

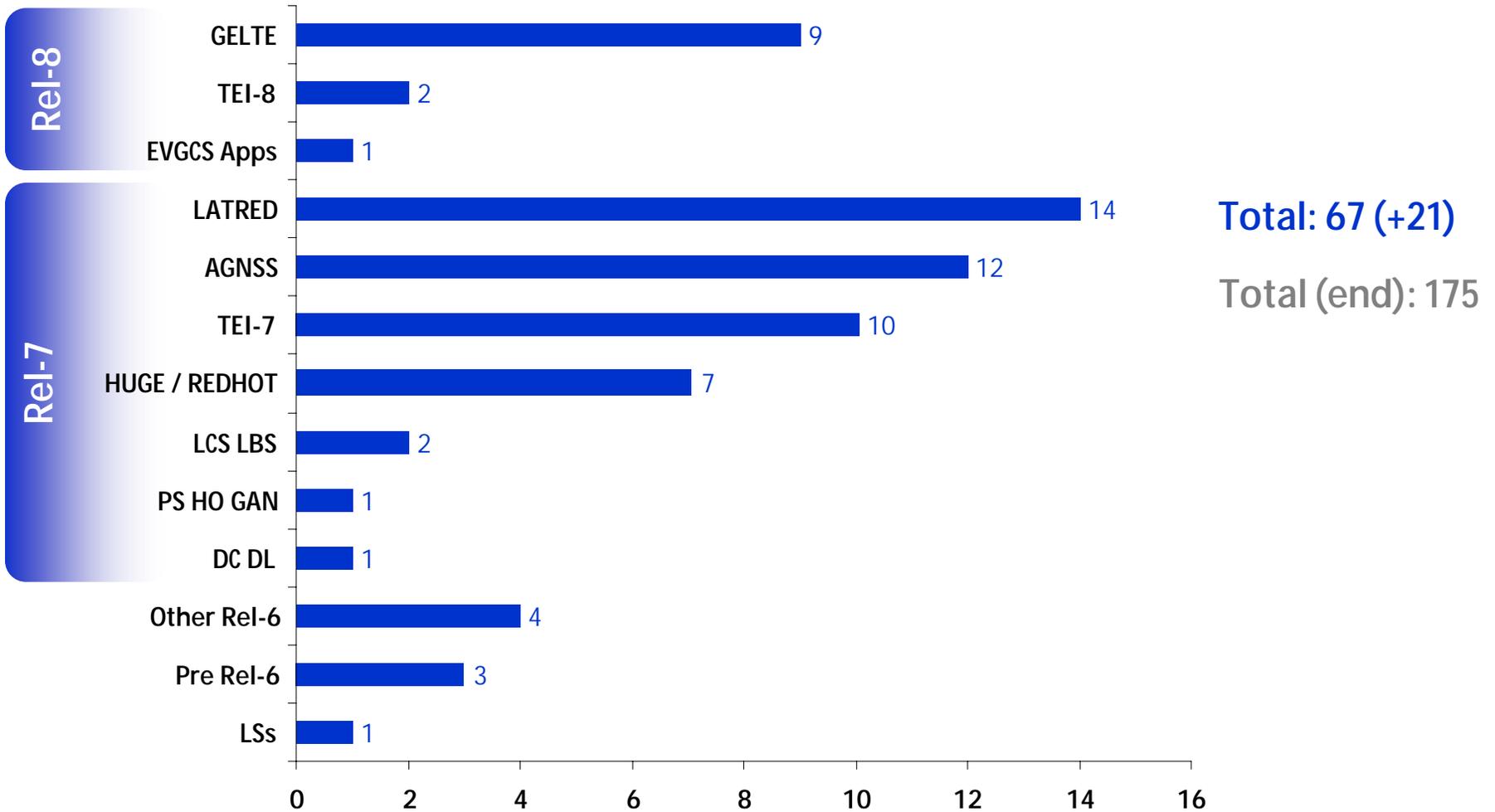
3GPP TSG GERAN2#35

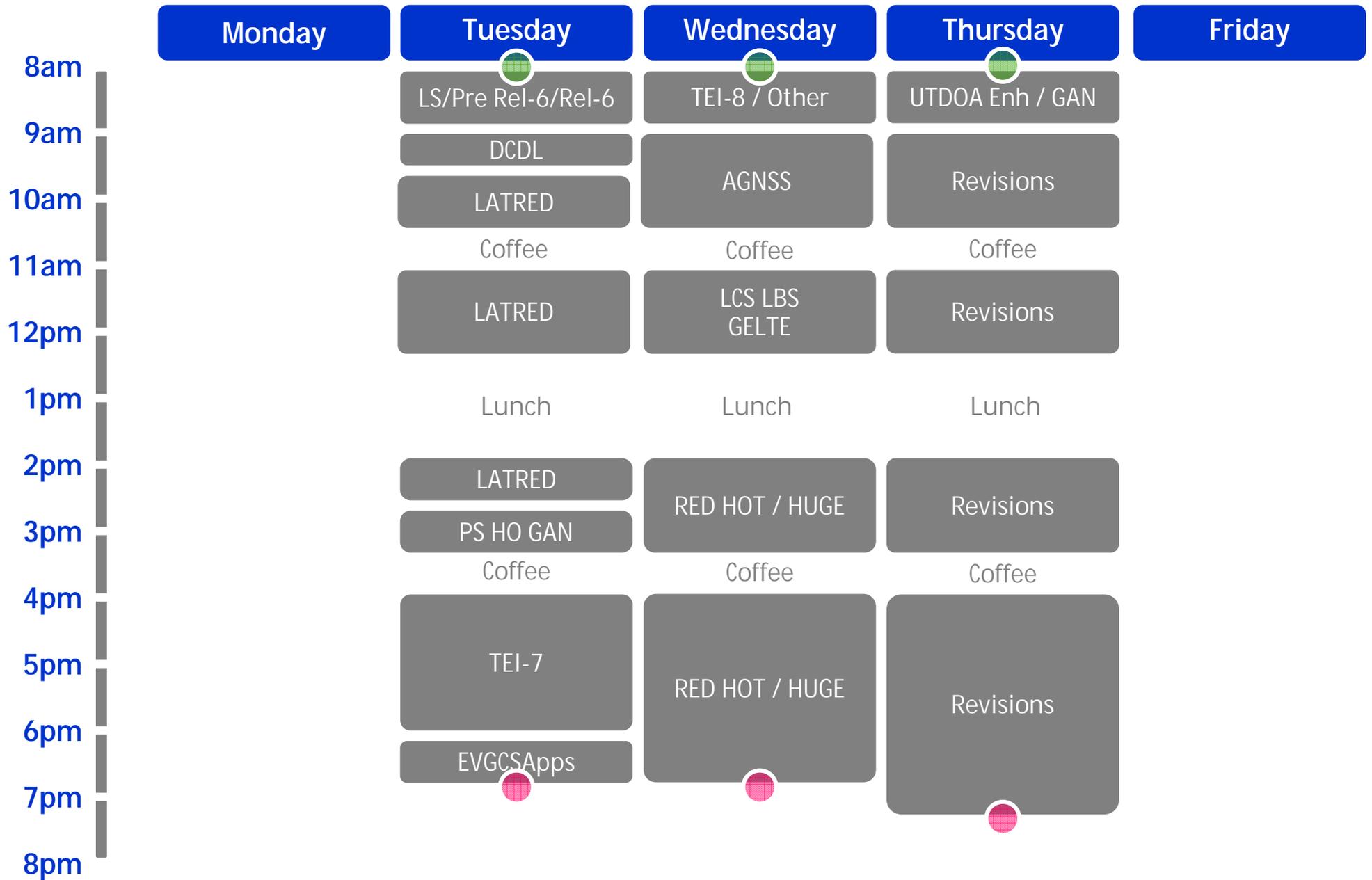
Dublin, Ireland, 28 – 30 August, 2007

Chairman's summary

Guillaume SÉBIRE (Nokia-TP/Helsinki)

Incoming Contributions per Agenda Item





SA3 issue on Algorithm Change [G#31]

- **Pending:** Review if any changes are needed to our specifications due to the introduction of UEA2/UIA2 and the inferred algorithm change at inter RAT Handover (see GP-061526)

Pre Release 6 Corrections

- **Correction to Enhanced Measurement Report IE definition**
 - **GP-071327, GP-071328, GP-071329, GP-071330** CRs 08.71, 48.071 (R99+)
 - Inconsistency regarding the coding of the enhanced measurement report IE over the Lb interface between releases: R99, Rel-4, Rel-5 (header fields included) vs. Rel-7 (header fields excluded) (Rel-6 is itself ambiguous)
 - Topic discussed in some previous meeting, and a clarification was brought to Rel-7 with a common understanding that the expected implementation is as described in Rel-7. Alignment now brought down to earlier releases.

