- Qualcomm considers that we should consider the delay in msec instead of TTIs, so 2 TTIs
  of 2 msec, and 1 TTI of 10 msec. Qualcomm considers that 2 msec and 10 msec TTIs are
  sufficiently specific that they can be handled independently.
- Interdigital considers whether we can not just specify the number of RLC PDUs that can be created and not need to handle a delay.
- Qualcomm considers that more RLC PDUs than the number of TTIs could be created in advance.
- Ericsson considers that the creation should be done based on the current situation.
- Open issues (see email discussion 61b\_UTRAN):
  - o On what should we base the RLC PDU size selection, e.g. grants...
  - Number of TTIs for 2msec and 10 msec
  - o Number of RLC PDUs that can be created in advance
  - How to increase the RLC PDUs
    - Interdigital proposes to create a certain amount of untransmitted RLC PDUs.
    - Qualcomm considers that it would be possible to build RLC PDUs with some
      - delay.
    - How to take care of multiple logical channels
    - Qualcomm considers that the data should be taken in the priority
  - o How to handle scheduled and non-scheduled data
    - ALU considers that if in one TTI the was scheduled + non-scheduled data the E-TFCI would be bigger compared to the case when there would be only scheduled data afterwards.
  - o How does it work for the delta HARQ depending on the MAC-d flow.

# Mixed:

R2-081634 MAC-i/is PDU formatHUAWEI Disc

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- Ericsson considers that there is no need to change the current agreement, and don't see the gain of 10 bits sufficient to change the current agreement.
  - Nokia agrees that there is no need to introduce an extra mechanism.
- Huawei considers that there could be some more possible control information that could be included in the MAC header. This is mainly for future extensibility.
- Huaweis concern is that there is no possibility for future extension.

# R2-081833

RLC buffer management and polling InterDigital Disc

- Qualcomm wonders why the buffer overflow would happen, and what is different about the flexible RLC that would not happen in the fixed RLC PDU size
- Interdigital explains that the issue is that today the RNC can calculate a buffer size based on the SN space and the PDU size, so choosing the RLC window too low will unnecessarily limit this.
- Qualcomm considers that even today there is a need for a flow control between the application and the RLC which could prevent the overflow of the RLC buffer
- Ericsson considers that there may be some problem, but that even today we have no
  deterministic assignment, and thus there may not be a real big problem.
- Interdigital considers that if there is no mechanism specified this would really rely on the fact that the RNC creates autonomously status reports. Interdigital would prefer to have the possibility to have some more information.
- Nokia and NSN thinks that there is no need for such a mechanism
- Interdigital considers that if we don't specify anything then we end up with option 3.
- Interdigital wonders whether network vendors have to track the UE buffer, and create the Status reports autonomously.
- Ericsson considers that in any way we need to have option 3. Ericsson considers that there
  may be some value, but that this is not strictly needed.
- Interdigital wonders that we are inconsistent then by having a RLC window based mechanism, since the network could handle this as well.
- Noted. Might come back if there is more support.

<u>R2-081834</u> Reconfiguration of L2 protocols between enhanced and non-enhanced cells InterDigital Disc

 Nokia considers that the cases 1 and 3 for the reconfiguration from flexible to fixed sizezs in the UL are quite rare, and that the case of the state transition from CELL\_DCH to CELL\_FACH should in the normal case only occur in the case that we have no more data to transmit.

- Interdigital wonders why the case that there is mobility between Rel-8 and Rel-7 is a rare case.
- Ericsson considers that the cases 1 and 3 should only be a transitionary case.
- Ericsson considers that the same case that we have for the uplink should apply for the downlink.
- It is agreed that we support lossless reconfiguration from fixed to flexible RLC PDU size in the uplink

# Corrections

 R2-081504
 Correction of a spelling error of E-TFC selection
 Ericsson CR 25.321

 Updated in R2-081925
 Correction of a spelling error of E-TFC selection
 Ericsson CR 25.321

 The CR (REL-8) is technically endorsed.

 R2-081877
 Introduction of POLL\_SUFI for the uplink
 SamsungCR 25.322

 Ericsson wonders how the UE chooses between the Poll Bit and the Poll Sufi

- Samsung considers that the UE should choose based on the presence of new data. It could
- as well be left to UE implementation
   Ericsson does not consider that the gains will be very big since also in the downlink they turn out to be smaller than expected, but at least Ericsson wants the use of the POLL\_SUFI
  - to be controlled by the network, i.e. is the UE allowed to use POLL\_SUFI or not.
  - Samsung would be happy to have this network controllable.
  - Samsung wonders why this could not be used by the network.
  - Ericsson considers that the gain could be smaller because the cases where the retransmission of the last packet could be unnecessary is rather a rare case, since typically if the Poll timer expires the last packet has to be retransmitted anyway.
  - Samsung considers that there may be 50 percents of the cases.
  - Ericsson considers that this only applies to 50% of the poll timers that expire (either the poll is lost or the status report)
  - Broadcomm considers that if it is not seen usefull by network vendors (i.e. it will not be configured) then we better don't have it.
  - Nokia thinks that we could leave it open until the next meeting.
  - Noted.

R2-081878 Correction to transmitting AM RLC entity SamsungCR 25.322

The CR (REL-8) is technically endorsed.

# 6.4.2 CS voice service over HSPA

(RAN2 WI, RInImp8-CsHspa, 100%, March 08, closed)

- R2-081841 Support for RLC Segmentation in CS voice over HSPA Qualcomm Europe Disc
  - Huawei considers that SA4 has pointed out that the RLC SN is important for the dejitter buffer handling.
  - NSN considers that depending on the UL configuration the TB size can deduced, i.e. due to the fact that the RNC controls the segmentation it can know whether segmentation applies or not.
  - AdHoc chair wonders whether this implies that the Ue has to be controlled by the nonscheduled grant.
  - Huawei Is in favour of the segmentation in case of 2 msec TTI and wonders whether this should be also used for the 10msec TTI
  - NSN considers that the segmentation would probably only be configured for the 2 msec TTI, but the UE should be allowed to segment as well for the 10 msec TTI in the specification.
  - It is agreed to allow segmentation in the UL.

R2-081783 CS-HSPA UL Segmentation Nokia Siemens Networks, Nokia corporation CR 25.322

- Ericsson proposes some improved wording
- The CR (REL-8) is technically endorsed.

R2-081839 Pro

Proposal for Reply to SA4 Qualcomm Europe, Nokia Siemens Networks Disc

- ALU wonders whether there is any specification on how the parameters Max CS delay is supposed to be used.
- NSN clarifies that there is a description on how this is used.
- AdHoc chair proposes to clarify in the last response that the delay is controlled, i.e. there will be no additional losses due to late delays.
- Reply LS based on this in <u>R2-081952</u>

# 6.4.3 Enhanced Uplink for CELL\_FACH State in FDD

(RAN2 WI, RANimp-UplinkEnhState, 50%, June 08)

# Resource Release

R2-081501 Implicit release for enhanced uplink in CELL\_FACH Ericsson Disc

- Qualcomm considers that the implicit release for the case of DXCH is not necessarily a good idea in order to support the downlink activity. Thus we should rely on the explicit release for DXCH.
- Ericsson wonders whether the use is for the Ack Nack in the UL. QC confirms.
- QC clarifies that the UE would maintained with the E-DCH resource until the DL transmission would be finished.
- NSN considers that also for the transmission for RLC Acks in the UL the maintenance could be a good idea, and if the common resource is released, due to possible backoff the transmission of the RLC Ack would then be delayed.
- Ericsson wonders whether for the case where DL traffic is foreseeable it would not be better to move the UE to CELL\_DCH state.
- Qualcomm considers that having the UL in order to support the DL is quite usefull for the support of the HARQ operation
- Ericsson considers that this feature should be designed in order to be optimal for the case of small keep alive traffic for which there is not necessarily a big response.
- NSN agrees to the benefits for the implicit release, but also agree that the E-DCH should not be released immediately, but would wait for a small time e.g. several TTIs. For the case that there would be new data arriving the UE would maintain the E-DCH resource based on the timer.
- Qualcomm considers that DL and UL should be handled together in the typical TCP case.
- Ericsson considers that adding a timer could be an interesting solution. 5

