

3GPP TSG GERAN2#42

Shenzhen, China, 12-14.05.2009

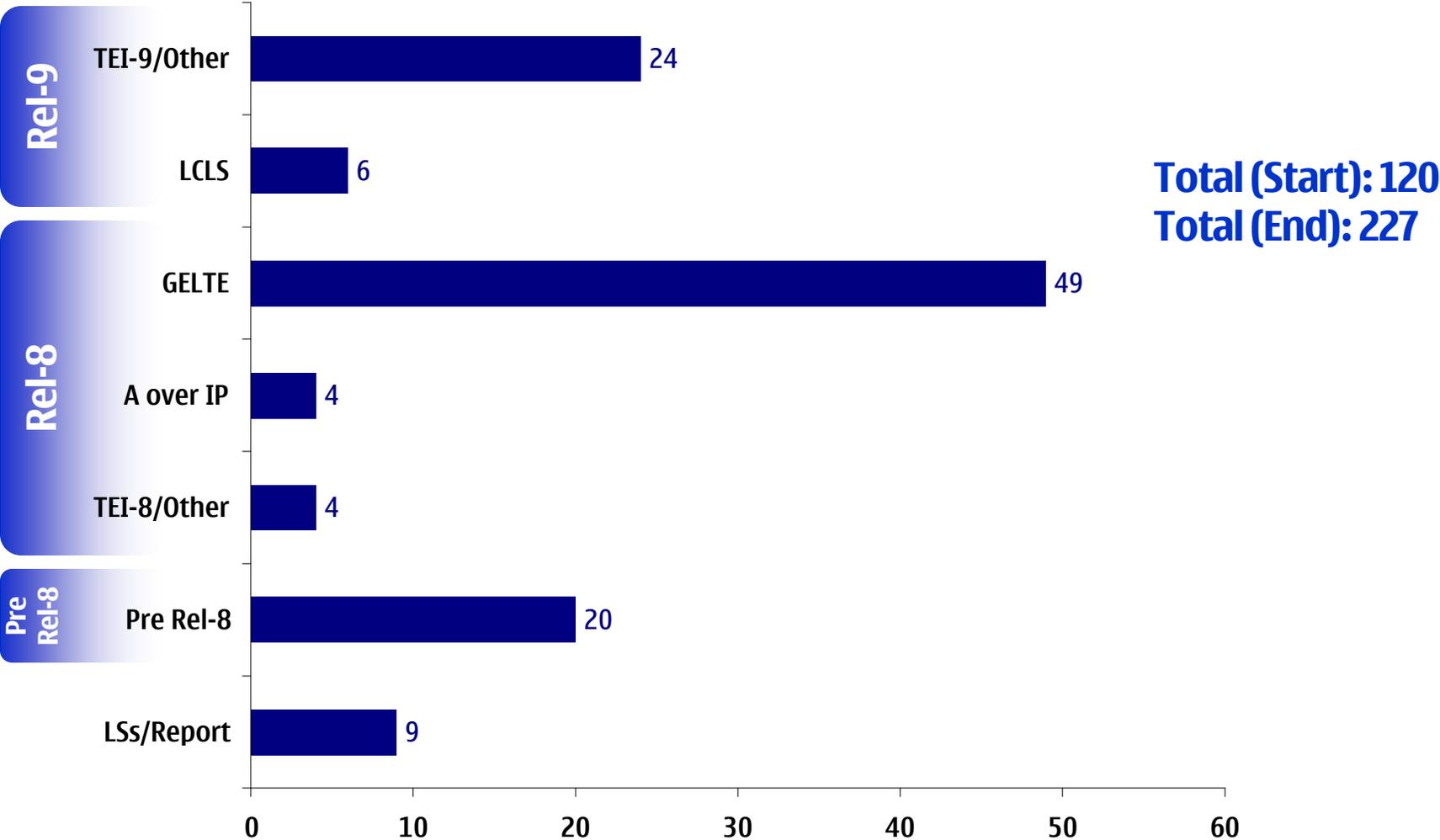
