

3GPP TSG GERAN2#48

San José del Cabo, Mexico, 23-25 November, 2010

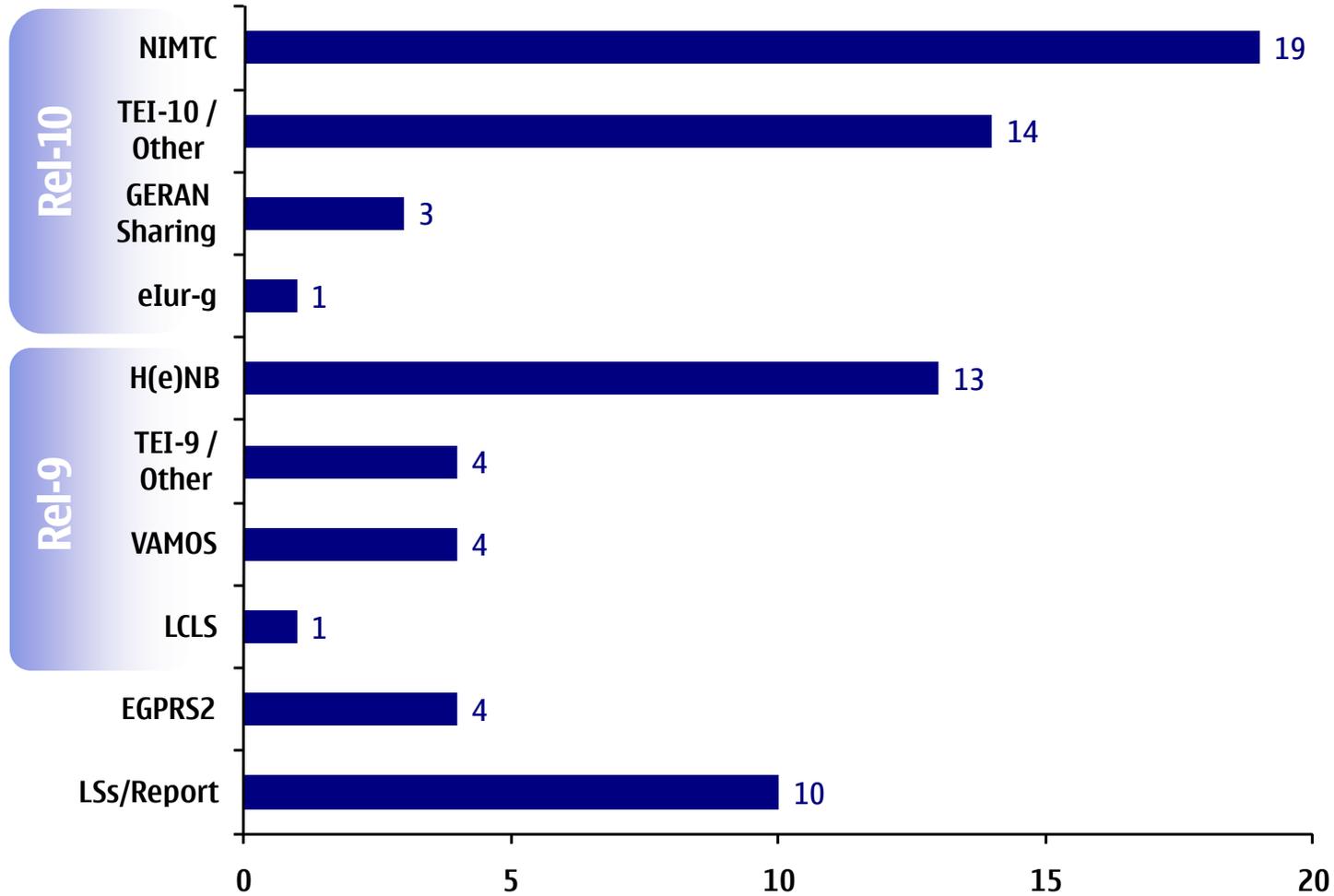
Chairman's Summary

NOKIA

Guillaume SEBIRE (Nokia/Chairman)