<u>R2-081581</u> Empty Buffer Status reporting and Implicit release for CCCH messages using enhanced uplink in CELL FACH Qualcomm Europe Disc

- Interdigital wonders why we would need to modify the SI in order to indicate the empty buffer.
- QC clarifies that today in MAC it is not allowed to send an SI if the buffer is empty. So the trigger has to be changed.
- NSN considers that there would be some interest to limit the maximum message size.
- Noted

# MAC model

- R2-081503 Location of the MAC-is for CCCH Ericsson Disc
  - noted

R2-081770 Some open issues Nokia Corporation, Nokia Siemens Networks Disc

- Qualcomm considers that the location of MAC-is should rather be in the NodeB due to Nokias arguments.
- Huawei prefers to have the MAC-is in the CRNC
- Ericsson wonders why there is a different impact of static resources in the controlling RNC or in the NodeB
- NSN considers that the RNC is not aware of the EDCH resource usage, thus it can not allocate the resources depending on the allocation of the EDCH resources. The NodeB can flush the buffer when the EDCH resources are released, the CRNC has to wait until a timer expires.

- Ericsson wonders whether the RNC would then be a bottleneck. NSN considers that there is no principal problem, just a question of dimensioning.
- Ericsson considers that there can be some multiplexing gain if the queue is located in the network.
- NSN considers that there is a gain in the scalability if the MAC-is for CCCH is in the NodeB.
- Huawei wonders why the processing and buffer requirements would be increased significantly. NSN clarifies that the impact from CCCH may not be too large.
- It is agreed that the MAC-is for CCCH is placed in the CRNC
- It is agreed that an E-RNTI can be allocated to UEs in CELL\_PCH state, and that the UE
  can autonomously enter CELL\_FACH from CELL\_PCH and start DTCH/DCCH transmission
  with the E-DCH enhanced random access without sending a CELL UPDATE message to
  request state transition
- It is agreed that we do not allow data flow for CCCH/DTCH / DCCH mapped to FACH/E-DCH, i.e. a UE that supports E-DCH in the CELL\_FACH state has to support HS-DSCH in the CELL\_FACH state, and a NodeB that supports E-DCH in the CELL\_FACH state has to support HS-DSCH in the CELL\_FACH state.

# Applicability of E-DCH in CELL FACH state

R2-081663 Common E-DCH usage in CELL\_FACH state HUAWEI Disc

- NSN considered that in the case that the UE is already in CELL\_FACH state for DTCH and DCCH the UE is only allowed to use E-DCH if the E-RNTI is provided. Thus it is the SRNC responsibility to make sure that both NodeB, CRNC and SRNC are able to handle the E-DCH in CELL\_FACH state.
- Interdigital asks whether there is no need for the fallback to the R99 RACH for the case of e.g. congestion on the E-DCH for CELL\_FACH
- Huawei considers that the blocking probability should not be a very big problem.
- It is agreed that the UE uses the E-DCH for CCCH in all cases when the UE and the NodeB are capable of E-DCH in CELL\_FACH state
- Adhoc chair wonders whether there is an impact on the lur in order to setup the Common Transport Channel resources for the use of E-DCH
- NSN clarifies that there would anyway be a need for an update.
- ALU considers that if there is an inconsistency, then there will be an RRC connection release in the case that the SRNC does not support the HS-DSCH in the DL, and probably the capability of E-DCH in CELL\_FACH state, as well as the capability of E-DCH in CELL FACH state would be the same for both.
- Huawei considers that the scenario will only occur in the case that the case only occurs if the HS-DSCH is supported in both the CRNC and the SRNC.
- ALU considers that this case would be temporary, and thus there would be no need to be able to maintain the connection if the SRNC is not E-DCH capable for CELL\_FACH.
- Ericsson prefers the solution 2.
- Huawei prefers the solution 2.
- Have an LS to RAN3 stating that RAN2 has a preference for the scenario 2 by Huawei in R2-081966.

# Content of E-AGCH

<u>R2-081817</u> E-DCH explicit resource release with E-AGCH Qualcomm Europe Disc

- Qualcomm proposes to reserve the highest T/P value or the "INACTIVE" E-AGCH code point with the absolute grant scope of the E-AGCH set to "all HARQ processes" to indicate an E-DCH resource release
- Infineon would prefer to use the "INACTIVE" E-AGCH code point

Updated in R2-081986

<u>R2-081986</u> Content of E-AGCH for contention resolution, scheduling and explicit resource release Infineon

<sup>&</sup>lt;u>R2-081582</u> Content of E-AGCH for contention resolution, scheduling and explicit resource release Infineon Disc

- Interdigital wonders whether the network will still have sufficient control on the load if we remove the active / inactive state, e.g. in order to protect the UE from a strong interferer in a certain HARQ process.
- NSN considers that this feature for this is not necessary since the transmission is anyway started with all processes active, and the transmission will be rather short.
- It is agreed that: the Absolute Grant Scope is always set to "All HARQ process" we only use one E-RNTI for E-DCH in CELL\_FACH state the inactive value is used for the resource release

# Backoff

Back-off operation for enhanced uplink in CELL\_FACH Ericsson Disc R2-081502

- LGE comments that in Rel-99 the duration of the resource usage is only one TTI, whereas in the E-DCH the resource usage might be longer, so therefore a UE specific control would be necessary instead of a general backoff.
- Ericsson wonders whether the backoff would be determined based on the duration when the UE uses the resources.
- LGE comments that it is not based on the duration.
- Ericsson considers that there is a need for the backoff mostly for the case of collisions, and not dependend on the time of usage.
- NSN wonders whether the same backof time would be used for NACK and at explicit resource relese.
- Ericsson confirms. The intention is to have a different configuration compared to R99 RACH.
- NEC wonders whether this kind of topic should rather be discussed in RAN1 or RAN2.
- RRM is a RAN2 issue, so it would be good to have this handled in RAN2.
- Samsung wonders whether the same backoff parameter is used in the case of unsuccessfull contention resolution and contention.
- Samsung considers that the case of contention this is not related to the load situation but. So Samsung would like to consider this case differently. So this case should be similar to the case when the transmission is stopped.
- Qualcomm wonders whether there could not be a possibility to do load balancing using e.g. the E-AICH channel.
- Ericsson wonders whether this would imply that there would be the same resources on different frequencies.
- It is agreed to have E-DCH specific parameters for the backoff similar to R99 No UE specific backoff parameters Different cases are FFS

R2-081829 Load Management on E-DCH resource Release LG Electronics Inc. Disc

- NSN wonders whether this is too complex, and whether this really is worth the effort.
- LGE considers that in the case of E-DCH there is a need for a type of backoff.
- NSN considers that backing off for a certain time is not really a metric for the backoff, but the UE should come again as soon as a resource is available.
- Ericsson wonders whether this is depending on the subscriber type, or whether it is dependant on the type of data.
- LGe considers that it could depend on the service, or based on charging;
- NSN considers that the problem is not really necessary to be addressed.
- LGE wonders whether the backoff is going to be dependent on the ASC
- NSN wonders what is the use of backing off a certain UE more than another UE. Depending on the QoS it would rather stop the connection.
- So far there is no support for a UE specific mechanism.

