

3GPP TSG GERAN2#36

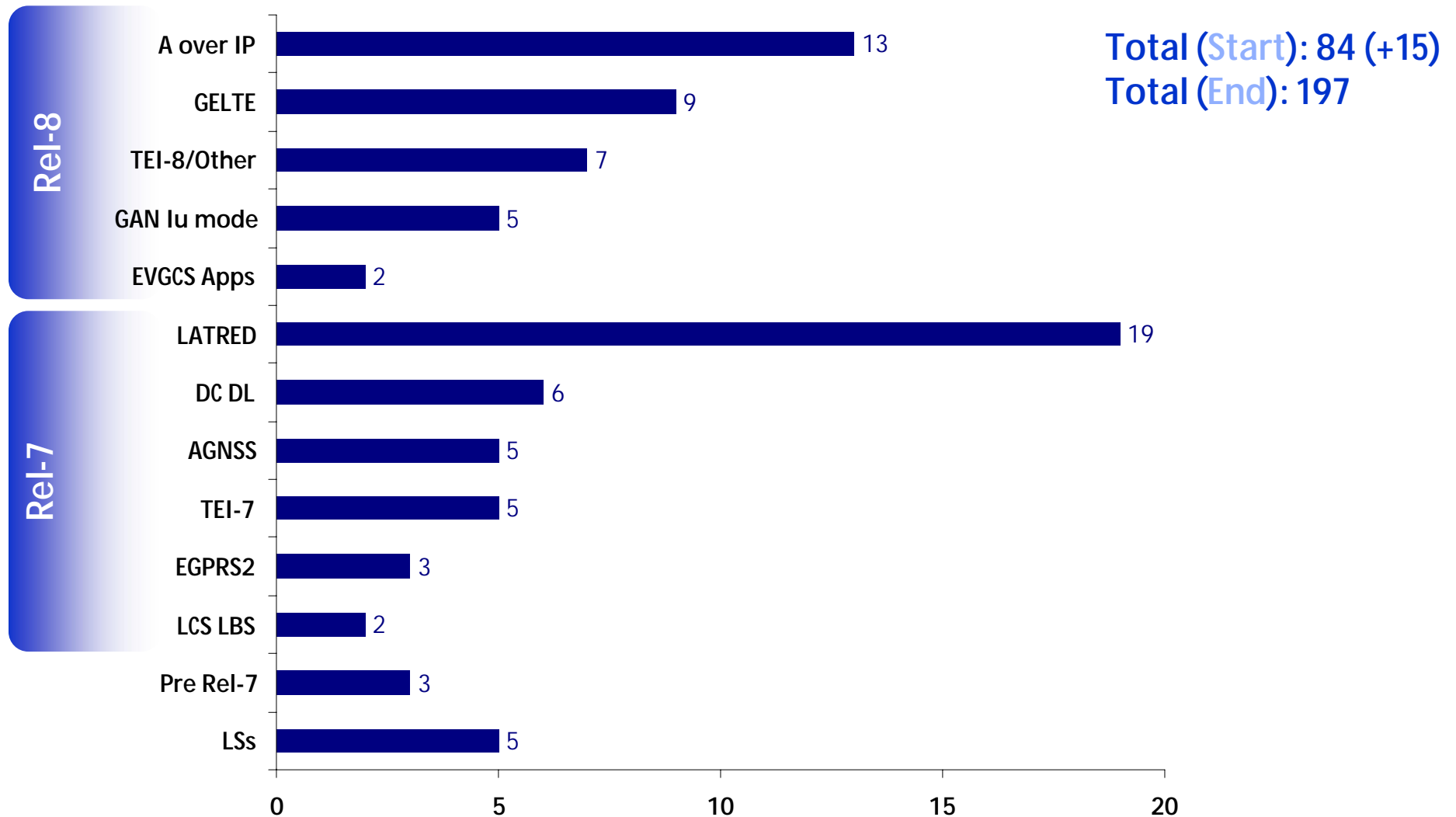
Vancouver, Canada, 13 – 15 November, 2007