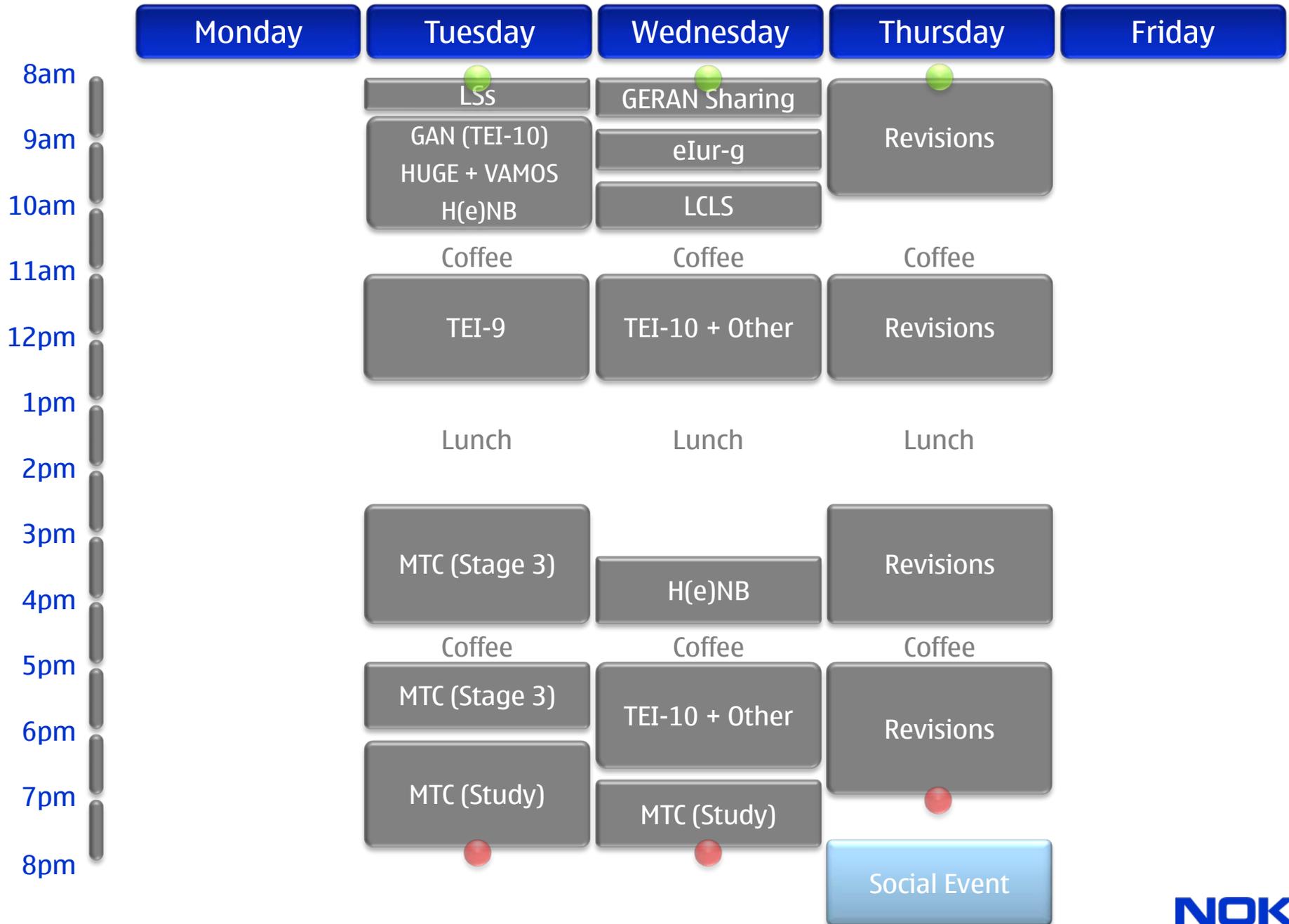
Gert THOMASEN (MCC)

Incoming Contributions



Total: 73

Total (End): 147



Pre-Release 9

- **GP-101939, GP-101940, GP-101941, GP-1019342** CR 44.060 (Rel-7+): (EGPRS2 Uplink) correction to the CSN1 coding of the Pulse Format IE (Pulse format coding 2) to include an explicit length indication of the IE