# **Transition to CELL DCH**

#### R2-081649 Traffic Volume Measurement for enhanced Cell\_FACH\_HUAWEI Disc

It is agreed to have an RRC message that triggers the state transition to CELL\_DCH

- R2-081904 quick switch to macro diversityLG Electronics Inc. Disc
  - Qualcomm wonders whether TVM would not be the most natural message to be used, so what specific would need to be done there.
  - LGE clarifies that currently if the event 4a is triggered the UE sends the measurement result. LGE considers that also the event 1a should be evaluated to trigger the transmission of such a message.
  - ALU wonders when the measurement would be sent once that event 1a is triggered and whether for option 2 the UE is waiting that a Cell\_Update / TVM would be triggered.
  - LGE considers that this is applicable only when E-DCH is used in CELL FACH state.
  - ALU wonders whether this is done in the case when the UE is CELL\_FACH without E-DCH, or whether this is only done when an E-DCH transmission is already ongoing.
  - Noted for this meeting.

# R2-081653 State transition from enhanced CELL\_FACH to CELL\_DCH state HUAWEI Disc

- Adhoc chair wonders what is the common E-DCh E-RNTI. Huawei considers that there is a different E-RNTI used for common E-DCH.
- NSN wonders what is the explicit E-DCH release in the case of the transition.
- Huawei considers that this for security reasons.
- Huawei wonders whether the assumption is that we have to change the E-RNTI in the case that we transit to CELL\_DCH.
- Interdigital wonders whether we would have the same problem if we have an activation time.
- NSN still considers that the NodeB would have to know which UE we are moving.
- Huawei considers that today there is no possibility to use the activation time at transition from CELL\_FACH state to CELL\_DCH state.
- Qualcomm wonders whether this would imply that the NodeB has to monitor for a period of time both scrambling codes.
- NSN considers that this is the case, i.e. the UE is still receiving the common resource while detecting the dedicated resource.
- Infineon wonders what would happen if the transition to the dedicated resource fails. Does the UE have to initiate a new RACH procedure or go back to the common resource?
- Huawei prefers that the UE performs another random access.
- NSN agrees with this.
- It is agreed that;
- the typical transition from CELL\_FACH using E-DCH resources would be RB Control message with activation time now.
- We need a possibility in RAN3 to match the common resource to the dedicated resource The release of the common resource is implicitly learned by the NodeB due to the detection of the UE on the dedicated resource.
- This information will be included in the LS to RAN3.
- Add in the LS that the MAC-is is placed in the CRNC

# Inter cell Interference

R2-081619 Cell Reselection while transmitting E-DCH in CELL\_FACH Qualcomm Europe Disc

- NSN highlights that the system simulations assume that all the UL load is carried over E-DCH in CELL\_FACH, but that in reality there should be a proportion of UEs as well in CELL\_DCH state.
- NSN states that this is considering only UEs in CELL\_FACH states, and that we should consider also other scenarios
- Qualcomm considers that this is an ongoing study
- Motorola wonders whether there is an impact on the UE, and on whether there the pathloss difference measurement is a new measurement.
- Motorola wonders which UEs are supposed to be measured, an how long they would be measured.
- Qualcomm comments that this is a measurement that is performed on the neighbouring cells. The measurement envisaged is the Ec/lo, and not the pathloss.
- Interdigital agrees that there is a problem for the RoT caused by these measurements and wonders.

- Nokia considers that the fast fading in the UE is filtered out, and the period for the measurement is in the order of 200 msec, so the UE would then anyway be in CELL\_DCH.
- Qualcomm highlights that the Treselection time is in the order of seconds (at least 1 second) so the UE could not be on the best cell.
- Proposal 1) Expediate the transition to CELL\_DCH softhandover based on the measurements of the neighbouring cells in addition to buffer measurements.
- Ericsson considers that there is no need to trigger the TVM on a different criteria than the buffer load
- Huawei considers that the TVM only based on the buffer load is sufficient.
- Proposal 2)
  - Reduce the data rate on E-DCH
- Ericsson considers that the typical cells that have problems could be handled by setting a lower grant, and that thus would be adjusted on a longer term and not case by case.
- Qualcomm considers that the NodeB can not know the situation of the UE, and that it should not be restricted for all UEs.

R2-081812 E-DCH interference in CELL\_FACH Ericsson Disc

Noted

R2-081835 Path loss variations during E-DCH transmission in Cell\_FACH InterDigital Disc

- NSN considers that only the UEs that that fulfil all conditions would create a certain problem, so the issues is not worth to be addressed.
- Interdigital considers that these UEs cause a rather severe damage to the system.
- Motorola comments that the UE should be allocated a low grant in any way due to the fact that the pathloss to the current cell is considered rather high.
- Interdigital considers that this is even worst.
- Motorola considers that the power headroom would be even worse.
- Motorola states that reducing the grant could only reduce the interference only partly, since high interference is created by the DPDCH.
- NSN considers that if this is really a problem then already today we would have a problem, since today most of the networks don't move the UE to macro diversity.
- Qualcomm considers that in R99 there is not much data sent on the RACH.

# Mobility

<u>R2-081650</u> Cell Recelection for UL enhancement in Cell\_FACH HUAWEI Disc

The proposal is to release the E-DCH in the case that we have a high difference in the radio between the serving and the neighbouring cell.

# Use of HS-DPCCH

R2-081567 Efficient utilization of DL HS-resources in CELL\_FACH Qualcomm Europe Disc

- NSN considers that there should be some more analysis on the reliability e.g. when the HS-SCCH orders are lost.
- NSN considers that the analysis should be not only done based on the full buffer CELL\_FACH only UEs.
- NSN considers that in the typical case the UE would respond anyway somehow with the RLC Ack, and then the E-DCH would be established in CELL\_FACH some time later, and that's what should be compared.
- Interdigital considers that the benefit is that if the E-DCH is not established by the HS-SCCH
  orders then the first transmissions will be less efficient.
- Qualomm considers that typically at some point in time the UE would transition to CELL\_DCH which would take some 100 msecs.
- Due to the proposals several round trip times could be saved.
- Huawei wonders whether the collision and the blocking probability will not be impacted if now we start to use the E-DCH resources also for non UL Tx reasons.
- Qualcomm considers that this is an issue of dimensioning.
- Ericsson considers that this is not really need so far for this work and that the usage of the HS-DPCCH in CELL\_FACH is not that easy.
- Qualcomm considers that the main purpose is to use the HS-DPCCH.

Noted.

