the next GERAN meeting**

- **However a rough "unofficial" estimation would indicate the specifications could be stabilised Q1 2001 with final completion in June 2001**

- Stabilization of concept document for release 2000
- Refined stage 2 description
- Hand over concept
- Decision on Header stripping / compression
- First input on speech channel coding
- First specification like input on PDCP, RLC, MAC, RR

GERAN Ad #1
7-11 Aug 2000

Nokia

TSG GERAN #1
28-1Sept 2000

GERAN Ad #2
9-13 Oct 2000

Siemens

TSG GERAN #2
13-17 Nov 2000

GERAN Ad #3
Dec 2000

• Discussion of concept document
for release 2000
• Refined stage 2 description
• Refined Hand over concept
• Additional input on speech channel coding,
other channel coding
• Specification like input on PDCP, RLC,
MAC, RR
• First specification like input on physical
layer

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- Stabilization of concept document for release 2000
- Refined stage 2 description
- Refined Hand over concept
- Additional input on speech channel coding, other channel coding
- Refined specification like input on PDCP, RLC, MAC, RR
- First specification like input on physical layer 05 series

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Stage 2, 03.51

PDCP

RLC / MAC

RR

Interface related specs

05.xx series

Test specs

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GERAN Ad #3
Dec 2000

GERAN Ad #4
Feb 2000

GERAN Ad #5
May 2000

ge Date   Action

Aug. 00, SA-3#14   GERAN group presents stable GERAN architecture to SA-3

Sep. 00, SA-3#15   SA-3 specifies the security requirements

Nov. 00, SA-3#16   SA-3 specifies the security features

Jan. 01   SA-3 conducts feasibility study

Jan. 01   SA-3 specifies GERAN security architecture (Stage 2)

Mar. 01   SA approves final GERAN security architecture (Stage 2)

Feb. 01   SA-3 presents GERAN security architecture to CN, T and GERAN

Mar. 01   CN, T and GERAN write draft Stage 3 CRs

Apr. 01   CN, T and GERAN approve final Stage 3 CRs

Jun. 01   SA-3 reviews final Stage 3 CRs

Jun. 01   CN, T, RAN approve final Stage 3 CRs

rch 01, stabilizing specs

ne 01 completed specs