Rel-9 – VAMOS

- **GP-101921, GP-101922** CR 44.018 agreed: Clarification that for VAMOS operation in DTM, the PS slots use the same TSC number as on the CS slot but always from TSC set 1 (in line with GERAN#47 agreement) – “Channels” terminology used
- **GP-101891, GP-101892** CR 44.018 agreed: mandating the support of early classmark sending for VAMOS mobile stations

Rel-9 – H(e)NB Enhancements (1/3)

- **Misc.**
 - **GP-102031, GP-102032** CR 44.060 agreed: correction that the reselection criteria, not the reporting criteria, apply for reporting a CSG/hybrid cell with a CSG ID is on the CSG Whitelist as a *target cell* in PCCN
 - Note: a CSG/hybrid cell with a CSG ID on the CSG Whitelist cannot be reported as part of the up to 6 neighbour cells in PCCN (with routing parameters)
 - **GP-102034, GP-102035** CR 44.060 agreed: misc corrections to reflect in control messages the handling of detected hybrid cells (of which the CSG ID is on the CSG Whitelist) in case of handover according to G#47 decision (i.e. same handling as for CSG cells) (Updates of G2-100366, G2-100367)
- **PLMN ID Reporting**
 - **GERAN2#47bis:**
 - **Working assumption** that the primary PLMN id is reported. This may be revisited should feedback from other groups indicate that this is not ok.
 - **G2-100383, G2-100384** (GP-101802, GP-101803) CRs 44.060 conditionally agreed according to the working assumption above
 - Condition: positive feedback from other groups on the working assumption
 - **GERAN#48**
 - Response LSs received (RAN2, RAN3) indicating no problem with the working assumption above. No response received from CT1 (as per CT1 Chairman's Notes: The actions were seen as RAN-oriented and no reply from a CT1-perspective was needed)
 - **GP-101802, GP-101803** CRs 44.060 agreed
 - **GP-101776, GP-101777** CRs 44.060 rejected

Rel-9 – H(e)NB Enhancements (2/3)

- **PCCO to CSG cells (NC2 when PS HO not supported):**
 - **GERAN#47** agreement that PCCO to CSG cells shall be supported in the standard (NC2 mode when PS HO not supported)
 - **GERAN2#47bis**
 - General disclaimer: Mechanism need to be simple and make sense
 - GERAN1 decision needed as to
 - whether measurement results for CSG cells shall be reported
 - Whether to apply measurement reporting or reselection criteria for reporting a CSG cell
 - Identification of a CSG cell in a measurement report
 - **GERAN#48**
 - GERAN1 working assumption that measurement results shall be reported for CSG cells
 - GERAN1: No decision as to whether to apply reporting or reselection criteria
 - Identification of a CSG Cell:
 - Option 1: physical layer parameters (PSC/PCI + Freq)
 - Option 2: physical layer parameters (PSC/PCI + Freq) + discriminator bit
 - Show of hands - issue had been discussed for a number meetings
 - 7 companies in favor of option 2
 - 3 companies in favor of option 1
 - 4 companies undecided/no opinion
 - **Option 2** taken as a working assumption

Rel-9 – H(e)NB Enhancements (3/3)

- **GP-101774, GP-101775** CRs 44.060 rejected (single bit reporting)
- **GP-102022, GP-101814, GP-101815, GP-101816** CRs 44.060, 44.018 postponed
- **GP-102028** CR 44.060 postponed: proposal to allow transmission of PCCN in NC2 (at the moment it is allowed only in NC0 and NC1 in packet transfer mode) – the motivation is to minimize CSN1 changes to enable reporting of CSG cells (without routing parameters)
 - Companies strongly invited to resolve outstanding issues offline before GERAN#49
- PSC/PCI Split for hybrid cells
 - **GERAN2#47bis:** proposal that no PSC/PCI split for hybrid split be introduced on the radio interface but that a PSC/PCI split distinguishing between home and macro hybrid cells or a Cell Identity split may be needed in the BSS – further discussions needed
 - **GERAN2#48 agreement:**
 - No PSC/PCI split for hybrid cells needed on the radio interface
 - No PSC/PCI split for hybrid cells needed in the BSS