# CRs

- R2-081771 Introduction of Enhanced Uplink in CELL\_FACH Nokia Corporation, Nokia Siemens Networks CR 25.319
  - Interdigital wonders whether the CRC is only attached in the case that it is segmented for CCCH
  - NSN confirms that this is only done in the case that segmentation is performed.
  - Interdigital wonders what is an E-DCH buffer.
  - NSN clarifies that this should be the HARQ buffer.
  - Interdigital wonders whether the TSN should be reset as well.
  - NSN considers that everything is reset.
  - Ericsson wonders whether there is a definition for HARQ buffer, it should better say flush the HARQ ???.
  - Interdigital proposes to state reset the MAC-is.
  - CR is not agreed
- R2-081773 Introduction of Uplink Enhanced CELL\_FACH in 25.301 Nokia Corporation, Nokia Siemens Networks CR 25.301
  - It seems kind of odd to have the Enhanced Dedicated Channel (E-DCH) (FDD only) as a common channel
  - CR is not agreed
- <u>R2-081774</u> Enhanced Uplink for CELL\_FACH in 25.321 Nokia Corporation, Nokia Siemens Networks Disc
  - Especially section 11.2 needs further checking by delegates.
- R2-081775 Introduction of Enhanced Uplink in CELL\_FACH in 25.302 Nokia Corporation, Nokia Siemens Networks CR 25.302
  - Noted, i.e. CR is not agreed.
- <u>R2-081776</u> Short impact analysis on 25.331 Nokia Corporation, Nokia Siemens Networks Disc - Noted.
- R2-081769 RRC signalling for Enhanced CELL\_FACH Philips, Qualcomm Europe Disc
  - NSN proposes that the E-DCH configurations should only be added to SIB5, SIB5bis.
  - Interdigital highlights that reference TFC and power offsets and minimum TFC sets are missing
  - Ericsson considers that the semantics should be shortened and would be better included in the procedural text.
  - NSN wonders whether the relative grant channel could be removed.
  - It should be discussed whether we have to be able to configure both 2 and 10 msec TTI.
     NSN considers that this should be only either or. To be discussed in the next meeting.
  - Samsung wonders whether all information has to be configured per channel.
  - ALU considers that we should re-use more carefully the already existing names of the tabular IEs.

# Misc

R2-081568	Uplink Power Headroom definition for E-DCH in CELL_FACH Qualcomm Europe Disc
	<ul> <li>Motorola wonders whether the intention is to have a new definition in 25.215, or just a change of the performance requirement in RAN4.</li> </ul>
	- Qualcomm wants to change only the performance requirements, and possibly allow the
	measurement to be based on the last transmitted preamble.
	<ul> <li>NSN considers that there is some need for checking these definitions</li> </ul>
	<ul> <li>Interdigital agrees, and in addition there may be a need to define whether a TFC s in supported state or not.</li> </ul>
	<ul> <li>It is up to interested companies to raise the issue in RAN4.</li> </ul>
<u>R2-081640</u>	

# 6.4.4 Enhanced UE DRX

(RAN2 WI, RANimp-DRX, 50%, June 08)

- R2-081860 Considerations on Enabling DRX in CELL\_FACH Qualcomm Europe Disc
  - Nokia considers that we should keep the possibility open.
    - Qualcomm considers that the case is rather a typical case de to the behaviour of TCP
  - Ericsson considers that there are error cases that have to be handoed, e.g. when the UE
    misses the downlink transmission.
  - Qualcomm agres that some error scenarios have to be handled.
  - Interdigital considers that this is linked to HS-SCCH orders. In that case this may help the error case as well.

R2-081563 Details of the CELL\_FACH DRX scheme Nokia Corporation, Nokia Siemens NetworksDisc - AdHoc chair asks the question on what is the usage of the linkage between E-RNTI and H-RNTI.

- Nokia explains that if we indicate in the DL transmission that the E-RNTI is the same as the H-RNTI then the NodeB could deduce that this is a Rel-8 capable UE supporting the DRX operation
- Further question whether there is already a conclusion that a UE supporting DRX operation also has to support the E-DCH in CELL\_FACH state.
- At this time there is no decision on that.
- We need to decide whether the UE DRX is linked to the support of E-DCH in CELL\_FACH state or whether it is an independent feature
- Qualcomm wonders whether having the parameters cell specific would allow to have this data sent on BCCH
- Nokia would prefer to provide this data over CCCH / DCCH because the SRNC is always aware of the DRX configuration that the UE has.
- Qualcomm wonders whether there has been some analysis done to compare the usage of resources.
- RAN3 is impacted due to: Rx burst duration, cycle length, inactivity timer are cell specific (Cell setup) UE support of UE-DRX + UE support of E-DCH (possibly linked) E-RNTI if the E-RNTI can not be mandated to be the same as the H-RNTI, to be checked
- It is agreed that: the UE shall move to continuous reception when it receives the AICH/E-AICH Value ranges are Rx burst 10, 20, 30 and 40 ms and cycle values 60, 80, 100, 120, 140 and 160 ms. The inactivity timer could be multiple of the cycle length or some absolute value like 100, 200, 300, 400, 500, 600, 700 or 800 ms. the Rx burst duration, cycle length, inactivity timer are cell specific SFN = H-RNTI mod DRX cycle + n \* DRX cycle

R2-081562 Introduction of CELL FACH DRX Nokia Corporation, Nokia Siemens Networks CR 25.308

- Ericsson wonders whether for the case of a UE initiated traffic that triggers a response from the network (e.g. TCP ack) the timer has to be set long enough such that the UE should still be in the active reception. Else the TCP ack would be delayed until the next Rx burst.
- Nokia confirms, and this should be done by having a good timer setting.
- Qualcomm agrees, and assumes that the typical round trip time should be around 100
  msec, and thus the typical timer should be a multiple of the round trip time.
- Qualcomm considers that the value range of 800 msec should be enough for most of the RTTs in internet today, but only for the case that the Rx period is extended by the reception of DL data.
- Ericsson wonders whether this would be suitable as well for some DL UDP streaming.
- The CR (REL-8) is technically endorsed.

# 6.4.5 Enhanced CELL\_FACH state in 1.28 Mcps TDD

(RAN2 WI, RANimp-EnhState1.28TDD, 40%, Sep. 08)

# Physical layer feedback

noted

- <u>R2-081613</u> On Physical Layer Feedback for Enhanced DLZTE Disc
- -
- <u>R2-081756</u> Discussion on Synchronization and HARQ Mechanism in Enhanced CELL\_FACH State for LCR TDD CATT Disc
  - AdHoc chair asks whether the re-synchronization is always done or only in the case that new data arrives
  - CATT clarifies that the synchronization is only done when new data arrives.
  - ZTE believes that both solutions can solve the problem, in the ZTE solution it is up to the NodeB to decide, and CATT it is a UE independent resolution. CATT has some concern on the timing relations, i.e. the HS-SICH comes too short after the HS-SCCH, thus there is no time for doing the re-synchronization
  - CATT considers that he HS-SCCH is sent during 4 subframes, i.e. 20 msec, and thus the re-synchronization can be done in good conditions, but in bad conditions it may not be done. But in that case the only problem would be that there is an additional retransmission by the NodeB. The maximum number of retransmissions could be limited
  - TDTECH considers that the ZTE proposal is the preferred solution. In RAN1 there are two
    options for the feedback signal discussed in RAN1.
  - CATT considers that the two issues are independent. CATT considers that there is no
    problem on the reliability.
  - CATT considers that the chances for success can be increased by proper setting of timer.
  - CATT wonders whether the ZTE proposal will introduce a systematical delay in the reception of the data since the reception will always be delayed due to the synchronization. So there is no optimization of the delay and the resource usage will be increased.
  - ZTE considers that there is some disadvantage on the delay, but the impact is not too high. It is more important to make sure that the synchronization is guaranteed.
  - CATT clarifies that there will be no transmission when the UE is not synchronized.
  - CATT wonders whether ZTE has some requirements that the UE has to support the enhanced uplink channel to work, but how if the UE does not support
  - ZTE considers that there can be other alternatives for the E-RUCCH
  - TDTECH wonders whether this is a general procedure for both enhanced UL and DL or only DL. Because in the case that UL is considered there would be a good chance that the timer would anyway be interrupted by the UL transmission. TDTech acknowledges that the ZTE has a proposal that is reliable, and that in practice the time delay will not occur frequently.