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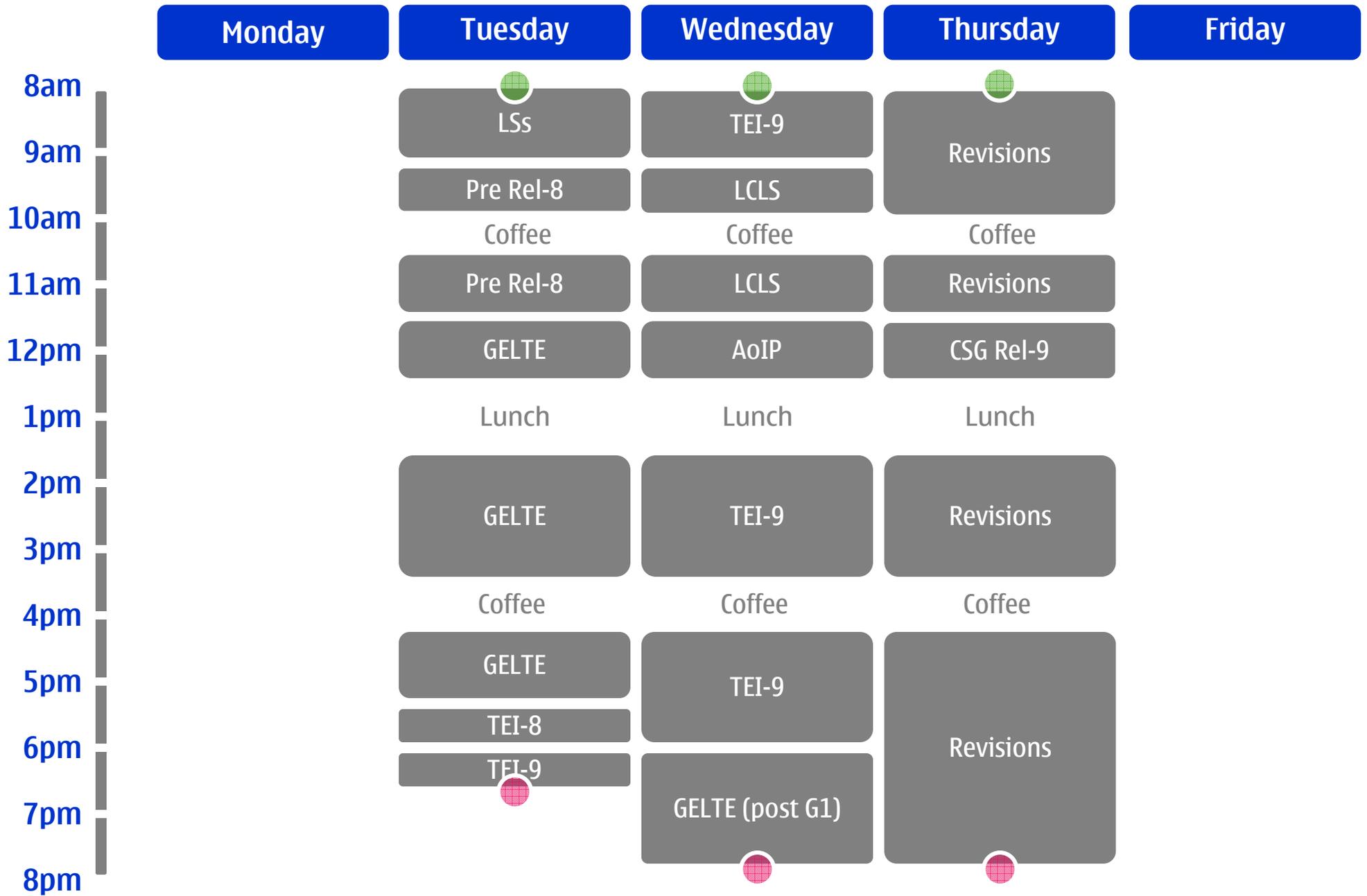
Chairman's summary