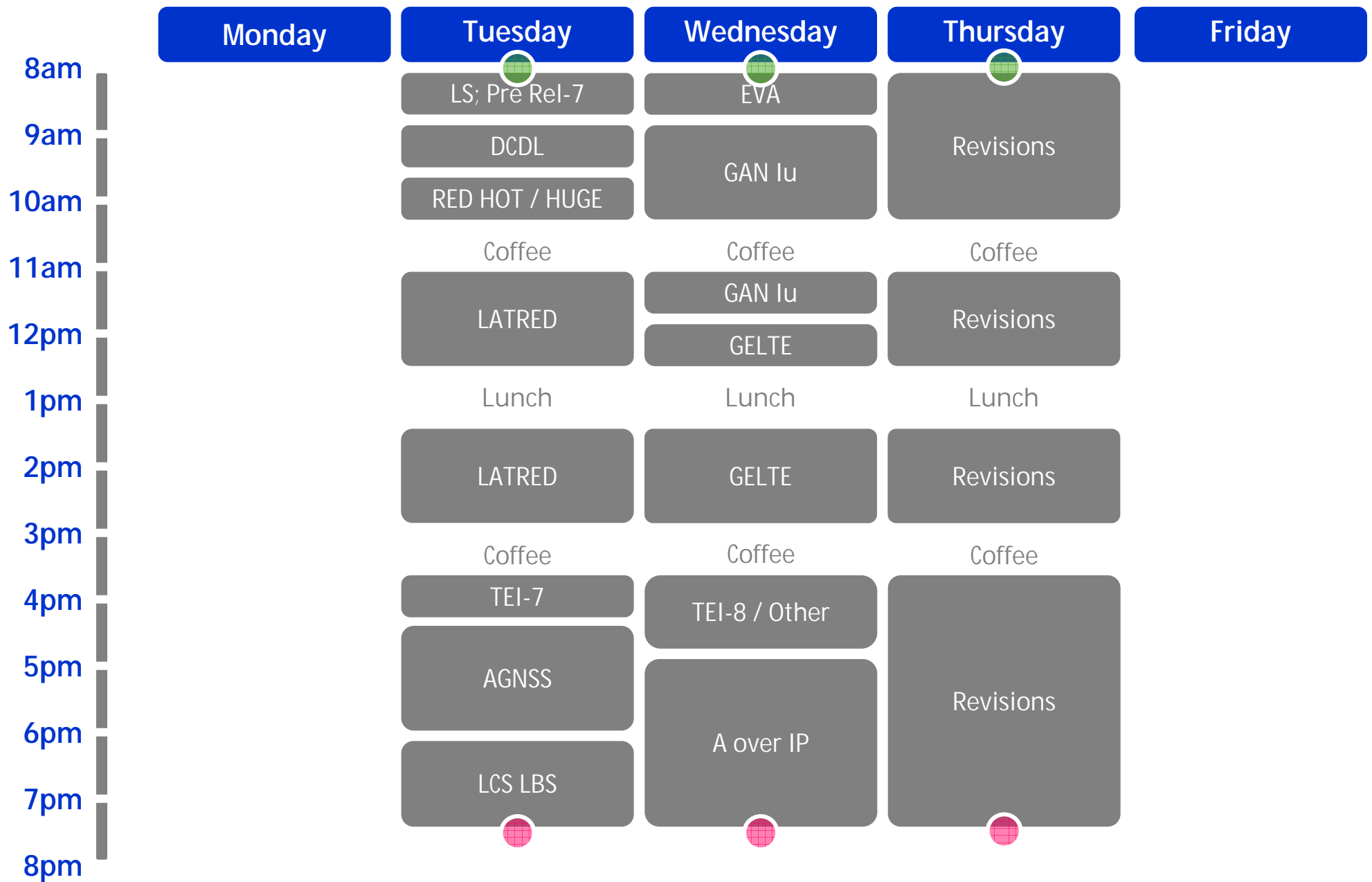
Chairman's summary

Chairman: Guillaume SÉBIRE (Nokia-TP/Helsinki)

Secretary: Gert THOMASEN (MCC)

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 7 Corrections

- **GP-071772** CR 44.018 approved: Correction of the Classmark Enquiry Mask value part corresponding to UTRAN CLASSMARK CHANGE message request (due to misalignment between pre/post Rel-6)
- Change of GAN specs title – “Generic Access Network (GAN)”
 - **GP-071944, GP-071945** CRs 43.318 endorsed
 - **GP-071946, GP-071947** CRs 44.318 approved

Rel-7 – DTM Handover

- None

Rel-7 – VGCS Enhancements

- None

Rel-7 – Dual Carrier Downlink

- Downlink Dual Carrier capability signaling for DTM is not needed in CM3, but is only necessary in MS RAC
 - **GP-071906** Draft CR 24.008 endorsed and sent to CT1 in **GP-071907**
 - Note that DC UL assignment flexibility cannot be used in the uplink if DC is not used in the DL when in DTM, due to the CS timeslot
- **Packet Assignment Messages and Procedures**
 - Clean-up of packet assignment message and procedures now all GERAN evolution features have been introduced
 - **GP-071996** CR 44.060 approved
 - **GP-071909** CR 44.060 approved