# Selection of frequency

R2-081614 Carrier Access Control in Enhanced CELL FACHZTE Disc

- See R2-081708 for discussion.

- R2-081708 Further clarifications upon per-carrier admission control in 1.28Mcps TDD HSPA+ scope TD Tech Ltd. Disc
  - ZTE considers that there will only be the RRC Connection request transmitted by idle mode UEs, and the possible gains are very small. Furthermore it can be ensured that on the primary frequency sufficient resource is available for the RRC Connection Request.
  - TDTECH considers that if the access is limited to the primary frequency could be polluted by interference.
  - AdHoc chair wonders what is the impact on battery lifetime if the UE would as well have to consider the secondary frequency.
  - TdTech does not see an issue on the battery lifetime.
  - ZTE considers that the main issue is that the paging may be missed.
  - TDTech considers that the UE would select the frequency based on the system information block.
  - CATT considers that even if the PICH interval is 160 msec the RRC Connection Setup message will not be completed.
  - TDTech that in the case of enhanced CELL\_FACH the paging can be done on the HS-DSCH, and thus the TTI will not be 5msec any more but smaller.
  - CATT is also concerned that the complexity and the power consumption in idle mode will be increased. And a gain can only be achieved if there is a problem with the primary frequency. So there is not really a problem to resolve.

- TdTech considers that there could be some extreme situations where the uplink could be interfered.
- It is agreed to have a working assumption that the UE performs the initial access on the primary frequency
- R2-081710 Work frequency select in Enhanced CELL\_FACH for 1.28mcps TDD TD Tech Ltd. Disc - Noted

# E-DCH access

# R2-081615 Discussion on E-RACH Procedure ZTE Disc

- Discussion with R2-081706.
- CATT wonders whether in procedure 1 in step 8/9 the common E-RNTI is used.
- ZTE considers that the common E-RNTI will be used.
- CATT consider that since there are many UEs sharing a common E-RNTI will cause collision between the different UEs. ZTE considers that the timing for the E-AGCH can be UE specifc due to different timing.
- CATT wonders whether this implies that there will be one specific timing for each UE using the E-RNTI.
- TdTECH considers that in idle mode there can be no possibility tat specific UEs are related to a specific E-AGCH.
- R2-081706 Procedural analysis of Enhanced Uplink for CELL\_FACH state TD Tech Ltd. Disc
  - ZTE considers that the two solutions have a performance difference due to the delay. ZTE considers that the delay in the FPACH solution the scheduler has anyway to schedule the UE very conservatively, since on SI information is available.
  - TDTECH considers that the E-DCH should have dedicated resource for the transmission.
     TdTECH does not share the view of ZTE that the resources should be mixed.
  - ZTE is also concerned about the number of SYNC\_UL codes which is limited to 8, and which is already split into two sets. Splitting it into more sets the probability of collision may become too big.
  - TDTech considers that in the case that there is no use of the FPACH is used then there is no gain. And splitting the resources will imply that there is much less load for the normal random access.
  - TDTech considers that the enhanced CELL\_FAHC could be done mostly on the secondary frequency. So the resources would be anyway increased.
  - ZTE considers that there has to be traditional E-DCH on the primary frequency.
- R2-081707 Resource allocation method analysis of Enhanced Uplink for CELL\_FACH state TD Tech Ltd. Disc
  - Noted.

# Misc

R2-081705 Disc

- 05 Discussion on reducing downlink signalling overhead in eFACH state TD Tech Ltd. Disc
  - CATT is concerned about the probability that the HS-SCCH is missed the complete transmission will be wasted.
  - TdTECH considers that the code rate of HS-SCCH is rather low. Thus the power of the HS-SCCH can be set such that a sufficient reliability can be achieved.
  - CATT considers that the cost will be rather high if the power for the HS-SCCH will be increased.
  - TDTECH believes that comparing the loss and gains and considering rather small packets, and comparing the HS-SCCH and the data packet the signalling overhead will use a significant portion of the power, so reducing the signalling overhead gives a big improvement.
  - TDTECH considers that the similar scheme is used for the HSUPA.
- The analysis on the gains and the reliability should be continued in RAN1.
- \*R2-081709 DRX aspect in enhanced CELL\_FACH for 1.28Mcps TDD TD Tech Ltd. Disc
  - ZTE wonders whether this implies that the NodeB shall associate an H-RNTI with an E-RNTI.

- ZTE wonders whether is means that the uplink transmission would be restricted due to the downlink DRX? Also the second solution does not explain how the UE would come back to reception
- ZTE considers that there is no context in the NodeB for UEs in CELL\_FACH. So a solution should be would that does not require the NodeB to maintain a context.
- Noted

# 6.4.6 Mobility between UMTS and LTE

Contributions related to UMTS Stage-3 aspects should be submitted here. Stage-2 aspects should be submitted under 4.10.

R2-081560 Inter-RAT reselection from UTMS to LTE Nokia Corporation, Nokia Siemens NetworksCR 25.304

- Noted, please review and provide comments offline to NSN / Nokia
- R2-081561 Inter-RAT mobility from UTMS to LTE Nokia Corporation, Nokia Siemens Networks CR 25.331
  - Noted, please review and provide comments offline to NSN / Nokia
  - Ericsson wonders whether intention that the priority mechanism is applied for UMTS to GERAN / eUTRAN and also to other UTRAN frequencies. Furthermore should this be the behaviour for all Rel-8 UEs.
  - NSNs understanding is that all UE Rel-8 UEs should support this. For which RATs and UTRAN frequencies this should apply shuld be checkd.
  - AdHoc chair asks whether the dedicated priorities also apply to UTRAN?Ericsson considers that it is not yet clear whether this should apply to the inter frequency UTRAN carriers

# 6.4.7 HSPA VoIP to WCDMA/GSM CS continuity

(new RAN2 WI, RANimp-HSPAVoIP, 0%, Sep. 08)

R2-081888 HSPA VoIP to WCDMA/GSM CS continuityQualcomm Europe Disc

- Huawei asks whether the WI excludes the handover from CS to VoIP.
- Qualcomm states that the WI does not explicitely exclude the other direction.
- ALU wonders what is the interest in splitting the procedure in two
- Qualcomm considers that setting up the call can take some time. So it is better to do the delay intensive time first. So that the VoIP cal would be only established in the latest momet to benefit from the VoIP advantages as long as possible.
- NSN considers that sniffing inside the Uplink direct transfer is a layer violation that is not really nice. NSN wonders whether QC have considered to adopt single VCC, or at least align it.
- Qualcomm agrees that this is a layer violation, and the solution for LTE will probably be very different.
- AdHoc chair wonders why the first part stops already at 10, and not the RB Setup is delayed.
- Huawei comments that the switch between PS to CS takes place already in step 14
- Huawei considers that the RB setup should be done as soon as possible after step 15.
- Huwaei is concerned that buffering the CC: Setup may impact the timer setting.
- Huawei considers that there is no need to inform the network on whether the call is setup in VCC or not. It is sufficient that the UE ignores the paging type 2
- T-mobile considers that there is also some implication due to the VCC application.
- Qualcomm considers that there is no problem to setup the CS call in the VoIP capable cell. The proposal here is only trying to show an optimized approach.
- Huawei agrees that the current proposal can work, but we should take into account that the gap should be at most 300 msec.
- NSN has some concern that the AS is aware that the VoIP call is anchored in the VCC domain.
- Tmobile considers that this solution requires an VCC application. Potentially for Rel-8 the Rel-8 solution in combination with LTE does not require a VCC application.
- Huawei considers that even the Rel-8 solution would require a VCC application.
- Huawei considers that even for the single radio VCC there is a need for a paging type 2 procedure.