Chairman: Guillaume SÉBIRE (Nokia-Devices/Helsinki)

Secretary: Juha KORHONEN (ETSI-MCC)

Incoming Contributions per Agenda Item





Election

- Guillaume SEBIRE (Nokia Corporation, ETSI) re-elected

Rel-7 Corrections (1/2)

- **Misc.**

- **GP-090906, GP-090907** CRs 44.060 agreed: inclusion of BEP_PERIOD2 in Packet Timeslot Reconfigure
- **GP-090743** CR 44.018 agreed: CSN1 correction in SI2 quater
 - Note that the corresponding Rel-8 correction is contained within a CR which is not a mirror

- **DCDL**

- **GP-090744, GP-090745** CRs 44.060 postponed: clarification for DCDL that no order shall be assumed if RLC/MAC control messages are received in the same radio block period.

- **LATRED**

- **GP-090910, GP-090911** CR 44.060 agreed: Definition of MS requirements, according to legacy behavior, for USF monitoring and PAN transmission upon polling
- **GP-090771, GP-090772** CR 44.060 postponed: transmission of PDAN instead of PAN in case all corresponding data blocks “in” V(B) have TENTATIVE_ACK status
- **GP-091020, GP-091021** CR 44.060 agreed: correction to the interpretation of the downlink PAN field
- **GP-090831, GP-090832, GP-090833** CR 44.018 agreed: alignment of coding of RR Packet Downlink Assignment Type 2 with 44.060

Rel-7 Corrections (2/2)

- **EGPRS2**

- **GP-090759, GP-090760** CR 44.060 agreed: correction to pulse format coding 2
- **GP-090822, GP-090823, GP-090824** CR 44.018 agreed: correction to Pulse Format in RR Packet Uplink Assignment
- **GP-090971, GP-090972** CR 44.060 agreed: removal of reporting of all modulations (and consequently of EGPRS2 LQMM IE)

Rel-8 – GERAN/E-UTRAN Interworking (1/6)

- **UE (MS) behaviour without USIM**

- GERAN2 **agreement** that
 - MS will behave as a non E-UTRA capable MS
 - Disable E-UTRAN capabilities and signalling thereof
 - Applicable in all RR modes of operation
- CRs are expected for GERAN#43

- **Misc.**

- **GP-091002** CR 44.018 agreed (Rel-9 editorial)
- **GP-090917, GP-090918** CR 44.018 agreed: correction to Measurement Bandwidth (CSN1)
- **GP-090919** CR 48.018 agreed: SPID position in the DL UNIT_DATA PDU changed to be immediately before the LLC PDU
- **GP-090920** CR 48.018 agreed: Addition of TAI to RIM Procedures for MME Routing, according to feedback from RAN3 at GERAN#41 – eNB ID is not globally unique across TAIs (*the CR could not be handled in GERAN#41 due to lack of time*)
 - LS to RAN3 in **GP-090947**

Rel-8 – GERAN/E-UTRAN Interworking (2/6)

• Priority Handling

- **GP-090637, GP-090619** discussed
 - Conclusions
 - Two sets of priorities: Common priorities and Individual priorities (per MS)
 - Priorities defined irrespective of the RR mode of operation
 - For a given MS:
 - Latest received common priorities apply if there is no valid individual priorities assigned
 - Latest received individual priorities apply otherwise
 - Duration of validity of individual priorities to be discussed
- **GP-090921, GP-091025** CR 44.018 agreed
- **Restructuring of signalling in 44.060**
 - GERAN2 **agreement** to restructure signalling to minimize duplications so that common struct and IEs in different messages are defined in a single location (clause 12)
 - **GP-091053** CR 44.060 agreed
 - Includes some changes originally submitted in GP-090641, GP-090622
- **Clarification of the procedural description is still necessary to remove any ambiguity with the reception of common priorities and individual priorities**
- **GP-090786** on signalling savings for individual priorities requires further discussion
 - Gains could be high in some scenarios but the applicability limited to those scenarios
 - Discussion on possibility to extend the scenarios