Rel-7 – RED HOT / HUGE

- **GP-071950** CR 44.060 approved terminology definition for EGPRS2
 - EGPRS TBF mode to apply for a number of *coding scheme sets*, including EGPRS2-A set (for EGPRS2-B TBFs) and EGPRS2-B set (for EGPRS2-A TBFs)
- **GP-071823** CR 44.004 approved
 - Introduction of PDTCH block formats for EGPRS2
- **One-Phase Access support for EGPRS2 and LATRED in GP-071788**
 - GERAN2 conclusions that
 - Crucial to provide indication of LATRED support at random access to allow the use of one phase access for RTTI which requires specific timeslot allocations
 - Need for indication of EGPRS2 support FFS while it is not seen essential when already knowing the EGPRS capability (i.e. added benefits questioned)
 - Indication of LATRED (and/or EGPRS2) support at one phase access prevents indicating the Multislot Class unless random bits are reduced
 - MS Tx Capability (3-bits) indication proposed (not agreed)
 - Fix needed in Rel-7
 - CR expected at GERAN2#36bis

Rel-7 – Latency Enhancements (1/4)

- **Naming inconsistencies**

- Misleading usage of "Reduced Latency", "RL TBF mode", "[RL] EGPRS TBF mode", "[RL] EGPRS2 TBF mode", "[B/R]TTI configurations" fixed
- **GP-071913** CR 43.064 approved
- **GP-071914** CR 44.060 approved
- **GP-071982** CR 44.060 approved
- **GP-071911, GP-071916** CRs 44.060 approved: correct the wrong implementation of some CRs

Rel-7 – Latency Enhancements (2/4)

- **(TB)FANR**

- **GP-071983** CR 44.060 approved to unambiguously define the PAN content, its construction and interpretation
- **GP-071717** reviewed that analyzes the PAN link level performance
 - Confirms the WA to have a 20-bit PAN
 - Proposes the use of bit-swapping for 8PSK MCSs
- **GP-071759** reviewed that analyzes the detection of and recovery from undetected PAN errors (false positive)
 - Further investigations needed
 - **GP-071760** CR 44.060 postponed
- **GP-071919** CR 44.060 approved to remove the FANR_TFI_UPLINK_MODE IE given the conditions to include the TFI in uplink have been clearly defined (i.e. MTBF)
- **GP-071920** CR 44.004 approved: PDTCH block formats with PAN
- **GP-071993** CR 44.060 approved: PAN Transmission in event-based FANR
- **Coding of Time-based PAN**
 - Proposal to use Huffman coding for PAN (initially in G2-070337) in GP-071762 – No agreement yet
 - GP-071761 CR 44.060 postponed

Rel-7 – Latency Enhancements (3/4)

- **GP-071834** CR 45.010 noted: MS reaction times for Packet Uplink Ack/Nack message
 - Proposal to align the MS reaction time for Packet Uplink Ack/Nack (PUAN) message to the ones specified for PAN
 - Concerns raised by some companies that more tasks are covered by PUAN (e.g. change of MCS for which specific reaction times are specified, CSN1 decoding necessary) than are required by PAN and therefore the proposed requirement is more stringent on the MS than it is with PAN
 - Proposed behaviour is however not prevented by the current 45.010 requirements
 - Only one company supporting the proposal

Rel-7 – Latency Enhancements (4/4)

- **RTTI**

- Evaluation of channel coding for RTTI RLC/MAC Control Blocks (“MCS-0”) in GP-071724, GP-071844
 - MCS-0 “Modified Proposal B from GP-071724” endorsed
 - Spare bits available given Payload Type unused and reduction of RRBP to 1 bit
 - **GP-071984** CR 44.060 approved
 - **GP-072009** CR 44.004 approved
- **GP-071981** CR 44.060 approved: correction to the CV calculation when operating in RTTI configuration

Rel-7 – PS Conversational

- None

Rel-7 – PS HO GAN ⇔ GERAN/UTRAN

- None

Rel-7 – A-GNSS (1/2)

- **Bit-efficient extended orbit information**
 - NOTE: provision of extended orbit information via control plane yields benefits, however in some scenarios, is not realistic (provision of a large amount of information via SDCCH)
 - **GP-071985** CR 44.031 endorsed as a baseline for future work
 - **GP-072000** CR 49.031 endorsed as a baseline for future work
 - Concerns raised that the feasibility of the feature has not been demonstrated, and additional studies are needed within Rel-8 timeframe
 - **Plenary discussion and decision needed**