- ALU considers that if we use single radio CS there is no need for any type of change to RRC.
- Qualcomm considers that the single radio VCC does not apply to the WCDMA to CS handover.
- Tmobile highlights that GERAN has concluded that the UE does not have the information on whether the call is anchored in IMS or not.
- Tmobile wonders with proposal 4 whether a UE would initiate a VoIP call on a Rel-7 network that does not indicate this capability. This is a problem.

# 6.4.8 HS-DSCH Serving Cell Change Enhancements

(new RAN2 WI, RANimp-IISDSCII, 0%, Dec. 08)

# R2-081500 HS-PDSCH Serving Cell Change Enhancements Ericsson Disc

- Interdigital asks whether the common H-RNTI could not be sent in the ASU message rather than being read on the BCCH in order to account for the problem of the number of H-RNTIs reserved.
- Ericsson considers only to use a dedicated H-RNTI
- Nokia is not happy about having layer 1 changes, i.e. proposal 3. The concern is to receive two base stations in the UE at the same time.
- Ericsson suggests that RAN1 would study the feasibility and the impacts.
- Qualcomm considers that the descrambling of the HS-SCCH on a different cell is not significant.
- Nokia considers that if there is another solution then this should be preferred.
- R2-081713 HS-DSCH Serving Cell Change Enhancements SamsungDisc
  - Ericsson is asking what is the difference with pre-allocation and reservation of the resource.
  - Samsung is concerned about how many resources are pre-reserved, and therefore the event 1a\* is introduced.
  - NSN wonders that we are adding more steps to the procedure.
  - Samsung considers that we reduce the reservation
  - Samsung also considers that the UE should only monitor the first HS-SCCH once that 1d has been reported.
  - Qualcomm considers that at the moment when the problem occurs then there is not time for reporting a different measurement.
  - Samsung considers that the call drop will not happen in all cell, and that the use of this feature depends on the network. So the 1a\* would be an optional feature.
  - AdHoc chair asks whether the UE monitors only the primary of the source cell.
  - Samsung clarifies that the idea is that the UE only monitors the primary HS-SCCH of the target cell.
  - Qualcomm wonders whether the switching is based on the transmission of u-plane data in the target cell. What happens if there is no u-plane data to transmit.
  - Samsung supposes that typically there should be data to transmit since this would only be applied for real-time data.
  - Qualcomm considers that even AMR has a SID periodi where nothing is transmitted for 160 msecs.

R2-081843

- Analysis of Voice Interruption Delay and Comparison of HS-DSCH Serving Cell Change procedures Qualcomm Europe Disc
- Updated in
- <u>R2-081965</u> Analysis of Voice Interruption Delay and Comparison of HS-DSCH Serving Cell Change proceduresQualcomm Europe Disc
  - Qualcomm considers that in terms of transmit power the E-RGCH based is better, but the code re-usage is worse.
  - AdHoc chairs whether Qualcomm excludes the transmission of the complete message on RRC to the RNC.
  - Qualcomm considers that the RRC message should still be used.
  - NSN wonders whether this implies that all base stations would have to be updated, and whether all base stations are aware. And it would imply double resource utilisation.
  - Question whether there is a difference between the HS-SCCH order or the normal HS-SCCH.

- Ericsson considers that there is no big difference between a normal HS-SCCH and a HS-SCCH order.
- Huawei wonders whether it would as well be possible to wait for new data instead of using an HS-SCCH order.
- AdHoc chair wonders whether there are more than one preparation, one for becoming serving cell with the new scrambling code, and one for staying non-serving cell with the new scrambling code.
- Qualcomm considers that in the RL Reconfiguration commit it could be indicated whether the cell becomes serving cell or not.
- NSN wonders whether this would imply that there would always be a pending reconfiguration in the NodeB

# R2-081901 HS-DSCH Serving Cell Change Nokia Corporation, Nokia Siemens Networks Disc

- Huawei wonders whether the setting of the activation time would have to be very
- conservative in order to make sure that the measurement event is received. NSN considers that there are different network strategies.
- Qualcomm considers that if the CFN is set conservatively it has to account for the maximum retransmissions, RLC delay and the reception of the "stay where you are" message, Qualcomm considers that the delay would be rather high in the order of a few voice frames. On the other hand if the UE is aggressive the UE would potentially be on a cell that is not transmitting vet.
- NSN considers that the main problem is to be able to maintain the radio link, and not to prevent the loss of some voice frames.
- Qualcomm considers that the average case is not the problem, but that the average number of cells with problems are localized in the same area, so for some areas the average may be rather high.
- Ericsson considers that it is important to maintain the network control, so the only viable option would be to have a rather conservative setting of the CFN value to be able to send the "stay where you are message".
- Nokia considers that the configuration to enable the enhanced method or the old one would be done in the active set update.
- Qualcomm wonders whether it is realistic to send another message form the source NodeB when the radio link is degrading.
- NSN considers that it is the same situation in all cases that if the handover is blocked. Then if the stay where you are message is not received in the UE after some time the UE should switch back to the old cell again.
- Samsung wonders whether there is not a need for a pre-configuration in the target cell.
- NSN considers that the preconfiguration is done in the active set update as well.
- Samsung wonders whether the measurement report is the event 1d.
- NSN thinks that possibly periodic reporting could be used as well.
- Qualcomm wonders how this could be done with a periodic report, since the UE would need to know whether it has to do the handover.
- TIM is asking whether this solution is also working in the case of non-soft handover.
- NSN considers that if the active set update is used then this could be only a cell in the target cell
- Ericsson wonders when the source cell can release the source cell.
- NSN considers that this would be based on an indication of the RNC.
- TIM considers that it would be important that the scheme could also be applied when the RNC and the NodeB is combined.
- NSN considers that this would be the same thing if you had an lur.

#### 6.4.9 Support of UTRA HNB

Note that WI-sheet needs to be reviewed by RAN2

(new RAN2 WI (agreed in principle), HNB, 0%, Sep. 08)

# WID review:

R2-081836 Comments on HNB WID RP-080159 Qualcomm Europe Disc

Huawei wonders for the second part the proposal "Cell selection/reselection from LTE Home NB to GERAN" whether this should be included in the RAN WI, and why the "support of

semi-open access operation (or signalling association) where a UE can exchange signalling and limited data on non suitable UTRA Home NB" should not be included

- T-mobiles understanding is that semi-open access means that users that are not explicitly declared to be part of the CSG group can access to the home NodeB to have service based on e.g. radio reasons.
- Samsung considered that semi-open access should imply a limited service.
- Ericsson considers that we should only focus on the first group, and have a priority order for the first group as well.
- NSN wonders that e.g. the home node B to home NodeB handover should not be a high priority.
- Huawei considers that this is already out of the scope of the WI of RAN. We should focus on the reduction of battery power.
- Ericsson wonders whether there is related WI for the CN being proposed.

<u>R2-081657</u> Proposed WID on support of UTRA HNB HUAWEI Disc - Revised in R2-081972

R2-081972 Revised WID o

- Revised WID on support of UTRA HNB RAN2
  - Agreed. Will be fed back to RAN in RAN2 chairman's report and by rapporteur.