Rel-8 – GERAN/E-UTRAN Interworking (3/6)

• Cell Change Order, Cell reselection

- **GP-091004** CR 44.060 agreed: Clarification on handling of CCO to E-UTRAN (according to LS from RAN2 in [R2-092692](#)) to indicate that the successful completion of network-controlled cell reselection is defined as per the target RAT
- Handling of not allowed cells within range
 - Pending GERAN1 conclusions (itself pending RAN WG feedback)
 - **GP-090762, GP-090763, GP-090764** CRs 44.018, 44.060 postponed

• PCID Grouping per TA

- **GP-091012, GP-091013, GP-091003** CR 44.018 agreed: encoding changed to increase signalling efficiency

• CSG Signalling on PSC/PCI Split

- As indicated by RAN2 the PSC/PCI split may not be common to all frequencies
- **GP-090924, GP-090925** CR 44.018 agreed
- **GP-091005** CR 44.060 agreed
 - Also includes restructuring of CSG information to avoid duplication across different messages

Rel-8 – GERAN/E-UTRAN Interworking (4/6)

• “NCell” List and Measurements

- **GP-090690** proposal to introduce a (*delta*) “Allowed Cells” list to be combined with the “Not allowed cells” list of a same E-UTRAN frequency received from different messages (e.g. PSI, PMO): results in a new not allowed cell list on a given frequency
 - No real need seen for the proposal
- **GP-090633, GP-090773** discussed to add flexibility to PMO to allow modifications of the E-UTRAN Neighbour list
- General clarifications needed on construction of E-UTRAN Neighbour List and indexing thereof
- Common understanding that PMO can be used to modify sys info for E-UTRAN
 - Whether the PMO should allow the removal of E-UTRAN Frequencies is open
 - The E-UTRAN Neighbour List is primarily a frequency list (with at most 8 frequencies, and expected typ. 2) – the need for removal is not obvious
- Common understanding that replacement of sys info in [packet transfer mode / (dedicated mode , dual transfer mode)] is as currently specified for GSM/UMTS by means of actual sys. info distribution on [PACCH / FACCH]

Rel-8 – GERAN/E-UTRAN Interworking (5/6)

- **SRVCC**

- **GERAN#41:** proposal to include eNB id in HO Request (MSC>BSS) and HO Request Ack (BSS>MSC) within the *mandatory* Cell Identifier IE was not seen feasible for it would for it would not be compatible with pre Rel-8 BSS. Discussions were ongoing in SA2 to resolve the above issue while aiming at preventing impact on GERAN/2G CN
- SA2 concluded to use the “Serving Area Identity” (SAI) to be used as the Source ID to indicate E-UTRA at handover (SRVCC). It is assigned by the MSC Server
- **GP-090927** CR 48.008 agreed

- **MS E-UTRAN Capabilities**

- Capabilities agreed at GERAN#41, where it was concluded impacts to 44.018, 44.060 were expected
- **GP-090928** CR 44.060 agreed
- **GP-090929, GP-090930** CRs 44.018 agreed

Rel-8 – GERAN/E-UTRAN Interworking (6/6)