Rel-7 – A-GNSS (2/2)

- **Misc CRs**

- **GP-071665** CR 44.031 approved
 - It is not possible right now to identify all satellites for GANSS
 - Proposal to remove the current SV_ID mask and use instead specific 6-bit SV_IDs for each satellite included in the GANSS almanac model: this proposal is deemed more efficient than extending the SV_ID mask
 - Both proposals are deemed comparable in terms of bit-performance, however some general preference was expressed using SVIDs
 - Feedback sent to RAN2 in **GP-071980**
- **GP-071813** CR 44.031 approved:
 - Correction to GANSS Navigation Model to align with the current ICD

Rel-7 – LCS Enhancements for LBS

- Bit-efficient extended orbit information for GPS
 - GP-071987 CR 44.031 endorsed as a baseline for future work
 - GP-071988 CR 49.031 endorsed as a baseline for future work
- Concerns raised that the feasibility of the feature has not been demonstrated, and additional studies are needed within Rel-8 timeframe
 - Plenary discussion and decision needed

Rel-7 – A-GPS Minimum Performance Requirements

- None

Rel-7 – TEI-7 (1/2)

- **GP-071921** CR 44.060 approved: minor editorial corrections
 - NOTE: no Rel-8 spec available, and not necessary to create Rel-8 due to the proposed change
- **GP-071752** CR 44.060 approved: addition of extension capability for dual carrier Radio Resources IE in DTM Handover and PS Handover messages
- **GP-071989** CR 44.318 approved:
 - An MS in GAN preferred mode with an event 3A configured, need not make a inter-RAT measurements prior to including GAN cell information in the Measurement Report message sent to UTRAN to trigger handover to GAN
- **GP-071939, GP-071940** CRs 44.018 approved: misc. corrections to mobile station capability signalling in DTM REQUEST message

Rel-7 – TEI7 (2/2)

- **GP-071814, GP-071815** CRs 43.059 noted
 - Addresses BSS Pre-emption and MS Abort of location procedures
 - Unclear what the proposals are trying to solve while the current definition of BSS preemption between RR (high priority) messages and RRLP (lower priority) messages and current MS behaviour are consistent
 - Whether there is a need for some additional abort mechanism in the MS need to be justified
 - Whether there is a need to change the current preemption mechanism need to be justified

Rel-8 – GAN Iu mode

- **GP-071977** CR 43.318 endorsed: Introduction of GAN Iu
- **GP-071680, GP-071791**: Proposals for the MS to indicate whether it prefers to use GAN A/Gb or GAN Iu
 - Isolated support while it is acknowledged that
 - it is up to the network to decide how best to serve the MS on the basis of the MS capabilities
 - It is unclear what the added value of the MS/user indicating such preference is
- **GP-071776**: Highlights different issues to be resolved in co-operation with RAN2 and RAN3 (LS sent in GP-072006)
- **GP-071790**: CS/PS Handover from UTRAN to GAN Iu
 - Requires coordination with RAN2/RAN3

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

- **Fallback to CS Domain**

- Fallback to CS domain in EUTRAN>GERAN interworking relies on Inter-domain Handover within GERAN following Domain Transfer procedures specified in 23.206
- Pending SA2 feedback
- Interdomain handover within GERAN: outside the scope of LTE hence TEI-8
- **G2-071937** CR 43.129 endorsed conditionally
- **G2-071994** CR 44.060 approved conditionally
- **G2-071978** CR 44.018 **plenary**
- **G2-071936** CR 48.018 approved conditionally
- **G2-071935** Draft CR 24.008 endorsed conditionally

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

- **GP-071684** Prioritisation of inter-RAT cells for GERAN interworking
 - If endorsed, signalling support will be defined in GERAN2
- **GP-071685** Neighbour cell list for inter-RAT operation with E-UTRAN
 - If endorsed, signalling support will be defined in GERAN2
 - Broadcast capacity is an issue that may impose limitations on NCell Lists broadcast in GERAN
- **GP-071686** Cell identities for inter-RAT monitoring
 - To be sorted out in RAN groups
- **GP-071687** Number of inter-RAT cells in the GERAN neighbour cell list
 - GERAN2 agree with the analysis made
- **GP-071751** E-UTRAN system information introduction in GERAN
 - GERAN2 agree that EUTRAN broadcast information will be introduced in
 - System information type 2quater (SI2quater)
 - Packet System Information Type 3 quater (PSI3quater)