# Way forward:

R2-081658 Way forward for UTRA hNB Rel-8HUAWEI Disc

- Ericsson wonders whether the possibility to have an UE autonomeous search would be restricted to the HNodeB
- For the Cell Reselection based on NCL from hNB Ericsson wonders how the HNB would receive the neighbouring cell list.
- Huawei considers that how this would be provided does not need to be standardised.
- Huawei considers that e.g. SA5 could help, or the hNB could learn the neighbours due to UE measurements.
- Ericsson wonders why the UE behaviour would be different if the UE is on a HNB compared to switching on the UE.
- Huawei agrees that it should be restricted to HNodeB
- Huawei proposes not to use an access stratum procedure for the access control
- It is agreed that:
  - We have an autonomous UE search for HNodeBs not based on the NCL
- <u>R2-081659</u> Idle mode mobility for legacy UEs HUAWEI Disc
  - Noted

R2-081820 Cell Selection/Reselection in Deployments with Home NodeBs Qualcomm Europe Disc

- Samsung wonders how the Ue based learning would relate to the priorize HNB section.
  - QC considers that this may be mostly the UE implementation.
  - NSN wonders whether all scenarios should be supported, especially the open access, and the shared carrier. NSN would prefer to priorize the dedicated carrier scenario
- Samsung wonders whether this would penalize operators with only one carrier.
- T-mobile thinks that both scenarios have the same priority.
- NSN wonder whether we can assume that we can anticipate that all HNBs are in one carrier.
- TIM thinks that if we don't see the gains that we can have then it's difficult to agree on this.
- Noted

R2-081660 UE idle mode mobility for HNBHUAWEI Disc

- Samsung asks what is the "user defined identity string". This should not be the CSG, but the HNB Id. Samsung comments that at the moment it is not clear whether from SA1 there should be a difference between CSG Id and HNB ID.
- T-mobile thinks that there should be a readable identifier but this should be checked based on nthe LTE progress.

It is agreed that:

The UE shall have a list of hNB cells where it is allowed, a so called "whitelist". This list contains at least the CSG IDs.

<u>R2-081656</u> Discussion on UTRA hNB WI HUAWEI Disc onclusion: withdrawn.

# 6.4.10 WIs / SIs under the reasonability of other working groups

# 64QAM for 1.28 Mcps TDD HSDPA

(RAN1 WI, RANimp-64Qam1.28TDD, 65%, June 08)

(RATT W), RATTING-OrganitizorDD, 0070, Suite 00)
R2-081683 Early Implementation of PPACNTT DoCoMo CR 25.331 Revised in R2-081992
R2-081992 Early Implementation of PPACNTT DoCoMo CR 25.331
<ul> <li>Agreements: There should be some comments on the possible early implementation on the coversheet. The possibility to implement this earlier than Rel-7 should be investigated, i.e. how to skip earlier information. NTT DCM considers that the earliest release that could be targeted would be Rel-5. The fact that the ASN.1 is closed should be highlighted to the plenary.</li> <li>The CR (REL-8) is technically endorsed.</li> </ul>
<ul> <li>R2-081899 Dual Cell HSDPA Operation Consideration HUAWEI Disc</li> <li>Ericsson wonders whether there is an assumption that the frequency have to be adjacent</li> <li>Huawei considers that they could be not adjacent.</li> <li>Samsung considers that the scenarios should be studied in RAN1.</li> <li>Ericsson considers that the scheduling should be discussed, especially for the case of the independent scheduling since transmission over different streams for RLC should be considered.</li> <li>Ericsson wonders whether there is a network vendor that could have problems in the hardware.</li> </ul>
R2-081915 Some suggestions on scheduling in CPC for 1 28Mcps TDD TD Tech Ltd. Disc - Noted.
R2-081616         Introduction of 64 QAM in RAN2 LCR TDD specifications         ZTE         Disc         REL-864QAM           for 1.28 Mcps TDD HSDPA         -         Updated in R2-081953         -
R2-081953 Introduction of 64 QAM in RAN2 LCR TDD specifications ZTE Disc REL- - Noted.
<ul> <li>R2-081617 Introduction of 64QAM in RRC LCR TDD specification ZTE, RITT, CATT, TD-TECH, Spreadtrum Communications, Potevio CR 25.331 REL-864QAM for 1.28 Mcps TDD HSDPA</li> <li>Ericsson comments that the Rel-7 extension container has been used. A Rel-8 extension container should be used and the numbering of the Notes should be updated, the Note 7 void should be kept.</li> <li>The AdHoc chair states that Potevio should not be included as a source;</li> <li>Ericsson comments that the indentation in the tabular should be corrected.</li> </ul>
<ul> <li>With the above changes the CR (REL-8) is technically endorsed.</li> </ul>
R2-081618 Introduction of 64QAM in MAC LCR TDD specification ZTE, RITT, CATT, TD-TECH,

Spreadtrum Communications, Potevio CR 25.321 REL-864QAM for 1.28 Mcps TDD HSDPA - Updated in R2-081954

- R2-081954 Introduction of 64QAM in MAC LCR TDD specification ZTE, RITT, CATT, TD-TECH, Spreadtrum Communications, Potevio CR 25.321 REL-864QAM for 1.28 Mcps TDD HSDPA
  - Potevio should not be included as a source.

- Qualcomm wonders why the category is in brackets
- ZTE comments that there is no special meaning
- The styles should be corrected.
- With the above changes the CR (REL-8) is technically endorsed.
- Introduction of 64QAM in UE LCR TDD capability specification ZTE, RITT, CATT, TD-TECH, R2-081620 Spreadtrum Communications, Potevio CR 25.306 REL-864QAM for 1.28 Mcps TDD **HSDPA** 
  - The styles should be corrected.
  - -With the above changes the CR (REL-8) is technically endorsed.

#### 6.4.11 TEI8

R2-081507 HS-SCCH orders for HS-SCCH-less operation Ericsson CR 25.308 REL-8TEI8 (better RANimp-CPC)

- The CR (REL-8) is technically endorsed. The agreement depends on the RAN1 agreement of the linked CRs.
- HS-SCCH orders for HS-SCCH-less operation Ericsson CR 25.321 REL-8TEI8 (better R2-081508 RANimp-CPC)
  - The CR (REL-8) is technically endorsed. The agreement depends on the RAN1 agreement of the linked CRs.

# \*R2-081779 EUL coverage enhancements Ericsson Disc

- Qualcomm does not consider the smaller transport block sizes to be interesting. For the autonomeous retransmissions the gains should be provided.
- Nokia considers that the autonomous retransmissions could be interesting, but some more analysis should be done.
- Noted

# R2-081816 Network Sharing Breaks SIB18 Qualcomm Europe CR 25.331 REL-8TEI8

- Ericsson wonders whether GERAN would support the shared network scenario. In this cas the extension would not needed for GERN cells. Also there could be eUTRAN cells to be added in Rel-8.
- It should be checked whether operators really need this type of shared network + ePLMN Noted

### 6.5 Outgoing LS and email discussions for UTRA/UTRAN

# **Outgoing LSs:**

R2-081934	LS on MAC-d flow definition for MAC-ehs (to:RAN3; cc: -; contact: Alcatel-Lucent) RAN2
l	- The LS is agreed
<u>R2-081933</u>	Reply LS to R2-081440 = R3-080434 on "Changes to the format of TMGI" Huawei - Contents agreed. Revised in R2-081971 to provide final LS.
<u>R2-081971</u>	Reply LS to R3-080434 = R2-081440 on "Changes to the format of TMGI" (to: RAN3; cc: CT4; contact: Huawei) RAN2
[	- Agreed
<u>R2-081952</u>	Reply LS on CS Voice over HSPA, RAN2 Qualcomm - Contents agreed. Revised in 1970 to provide final LS.
<u>R2-081970</u>	Reply LS to S4-080126 = R2-080671 on CS Voice over HSPA (to: SA4; cc: -; contact: Qualcomm) RAN2
l	- Agreed
R2-081966	LS on Progress on E-DCH in CELL FACH state Huawei

#### LS on Progress on E-DCH in CELL FACH state R2-081966

The source should be "Huawei", and there should be "DRAFT" in front of the title.