• Handling of E-UTRAN UE RAC

- **GP-090805** Proposal to retrieve missing capabilities in the BSS (resubmission from GERAN#41)
 - UTRAN UE RAC (resp. E-UTRAN UE RAC) may not be received by the BSS during a handover from E-UTRAN (resp. UTRAN) thus preventing a further handover to UTRAN (resp. E-UTRAN)
 - Proposal to allow the BSS to request the missing capabilities by means of PS HO COMPLETE from the SGSN which will then request the MS to send the missing capabilities at RAU. The SGSN will in turn forward the capabilities to the BSS by means of the PS HO COMPLETE ACK
- RAN2 LS received (Thursday after email approval) not entirely in line with RAN2 LS received (Monday)
- **GP-090730, GP-090806** CRs 43.129 noted
- **GP-090807** CR 48.018 postponed
- **GP-090887, GP-090884** on interworking with pre Rel-8 GERAN network
 - Not discussed in GERAN2
 - **GP-090766, GP-090767** CRs 44.018 postponed without presentation

Rel-8 – TEI-8 (1/2)

- **LCS**
 - **GP-090657** CR 44.031 agreed: Correction to allowed settings of GANSS Positioning Method element to indicate it cannot be used for A-GPS only
- **EGPRS2**
 - **GP-090821** CR 44.060 agreed: wrong implementation of a previous CR

Rel-8 – TEI-8 (2/2)

- **ETWS**

- **GERAN(2) recommendation** to define the primary notification message in 3GPP TS 23.041 (CT1) that can then be included by means of a container in RR and RLC/MAC control messages (Paging Request Type 1, Application Information, Packet Notification) was **agreed in CT1#58**
- **SA#42** agreed the definition of ETWS support in Rel-8 GERAN specifications: primary notification
- **Security issues** with duplicate detection identified in RAN2 **do not affect GERAN** due to the definition of primary notification in 3GPP TS 23.041
- MS Support for ETWS optional
 - No capabilities indication
 - **Effect on legacy terminals in dedicated mode expected**
- **GP-091009, GP-091010** CR 44.018 agreed: Delivery of Primary Notification in (packet) idle mode within Paging Request Type 1 message on PCH
- **GP-091030, GP-091051** CR 44.018 agreed: Delivery of Primary notification in dedicated mode using the Application Information message on FACCH
- **GP-091008** CR 44.060 agreed: Delivery of Primary Notification in packet idle mode, packet transfer mode and dual transfer mode using the Packet Paging Request message on PPCH and the Packet Application Information message on PACCH
- GERAN2 recommendation **to conditionally approve these CRs upon approval by CT#43 plenary of the corresponding CT1 CR** (definition of Primary Notification in 23.041)

Rel-8 – A interface over IP

- **Misc corrections**

- **GP-090816** CR 48.008 agreed: Clarification on codec list: was postponed at G2#40bis pending a check of the requirement to mandate Config NB Code 1 for NB-AMR for an AoIP BSS (see also 3GPP TS 26.103)
- **GP-090862** CR 48.008 agreed: Correction of the length of the A-Interface Selector IE in RESET and RESET ACKNOWLEDGE message
- **GP-090818** CR 48.008 agreed: Correction of Cause Codes for Redundancy
- **GP-090940** CR 48.008 agreed: Addition of Chosen Channel IE in Handover Complete message

Rel-9 – VAMOS

- None

Rel-9 – TEI-9 (1/5)

• DTX for conversational services

• GERAN#40

- Proposal in GP-081498 to allow DTX in uplink through usage of PTCCH/U and Search frames during silent periods to provide VAD indication and PANs
- Performance evaluation lacking both for multiplexing efficiency and delay

• GERAN#41

- More data provided, however a number of questions raised (e.g. PB TSC false detection performance, BTS impacts, Delay, Multiplexing efficiency etc.)
- Further investigations needed

• GERAN#42

- **GP-090647** addressing the issues above. A number of concerns again raised on battery saving gains compared to ext UL TBF mode, impact on timing advance, usage of the resulting unused PDCH capacity for other users/TBFs without impacting the voice user
- **GP-090648** Stage 2 CR noted without presentation
- **GP-090901** “MS delays when leaving DTX” discussed, raising potential concerns vs delay budget and potentially increased PB collisions probability

Rel-9 – TEI-9 (2/5)