Rel-9 – TEI-9 / Other

- **CSFB with Redirection and System information**

- **GP-101783** proposal to remove ambiguity from GERAN specifications to define the min SI messages needed to avoid full BCCH acquisition in the GSM cell upon CSFB, and how the MS should proceed should some of these messages not be available
- **GP-102033, GP-101976** CRs 44.018 agreed

- **GP-101893** CR 48.008 postponed: Kc128 handling with equipments of different release

- Concerns raised as a Rel-8 MSC would not send a command to use A5/4 to a BSC in the first place

- **Cell reselection enhancements**

- **GP-101754, GP-101755** CRs 44.060 postponed, pending GERAN1 conclusion

Rel-10 – Local Call Local Switch

- **GERAN2#47bis:** Companies invited to consider whether this can remain in Rel-10 or should be moved to Rel-11 knowing at least Stage 2 (CT4) cannot be approved before December CT#50 plenary
- LS from CT4 in **GP-101968** indicating Rel-10 completion is possible
 - Stage 2 23.284 v0.2.0 is now 70% complete (to be sent to CT#50 for information)
- **GP-101989** Updated WID endorsed – to plenary
 - Release 10 completion seen possible by GERAN#50 that would require an exception sheet at GERAN#49
- **GP-101990** CR 48.103 postponed – endorsed by GERAN2
- **GP-101972** CR 48.008 postponed – common baseline – more work needed
- LS to CT4 in **GP-102076**

Rel-10 – MTC Study Item (1/4)

- **GERAN#46:**

- Focus in Rel-10 Study Item on investigating Overload control (radio network congestion), identifiers, within the scope of smart metering applications
- Radio interface improvements, if any, should preferably be generic enough so they can be applicable to any [MTC] application
- TR: the TR should follow a Stage 2 approach i.e. reflect agreements and it will be a living document (i.e. will be further updated in Rel-11). It will not be a collection of proposals / contributions

Rel-10 – MTC Study Item (2/4)

- **General**

- **Simulation assumptions:**

- **GP-101779** Discussion on generation of numeric beta distribution: no impact to actual simulation results expected
 - **GP-101991** Way of working for TR inclusion: endorsed with the notes below
 - Pseudo CRs to be made for making changes to the latest version of the TR
 - The editor may update the TR as the editor sees fit without requiring pCRs, but need to inform the group about the changes made
 - Approved mechanisms as per the Stage 3 WID should preferably have a stage 2-like description in the TR but such description is not a prerequisite to the approval of these Stage 3 changes

- **Identifiers**

- **GP-101953:** a number of proposals made to increase the USF/TFI space: further work and investigation needed. Companies invited to review the paper and provide feedback offline

Rel-10 – MTC Study Item (3/4)

- **CCCH**
 - Evaluation of “Huawei” and “Ericsson” RACH-transmission proposals seen in previous meetings
 - **GP-1001861**: some concerns raised with the results that seem overly optimistic
 - **GP-101778**: some concerns raised with the results that do not seem to be comparable
 - **GP-101896** CCCH evaluation with Smart Meters
 - Clarification required on C/I plots
 - **GP-101879** Hybrid MTC Channel proposal
 - Evaluation requested at GERAN2#47bis pending
 - Misc. concerns raised. Further investigations needed
 - **GP-101906** Peak load control for MTC Devices: proposal to reduce the load on CCH assigning resources in advance i.e. taking appointments for future MTC data transmission
 - Concerns raised as to the need for the proposal

Rel-10 – MTC Study Item (4/4)

- **PDCH**

- **GP-101897** Evaluation of the proposal to improve uplink multiplexing capacity by sharing a USF between multiple mobiles
 - Simulation assumptions to be clarified
- **GP-101885** Proposal to multiplex several MTC devices, burst-wise in a single radio block period
 - Concerns raised on complexity
- **GP-101886** Proposal to mitigate the load on the Gb interface by aggregation of LLC PDUs from several MTC devices
 - Further investigations needed

Rel-10 – MTC Stage 3 (1/2)