Completed Rel-6 Work Items (2/2)

- **GAN**

- **GP-071521, GP-071522** CRs 43.318 endorsed: handling of emergency calls in GERAN/UTRAN preferred mode when outside GERAN coverage
- **GP-071473** CR 44.318 approved: handling of emergency calls in GERAN/UTRAN preferred mode when outside GERAN coverage (mirrors down in Rel-6 a change made in Rel-7: GP-070945)

- **Other Rel-6**

- **GP-071433** CR 48.058 approved: Alignment of 48.058 for Repeated SACCH: Uplink SACCH L1 header modifications (*Actual* MS power level and SACCH Repetition Request) for repeated SACCH reflected in 48.058

Rel-7 – DTM Handover

- None

Rel-7 – VGCS Enhancements

- None

Rel-7 – Dual Carrier Downlink

- **GP-071291** CR 44.060 approved: Processing of received PDUs in DC DL RLC Unacknowledged mode
 - In-order delivery of RLC data blocks to be preserved for Dual Carrier Downlink. Clarification of the MS behaviour needed to ensure *all* RLC data blocks received within a radio block period are taken into account prior to detecting missing RLC data blocks

Rel-7 – RED HOT / HUGE

- **Naming of the feature in the specification**

- UAS, UBS, DAS, DBS
- EGPRS2, EGPRS2-A, EGPRS2-B

- **Stage 2**

- **GP-071542** CR 43.064 to plenary: Introduction of RED HOT and HUGE
 - NOTE: only editorials left vs. GP-071490 (content otherwise endorsed by GERAN2)

- **Stage 3**

- **GP-071463** Draft CR 24.008 endorsed: Introduction of EGPRS-2 Capabilities – LS in GP-071541
- **GP-071537** CR 44.018 approved: Introduction of RED HOT and HUGE
- **GP-071533** CR 44.060 approved: Introduction of RED HOT and HUGE Enhancements
- **GP-071536** CR 44.060 approved: Introduction of EGPRS PACKET DOWNLINK ACK/NACK TYPE 2
- **GP-071535** CR 44.060 approved Link Quality Measurements for EGPRS2

- (GP-071351 CR 44.060 RLC/MAC withdrawn: Header types for CBRM)

Rel-7 – Latency Enhancements (1/4)

- **General**

- **GP-071530** CR 43.064 endorsed: Corrections for Latency Reduction
 - Introduction of RL TBF mode, and fix of the PAN coding (10-bit PCS)
- **GP-071524** CR 44.018 approved: Introduction of Latency Reduction features

- **RTTI**

- Removal of PDCH Split over two carriers: [agreed](#)
- Channel coding for RTTI RLC/MAC Control Blocks
 - Multiplexing case: new “MCS-1” like coding needed a.k.a. *MCS-0*
 - No multiplexing case (RTTI only): same new “MCS-1” coding or 10ms CS1 could be used. Indication provided at TBF establishment and cannot be changed at TBF reconfiguration
 - **GERAN2 Working assumption = Proposal A (see GP-071282)** : “MCS-0”
 - Fixed size RLC/MAC header, header type 3 encoding
 - Fixed payload size (20 octets), 18-bit CRC, rate ~1/2 CC (out of 1/3 Mother Code)
 - Separate header/payload encoding
 - *IR allowed as per the proposal but further discussion needed which may yield a change to the working assumption*
 - **GP-071436** CR 43.064 endorsed by GERAN2

Rel-7 – Latency Enhancements (2/4)

- RTTI

- RTTI Assignments: see discussion in GP-071294
 - Coding optimized compared to initial proposal in GERAN2#34bis
 - Provides assignment details (PDCHs, corresponding PDCH pairs, USF mode, etc) for RTTI TBFs
 - [GP-071534](#) CR 44.060 approved
- USF Granularity = 1 with RTTI in (extended) dynamic allocation
 - Allocation of every 2nd reduced block period i.e. leave 10ms gap between two RTTI blocks. Simulations have been shown to demonstrate the performance of this scheme, hence closing the open issue from G2#34bis
 - [GP-071322](#), [GP-071323](#) CRs 44.060 approved

Rel-7 – Latency Enhancements (3/4)