Rel-8 – VGCS Enhancements for VGCS Apps

- Revised WID in **GP-071855**: Plenary
- **GP-071755** CR 44.018 approved to use the correct Establishment cause in CHANNEL REQUEST message for sending of short application data

U-TDOA Enhancement – Rel-8

- None

Rel-8 – TEI-8 (1/2)

- **GAN**
 - **Enhancement of UMA/GAN Keep alive mechanisms**
 - Proposal in GP-071664 to avoid keep alive signalling during some ongoing signalling
 - Wrong settings of the Keep Alive Timer in the MS (T3906) by the GANC could yield inefficient signalling (hence battery drain) in the handset
 - However the currently specified signalling is inefficient, especially given there is no GANC behaviour defined for Keep Alive mechanism!
 - Proposal in GP-071664 would optimize this signalling and yield battery savings
 - More investigation needed
 - **GP-071831** CR 43.318 approved to maintain PLMN continuity when entering/leaving GAN mode
 - See earlier discussion in G2#35bis (G2-070341)
 - Behaviour clarified following 23.122 principles
 - **GP-071832** CR 44.318 postponed Defining Manual PLMN Selection Mode
 - Define unambiguously and without inconsistencies how Manual PLMN selection is done when in GAN mode
 - **GP-071943** CR 44.318 approved
 - See earlier discussion in G2#35bis (G2-070344)
 - Proposal to add MS requirement to re-register to the serving GANC after having obtained the PLMN list from the default GANC (for the case of manual PLMN selection or “User reselection”). Additional work will be made for G2#36bis

Rel-8 – TEI-8 (2/2)

- **GP-071817** CR 44.008 postponed: circuit pools for CTM + full rate AMR WB
 - Concerns raised that the use of CTM is not as such compatible with AMR WB
- **GP-071768, GP-071941** CR 48.008, 44.018 Feature name clarification for application-specific data functionality
- **GP-071905** CR 44.018 approved: correction to Table 9.1.1 and insertion of DTM Information message

Rel-8 – FS on A interface over IP

- Requirements reviewed and Endorsed by GERAN2
- **GP-072010** 3GPP TR 43.903 v0.0.3: **Plenary**
 - Only cleaned-up parts of the TR
 - Non-cleaned-up parts to be left empty
 - To be sent to CT1, CT4, SA2 for feedback in GP-072011
- Note: stage 3 details will be removed from the TR
- **GP-071809** BTS-MGW IP interface is not within the scope of the current Study Item which focuses on the BSC-MGW interface, though not prevented by the TR
- GAN Support will be investigated

Rel-8 – Other

- **Registration in densely populated areas**
 - Investigate whether there is any problem in GERAN only networks
 - No problem has been identified yet
 - 20-year history
 - If some problem do exist in UMTS networks, then a common solution for GSM/UMTS could be looked into for the case of shared LAs
 - Any solution must work and be compatible with legacy terminals on the field
 - Any solution requiring new terminals (like alternative 1 in SA2, with the introduction of new eXtra Area –XA) is not appropriate for it will not solve the existing problems
- LS in GP-072007

AOB

- None

Outgoing LSs

- **GP-071979** LS to SA2, RAN, CT1 cc SA1 on SIB Enhancement for PPAC
- **GP-071980** LS to RAN, RAN2 cc RAN3 on GNSS Satellites Identification in UMTS System Information
- **GP-071907** LS to CT1 on Downlink Dual Carrier capability signalling for DTM
- **GP-072006** LS to RAN2, RAN3 cc RAN on GAN Iu mode

Plenary

- **GP-072012** LS to RAN3, RAN2, RAN4 on feasibility of using RLF recovery to aid neighbour discovery
- **GP-072007** LS to SA2 cc RAN2, CT1 on RED
- **GP-072011** LS to CT1, CT4, SA2 on A interface over IP

Future meetings

• GERAN2#36	12 – 16 November 2007	Vancouver, Canada
• GERAN2#36bis	14 – 17 January 2008	TBD
• GERAN2#37	19 – 21 February 2008	Seoul, South Korea
• GERAN2#37bis	31 March – 3 April 2008	TBD
• GERAN#38	13 – 15 May 2008	Malaga, Spain
• GERAN2#38bis	24 – 27 June 2008	TBD
• GERAN2#39	26 – 28 August 2008	Florence, Italy
• GERAN2#39bis	30 September – 3 October 2008	TBD
• GERAN2#40	17 – 21 November 2008	TBD