- **Low priority**

- Ambiguities remain as to the definition of “low priority” and the underlying criteria in particular at L2 that trigger the use of such access - Also Stage 2 aspects in 23.060 are yet to be approved
- **GP-101899**: Low priority (CS) indication at RACH – further discussions needed
- **GP-101900** CR 44.060 postponed
- **GP-101926** Low priority / MTC indicator at RACH – further discussions needed

- **Avoiding Immediate Assignment Reject message**

- Discussions linked to proposals on Low Priority / MTC indications at random access
- Proposals to reject access made by some devices using the Immediate Assignment message instead of the Immediate Assignment Reject message to reduce the load on AGCH
- **GP-101901**: Implicit Immediate Assignment Reject
 - Proposal to use the unused codepoints of the Channel Type field in the Packet Channel Description IE of the Immediate Assignment message to reject access of MTC devices having made a low priority access without having to require the transmission of the Immediate Assignment Reject message. These devices are not allowed access for a given time. Linked to GP-101899.
 - **GP-101902** CR 44.018 postponed
- **GP-101927** CR 44.018 postponed: addition of access reject timers in Immediate Assignment rest octets to avoid sending Immediate Access Reject messages

Rel-10 – MTC Stage 3 (2/2)

- **GP-1001894** proposal to assign resources to more than one MTC device at a time with a single new message (single radio block) on AGCH (PACKET IMMEDIATE ASSIGNMENT)
 - More work needed in particular to address MS support indication, Network Support (GPRS Cell Options), flexibility desired and relation with existing TBF establishment mechanisms
- **Extended Access Barring:**
 - **GP-101917** SA1 LS detailing Extended Access Barring requirements
 - Response LS in **GP-102072** aiming at clarifying the requirements
 - **GP-101903:** Proposal to introduce Extended Access Class Barring
 - **GP-101904** CR 44.018 postponed

Rel-10 – GERAN Sharing (1/2)

- **GERAN#47:**

- Principles proposed in **GP-101229** similar to the solution in RAN (w/ minor discrepancies)
 - General principles **endorsed** (some finetuning left on message names etc.)
- It is recommended that CT1 and SA2 define the changes that fall under their responsibility in TS 24.008 and TS 23.251 (respectively) and that coordination with GERAN(2) be made to ensure a timely and coordinated progress across working groups
- GERAN2 will focus on 48.008 and 48.018 and on reviewing GERAN matters as (and if) required by CT1/SA2 on 24.008/23.251

- **GERAN#48:**

- No more proposals at this meeting to include Manual PLMN selection within the scope of the current work.
- It is expected Manual PLMN selection will be addressed with a distinct WID at a later stage

Rel-10 – GERAN Sharing (2/2)

- **GP-101937:** Proposal endorsed to introduce a new BSSMAP Reroute Complete message in order to avoid using the Clear Command (upon initiation of the clear procedure), to terminate the reroute procedure. The clear command would otherwise yield an unnecessary release of the RR connection after LAU
- **Good progress on Stage 3**
 - **GP-102037** CR 48.008 agreed conditionally to 23.251 (Stage 2) and 24.008 CRs approval at SA#50 and CT#50
 - **GP-102038** CR 48.018 agreed conditionally to 23.251 (Stage 2) and 24.008 CRs approval at SA#50 and CT#50

Rel-10 – Enhancements of Iur-g

- **G2-101988** Working Assumptions on eIur-g principles endorsed by GERAN2
- **GP-101987** Draft CR 43.130 noted – further work needed

- **GP-101955** (Plenary) Updated WID to reduce the scope of the WID to CS domain only and only between a BSC and a TD-SCDMA RNC

- LS to RAN3 in **GP-102039** – Plenary [pending inclusion of GP-101955]
- LS to SA3 in **GP-102040** – Plenary [pending inclusion of GP-101955]

Rel-10 – TEI-10 (1/4)

- **Dynamic Timelsot Reduction**

- **GP-102073** CR 44.060 agreed: Misc. DTR corrections
- **GP-101930**: open issues with DTR: further investigation needed until GERAN#49

- **RACH Power Reduction**

- **GP-101840** CR 44.018 postponed, pending GERAN1 progress

Rel-10 – TEI-10 (2/4)