- **FANR**

- MS shall monitor a PAN only on the PDCHs on which the USF is monitored
 - Whether the MS shall also monitor a PAN on other PDCHs when downlink TBFs are assigned to this MS open
- Undetected error probability for PAN
 - GERAN2 view that the PAN CRC (PCS) need to be increased: 10bits proposed and confirmed in GERAN1
 - PAN size: 20bits
 - Encoding of the RLC data payload remains unchanged
- **GP-071525** CR 44.060 approved: Misc. corrections for FANR
 - New state UNREPORTED introduced to remove an ambiguity with event-based FANR
 - New state REPORTED introduced (see G2-070088) to avoid double reporting in PAN and Ack/Nack message itself

Rel-7 – Latency Enhancements (4/4)

• Time-based FANR

- GERAN#32 concluded the need for SSN-based FANR in both uplink and downlink. Time-based FANR for uplink ack/nacks (sent by the BSS) left open
- Proposal Optional (resp. mandatory) in networks (resp. mobiles)
- GP-071284 Simulation results showing Multiplexing gains, Coverage gains with Time-based FANR vs. SSN-based FANR
- GP-071446 Simulation results showing SSN-based approach is sufficient in some conditions that however cannot be guaranteed in all EDGE networks (e.g. IRC)
- **GERAN2 agreement to introduce Time-based FANR in the downlink**
 - One company expressed concerns about introducing the feature for they believe it is not needed
 - **GP-071511** CR 44.060 approved introduction of TB FANR

Rel-7 – PS Conversational

- None

Rel-7 – PS HO GAN ↔ GERAN/UTRAN

- **GP-071219** CR 44.060 Postponed: Optimization of PS handover from GERAN-UTRAN to GAN mode
 - Proposal to Allow the MS to use the GA-PSR Transport Channel assigned by the GANC to which it registered if it fails to receive a PS Handover Command message at expiry of T3208
 - Proposal questioned by a number of companies. Further work needed for GERAN2#35bis
 - If the proposal is introduced: 43.129, 43.318, 44.318 will also be impacted

Rel-7 – A-GNSS (1/2)

- **Bit-efficient extended orbit information**
 - GERAN2 agreement on the use of “**method B**” for ephemeris extension
 - GERAN2 recommendation to **close the AGNSS-GP work item** in this meeting (100% completion)
 - NOTE: AGNSS not completed in other groups and relying on the progress in GERAN
 - Validity check to be addressed in future meeting (category “F”)
 - Allow the MS to verify the validity of the long term ephemeris
 - (SMLC accuracy: implementation dependent)
 - **GP-071539** CR 44.031: Plenary
 - **GP-071540** CR 49.031: Plenary

Rel-7 – A-GNSS (2/2)

- **Misc CRs**

- **GP-071299, GP-071300** CRs 44.031, 49.031 approved: Correction to GANSS Data Bit Assistance
- **GP-071470** CRs 44.031 approved: Addition of Galileo as source of Time reference
 - **GP-071510** CR 48.031 postponed: Addition of Galileo as source of Time reference: ASN.1 fix are needed
- **GP-071318** CR 44.031 postponed: GANSS Navigation Model Modification
 - Disagreement on the need for the change

Rel-7 – LCS Enhancements for LBS

Bit-efficient extended orbit information

- CRs withdrawn

Rel-7 – A-GPS Minimum Performance Requirements

- None

Rel-7 – TEI-7 (1/2)

- **GP-071233** CR 44.060 rejected: Correction of the Repeated UTRAN TDD Neighbor Cells structure (Rel-7)
 - The *Repeated UTRAN TDD Neighbour Cell struct* in PACKET MEASUREMENT ORDER is defined differently from the *Repeated UTRAN TDD Neighbour Cell struct* in PACKET CELL CHANGE ORDER
 - However: all fields are included in both (only the order of fields differ) i.e. there is as such no specification error. Any alignment of the *struct* would impact terminals in the field that have implemented the specification properly
- **Sending of DTM request clarifications**
 - Proposal to allow the MS to stop sending DTM Requests in a given cell after consecutive DTM Rejects in that cell
 - 44.018 §3.4.22.1.1.3 already specifies the MS is not forced to send DTM Request upon Rejection
 - If the network cannot allocate the requested packet resource **it may send the mobile station a DTM REJECT message** in acknowledged mode on the main DCCH. **This message contains a wait time** ("wait indication" information element).
 - **On receipt of the DTM REJECT message, the mobile station** stops T3148, notifies upper layers of a packet resource establishment failure and **starts timer T3142** with the indicated value.
 - **The mobile station is not allowed to make a new attempt for packet access in the same cell until T3142 expires.** The value of the wait indication (i.e. T3142) relates to the cell from which it was received.
- **GP-071144** CR 43.055 endorsed to clarify DTM Reject contains a waiting time