- **EFTA** i.e. to allow more Rx/Tx timeslots than provided by FTA (FTA allowed the “Sum” parameter of a Multislot Class to apply on an allocation basis rather than assignment basis)
 - Optional in both BSS and MS
 - **GP-090681** addresses further concerns raised at GERAN#41.
 - Some concerns reiterated
 - On statistical errors in the simulations shown earlier
 - Lack of system level evaluation
 - Need once again questioned
 - **GP-090943** Draft CR 24.008 endorsed
 - **GP-091054** CR 44.060 agreed
 - **G2-090684** Draft CR 45.002 noted
 - LS to CT1 in **GP-0901055**

Rel-9 – TEI-9 (3/5)

- **Multiplexing enhancements for single TBF operation - EMST**
 - **GERAN#41:** GERAN2 agreement that an MS supporting EMST shall support (in each direction)
 - One RLC entity per RLC mode
 - If the MS is NPM capable it shall support 3 RLC entities: 1 for each of RLC AM, RLC UM, RLC NPM
 - If the MS is non-NPM capable it shall support 2 RLC entities: 1 for each of RLC AM, RLC UM
 - Open issue with uplink scheduling rules: **offline discussions encouraged until GERAN#42 and yet**
 - **GP-090879** QoS uplink priority based scheduling for EMST
 - Submitted late in the weekend (!)
 - ⇒ One PFC per TFI, RLC protocol runs across TFIs
 - ⇒ RLC Protocol impacted (segmentation, concatenation and reassembly)
 - ⇒ New priority signalling for PFCs needed
 - GP-090810 CR 44.060 postponed
 - **GP-090937** CR 44.018 postponed
 - **GP-090938** CR 44.060 postponed
 - **GP-090939** Draft CR 24.008 noted
- **GP-090767** to mix BTTI and RTTI for a given TBF
 - Clarification needed on applicable multislot classes and applicability of TB-FANR
 - Impact on Link Quality Reporting and Link Adaptation to be considered given the performance difference between BTTI and RTTI

Rel-9 – TEI-9 (4/5)

- **Dynamic Timeslot Reduction (aka DTR)**

- **GERAN#41**

- Proposal to reduce timeslot monitoring during inactivity periods (delayed TBF release, extended UL TBF mode) through signalling in RLC PDUs of reduction of resources / resumption to original assignment
 - More investigations needed to clarify the gains, in particular vs. using existing RLC/MAC control signalling (i.e. PACKET TIMESLOT RECONFIGURE to reduce the number of timeslots during an inactivity period and PACKET TIMESLOT RECONFIGURE to resume normal operation – although such signaling is not required in delayed TBF release and ext.UL TBF mode)

- **GP-090825** provides more evaluation of the proposal

- Power saving gains clarified as max. savings, seen according to the power consumption induced by the current standard (not the overall MS power consumption)
- Care to be taken by the network how to exploit the gains reached by the proposal
- **GP-090777, GP-090934** providing additional clarifications around DTR usage

- More work needed, no concerns raised

- **LLC PDU start indication**

- **GERAN#41:**

- **GP-090279** highlighted a possible problem with RLC NP and Unack modes. The loss of an RLC PDU containing the end of an LLC PDU (Length Indicator included) may trigger the loss of the next LLC PDU as there is no way for the network to determine that the end of the former LLC PDU was lost. A solution was agreed to explicitly indicate if an RLC PDU starts with a new LLC PDU, *when RLC NP mode is used* (CRs 44.060 approved in GP-090550, GP-090551).