- **GAN**
 - Support for Rove in/out from/to LTE
 - **GP-101977** CR 43.318 endorsed
 - **GP-101983** CR 44.318 agreed
 - Note: no impact to RAN specs
 - Addresses the “artificial” limitation of GAN capable E-UTRA terminals of not being to rove-in/out to/from GAN from/to LTE
 - Support for RFC4867 Bandwidth-Efficient mode to allow selecting between octet-aligned and BE mode for the GA-CSR traffic channel (linked to AoIP support)
 - **GP-101970** CR 43.318 endorsed
 - **GP-101984** CR 44.318 agreed
 - Note: RTP redundancy not applicable with AoIP
- **Fast downlink freq switching**
 - **GP-101876** CR 45.002 noted
 - **GP-101877** Draft CR 24.008 noted
 - Concerns expressed about the need for a new capability indicator (24.008) – more time requested to check the relation with other capabilities (EFTA, DLDC, DARP Ph II)
 - Decision expected at GERAN#49

Rel-10 – TEI-10 (3/4)

- **SACCH Security** issues raised at GERAN#47 in GP-101243
 - A) “Known text” in SI5 (SACCH, ciphered) based on contents of SI2 (BCCH) due to *BCCH Frequency List IE*
 - B) “Known text” content in SI6 (SACCH, ciphered) due to “2B” *padding sequence* of rest octets
 - Solution to A) by allowing different description formats in repeated versions of SI5 while the selection of the format is (pseudo)random
 - Solution to B) by allowing randomizing of padding bits while still allowing future extensions
 - Concerns were raised on B) that the content of SI6 is also fairly easy to determine based on BCCH information and mostly fixed, so the proposal may not be robust enough whilst still making attacks more difficult
 - Proposal to add a CM3 bit to indicate the behavior has been tested, however the proposal ought to be compatible with MSs on the field anyway – whether this bit it is needed is not clear
 - It was also proposed that a possible way forward could be not to cipher the SACCH but this would not be compatible with legacy MSs
 - **Decision expected at GERAN#48** – MS vendors requested to check the compatibility of the proposal with legacy MSs on the field. If no issue is identified, the proposal would then be specified and should be deployed asap, else a more complete solution would be required.
 - **GERAN#48:** three vendors required more time to evaluate this

Rel-10 – TEI-10 (4/4)

- **SACCH Security (cont'd)**

- LS from SA3 in **GP-101966** providing feedback on proposed solutions to A5/1 plain text issues for legacy terminals and new terminals: benefits acknowledged
 - Further security analysis *may* be provided from SA3#69 meeting
- Addressing known text issues with **legacy** terminals
 - GERAN#47: Compatibility with legacy terminals to be checked until GERAN#48 (see GP-101243)
 - GERAN#48: three vendors required more time to investigate compatibility with legacy terminals – Status to be verified at GERAN#49
 - **GP-101923** CR 44.018 postponed
 - **GP-101924** CR 44.018 postponed
 - **GP-101925** CR 44.018 postponed
 - Conclusion at GERAN#49
- Addressing known text issues with **new** terminals
 - **GP-101787** proposal to keep ciphering of SMS (user data) on SACCH while not ciphering RR messages (measurement / system information)
 - Comments received as to signaling the use of the mechanism (system information vs dedicated signaling)
 - Some support and no concerns expressed on the *principle* of the proposal.
 - **GP-101961** CR 44.018 postponed
 - **GP-101962** Draft CR 24.008 noted
 - Further work needed - conclusion at GERAN#49

Outgoing Liaison Statements

- **GP-102039** LS to RAN3 on Enhancements of Iur-g interface - Plenary
- **GP-102076** LS to CT4 on LCLS Progress update
- **GP-102072** LS to SA1 cc SA, SA2, RAN2, CT1 on Extended Access Barring
- **GP-102036** LS to SA3 on support for encryption in connection with Iur-g interface - Plenary

AOB

- GERAN2 Chairman to change affiliation on December 1st (Renesas)
- GERAN2 consensus for continuation until the end of the current term
- Letter of support to be provided asap after the change

Future meetings

- **GERAN2#49** 1st – 3rd March 2011 Chengdu, PRC