Rel-7 – TEI-7 (2/2)

- **GP-071376** CR 44.060 approved: CM2 not used to indicate the support of RLC Non-persistent mode
- **GP-071221** CR 44.318 approved: solve a race condition between T3905 and T3907 potentially yielding unexpected restart of the GAN registration procedure
- **GP-071222** CR 44.318 rejected
 - No need identified for the GANC to know about the RR states for GPRS
 - (note no need identified for the RR / RRC states that are already specified)
- **GP-071479** CR 44.318 approved: clarification of MS behaviour wrt the storage of information in the Service GANC table upon reception of Service GANC Table Indicator
- **GP-071450** CR 44.318 approved: Addition of GA-PSR State in GA-RC SYNCHRONISATION INFORMATION message

Rel-8 – FS on GAN Enhancements

- None

Rel-8 – GERAN/E-UTRAN Interworking (1/2)

- **Fallback to CS Domain**

- Working assumptions
 - Fallback to CS decision lies in GERAN (/UTRAN)
 - Fallback to CS to occur when the MS is in GERAN (/UTRAN): i.e. not relying on scenario 1
 - Seamless PS > CS domain change achieved through parallel PS and CS resources (i.e. MS in DTM) until CS call is established
 - Seamless mobility E-UTRAN > GERAN relying on PS Handover; Compatibility with SR VCC required
- Two methods proposed
 - 1) PS Handover including GERAN CS resource reservation during the PS Handover preparation phase and provision of both PS and CS resources to the MS at PS Handover execution phase. Mechanism used at E-UTRAN to GERAN handover. When in GERAN, MS is in DTM – see GP-070675
 - 2) Pure PS Handover from E-UTRAN to GERAN. When in GERAN, Enhanced CS Establishment initiated (prevents dropping the PS resources) and entering DTM – see G2-070224
 - Additional comparison data in GP-0701324 and GP-0701347
- GERAN2 working assumption: principles outlined in method 1
- Should any change occur in SAE/SR VCC that would impact method 1, revision of the working assumption based on method 1 will be needed

Rel-8 – GERAN/E-UTRAN Interworking (3/3)

- **RIM + External NACC between E-UTRAN and GERAN**
 - Evaluation of performance and network nodes impact of external NACC between EUTRAN and GERAN in GP-071308
 - Min. ~1s gap expected
 - Direction EUTRAN > GERAN recommended
 - RIM procedures will be impacted to allow addressing with E-UTRAN
- Proposal for scenario 1 support through hybrid PS/CS handover via Gs interface
 - Further discussion needed, also in other groups

Rel-8 – VGCS Enhancements for VGCS Apps

- **GP-071451** CR 48.008 approved: Addition of talker channel parameter to the VGCS/VBS SETUP and VGCS/VBS SETUP ACK messages to allow establishment of a dedicated channel for the talker

U-TDOA Enhancement – Rel-8

- **GP-071437, GP-071438** CR 43.059, 48.071 postponed: companies requested more time to check the proposal

Rel-8 – TEI8

- **Enhanced cell reselection for VGCS**

- Network provision of group channel information of neighbour cells while in the source cell by means of SI10bis (ter) message. Further indication on FACCH of the group channel in the source cell via VGCS Neighbour Cell Information message should the information sent on SI10bis (ter) become invalid
- Allows direct move to the group channel at cell change
- **GP-071454** CR 43.022 endorsed
- **GP-071453** CR 44.018 approved

- **AGNSS**

- GP-071313 discussion on addition of broadcast data for GANSS
 - Further work needed
- Provision of mean sea level information
 - Proposal initiated in GERAN2#33bis
 - Provision to the MS of the mean sea level information (approximated through [geoid](#)) within GANSS assistance data to allow the use of sea level as the reference point for altitude estimations while minimizing the impact on MS
 - Benefits of the proposal questioned
 - See GP-071317
 - **GP-071315, GP-071316** CRs 49.031, 44.031 Postponed

Rel-8 – Other

- **GP-071459** Proposed study item for A over IP
 - GERAN2 sees no issue with the proposal

AOB

- None

Outgoing LSs

- **GP-071541** LS to CT1 on Introduction of EGPRS2 capabilities

Future meetings

- GERAN2#35bis 08 – 10 Oct 2007 Sophia Antipolis, France
- GERAN2#36 12 – 16 November 2007 Vancouver, Canada