- **GERAN#42:** extended to RLC UM

- **GP-091023** CR 44.060 agreed
- **GP-091016** Draft CR 24.008 endorsed
- **GP-091019** LS to CT1

Rel-9 – TEI-9 (5/5)

- **GP-090658** on the validity period of differential corrections for GNSS (DGNSS)
 - **GERAN#41:** More elaboration on the benefits should be provided before a decision is reached
 - **GP-090658** provides additional data on the benefits
 - More discussion needed as concerns were raised on the need for the proposal
 - **GP-091011** CR 44.031 postponed

Rel-9 – Local Call Local Switch (1/2)

- **Local Call Local Switch**

- Proposal aiming at keeping the user plane (voice) traffic between the two parties of a local call (i.e. within the same BSS) in the BSS in order to save Abis and/or A interface resources
- A common understanding is that local switch decision lies in the BSS and may be assisted by the MSC

- **GP-091059** endorsed by GERAN2: Working Assumptions, Requirements and objectives

- **LS in GP-090904 to CT4, CT**

- Keep the timeline agreed in GERAN (BB timeline is not in line with that)
 - GERAN can progress irrespective of CT4 TR (but coordinated with CT4)
 - If TR is created by CT4, its completion need to remain within WID timeline
- Agreement/Principles/Requirements agreed in GERAN(2): GP-091059

- LS to SA3-LI in **GP-091056** on Lawful Interception

Rel-9 – Local Call Local Switch (2/2)

- **Several proposals discussed**, requiring further work, based on GP-091059
 - **GP-090629** proposal for binding of the two radio legs of the Local Call
 - **GP-090630** proposal to allow local switching of local calls during handover procedure
 - **GP-090653** Proposed Assumptions and Procedures for Local Call Local Switch
 - **GP-090834** Proposed solution for Local Call Local Switch

Rel-9 – H(e)NB Enhancements

- **GP-090781** highlights a number of issues to be discussed for CSG mobility in “connected” mode
 - Further work needed
- **GP-090632** Proposal on measurement control and reporting for CSG cells
 - Further work needed
 - **GP-090809** CR 44.060 postponed without presentation

AOB

- We have **only two meetings left**: GERAN2#43 and GERAN2#44
- Need for extra meeting(s) is **clear**: end of June and October
- **Rel-9 completion expected by Eo2009** (GERAN#44, November 2009)
- **New WIDs**
 - (expected) CBC-BSC interface
 - Approval expected at GERAN#42 – Completion expected November 2009 (GERAN#44)
 - H(e)NB Enhancements
 - Approved at GERAN#42 – Completion expected November 2009 (GERAN#44)
 - Local Call Local Switch
 - Approved at GERAN#41 – Completion expected November 2009 (GERAN#44)
- **In addition**
 - High workload on GELTE corrections also depending on RAN WG (Rel-8)
 - A number of TEI-9 topics ongoing
- **Efficient progress on these topics with telco / reflector is not realistic** even if telcos can yield progress
- Proposal to have a physical meeting **EuJune** was objected to by one company

- As per working procedures
 - F.2: “Ordinary meeting should be announced at least six months prior to the opening day of the meeting.”
- AdHoc with GERAN2 Decision power may be more appropriate for the end of June (restricted agenda to the topics above, potentially Rel-7)

- Bis meeting would be possible in october 2009

Outgoing LSs

- **GP-091017** LS to RAN2 on Cell Change Order to E-UTRAN
- **GP-091018** LS to RAN2 on transfer of inter-RAT handover to E-UTRA message
- **GP-091056** LS to SA3, CT4 cc SA, SA1, SA2, SA3, GERAN, CT1, CT3, ETSI TC LI on Local Call Local Switch
- **GP-091058** LS to CT1 on LLC PDU Start / Stop
- **GP-090947** LS to RAN3 on RIM Routing address definition for E-UTRAN
- **GP-091055** LS to CT1 on EFTA

- **GP-090904** LS to CT, CT4, SA3 LI, SA1 cc SA, SA2, CT, CT1, CT3 on Local Call Local Switch: Plenary

Future meetings

- **GERAN2 AdHoc** **End of June?**
- GERAN #43 31 August – 4 September 2009 Vancouver, Canada
- **GERAN2#43bis** **October?**
- GERAN #44 16 – 20 November 2009 Sophia Antipolis, France