Inter-frequency measurements and cell reselection Qualcomm Europe Disc R2-081844 Noted

- We should not add any attachements, and just state the preferences
- lur mobility case should be explained a little bit
- Last paragraph add from the serving RNC to the NodeB
- Response to should not be included

Revised in R2-081968

R2-081968 LS on Progress on E-DCH in CELL\_FACH state Huawei

Revised in R2-081969 to provide final LS.

- <u>R2-081969</u> LS on RAN2 status on enhanced uplink for CELL\_FACH state in FDD (to: RAN3; cc: RAN1; contact: Huawei) RAN2
  - Agreed

R2-081973 RAN2 status on UE DRX Ericsson

Revised in R2-081974 to provide final LS.

R2-081974 LS on RAN2 status on UE DRX (to: RAN3; cc: -; contact: Ericsson) RAN2

- Agreed

# Planned email discussions:

Ericsson will trigger an email discussion on the open issues listed in the discussion part of <u>R2-081876</u> "RLC PDU size selection for Improved L2"; see <u>61b\_UTRAN</u> (Annex H). We expect a list of open issues and aspects to be taken into account.

### 7 Left-overs

Handled on Friday in the plenary.

#### 7.1 LTE Control Plane session

R2-082008: Minutes of RAN2#61bis LTE CP

- Revision of R2-082007
- NSN wonders whether a default configuration applies to SRB2? Richard explains that the discussion was for SRB0/SRB1, and although it could maybe be applied to SRB2 it was not really discussed. Could be discussed further.
- W.r.t. SIBreading at handover (SIB2), does it mean we need to read SIB2 before resuming the user plane ? Assumption is still that all essential information is in handover command. So the broadcast reading should only be non-time critical.
- For the items for which no Tdoc was allocated (3 or 4 things), the RRC rapporteur will include them.
- => Approved
- Can the PDCP configuration in RCR after RRC Connection Re-establishment be full R2-081684: configuration (meaning UE deletes completely existing configuration and replaces with a new one) or must it always be delta signalling. Need discussion with UP.
  - => Agree that PDCP reconfigurations at re-establishment will be aligned to the reconfiguration possibilities at handover (i.e. no complete overwrite) except for security algorithm change?
- R2-081744: Etc on AS/NAS interaction. Choice between option 2 and option 4 (6 and 8 supporting companies respectively after Thursday discussion). Get view from group again.
  - Option 2: Complete independent; no piggybacking
  - Option 4: Piggypacking in DL-only; eNB rejects if AS fails (nothing to UE)
  - ALU thinks there is a CT1 impact and they should agree with any decision we make. Still it would be good to get a RAN2 decision.
  - QC thinks that if we go for option 2, the main impact is on MME/NAS.
  - NSN has slight preference for option 4.
  - ALU hopes that if we would go for option 4, we could restrict the piggybacking to a limited number of cases (ALU would like to avoid ATTACH case). ALU would like to limit it to bearer establishment only.
  - Ericsson would prefer the same handling for all cases.
  - Further offline discussion did not result in consensus. Since there is considerable impact on CT1 as well, an LS will be sent to CT1 to ask them for their opinion.
  - => LS is prepared in R2-082045
- On paging subframe patterns for TDD. See proposal from offline discussion in R2-082005 R2-081995: => Table2 from R2-082005 is agreed. Can be included in 36.304 by Nokia in the same CR as the FDD paging pattern (R2-082006)
- CDMA2000 System time R2-081892:
  - => No consensus; can come back at the next meeting.
- R2-082004: Introduction of measurement bandwidth in RRC specification
  - Default value for IE in SIB3 will tag measurement bandwidth definition with FFS.
  - Mandatory/Optional inclusion in measurement object (is also intra-freq included) FFS
  - => Agreed with 2 FFS's

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- R2-082026: Minutes of RAN2#61bis LTE UP => Approved
- R2-081997: DRX related corrections in MAC

- Nokia wonders whether with this proposal the short DRX cycle always starts after the MAC CE is received ? We might need to clarify how the offsets work (should continue with same offset). Can be clarified separately.
- LG wonders whether all conditions for the start of the short DRX cycle Timer should be listed in the definitions ? QC proposed to improve at the next meeting.
- => Text is agreed
- R2-082023: RLC Retransmit Count
  - => Motorola will provide input paper for next meeting (formulation turned out to be quite complex)
- R2-082022: PDCP minor changes
  - LG indicated there might be some errors in the colouring.
  - => Email endorsement: comments up to Tuesday; Final version Wednesday. Final version in R2-082043
- R2-082019: PDCP behaviour after handover
  - Reference to what security context is used should be added.
  - Infineon indicates that further updates to the description could be usefull.
  - => Email endorsement: comments up to Tuesday; Final version Wednesday. Final version in R2-082044

Offline discussion on RA-RNTI determination

- Proposal after offline discussion:
  - After offline discussions, majority seems to prefer to have 10 TTI boundary for TDD as well (i.e. 1 frame).
  - However companies would maybe like flexible start of window for TDD (FFS)
  - We could possibly agree on numbering the configured PRACH's only.
- => Agree that the window is <= 10 consequetive subframes for FDD and TDD.
- QC wonders what the benefit is to link it to the PRACH configuration. Motorola replies that we would typically use less than 50 RNTI's. E.g. probably only 1 in FDD.
- Ericsson thinks that anyway, RAN1 might limit the max number of PRACH per frame. QC would prefer to use the 50 RNTI's rather than complexity.
- So two options:
  - a) Use fixed numbers which assume max PRACH configuration (e.g. 10\*9)
- b) Use numbering only for the actual configured PRACH configuration (actual nr)
- => Will take a decision between a) and b) at the next meeting based on response from RAN1.

# 8 Liaison and output to other groups

Handled on Friday in the plenary.

# To: GERAN; Cc: RAN4

R2-081926: DRAFT Reply to LS on priority for GERAN/UTRAN only UE, and default conf

- Open question is whether a default configuration applies to SRB2 (probably it should)
- Ericsson thinks we did not agree to not have default configurations for anything else.
- Samsung thinks in the CP session the common understanding was that no other stored or default configurations for DRB's are expected. The question from GERAN is probably about predefined configurations.
- CP session agreed to only have default configurations for SRB's and some MIMO.
- => LS is agreed in R2-082031

# To: GERAN

R2-081927: DRAFT Reply LS on equal priority RAT's => Withdrawn

# To: GERAN; Cc: SA1, SA2, RAN3, RAN4, RAN1

R2-081928: DRAFT Reply LS on CSG related mobility => Withdrawn: should be sent from next meeting

## To: SA; Cc: SA WG2, RAN WG1, RAN WG2, RAN WG3, SA WG1, GERAN WG2

R2-081929: DRAFT ETWS Response LS for 1404/1407 => Withdrawn

To: CT1; Cc: RAN3, CT4

R2-081930: DRAFT Session Management optimisation

- ALU thinks that it would be better to reflect the current status: no concatenation irrespective of piggybacking or not.
- => Rephrase to say that currently no concatenation is supported.
- => Agreed with this change in R2-082032.

## To: RAN3; Cc: SA2, GERAN2

- R2-081931: DRAFT Response on subscriber type
  - TIM thinks that some of the questions from GERAN are also answered in this LS.
  - => Defer to next meeting, and to make one response to both the RAN3 and GERAN guestions. Can have an email discussion to draft the reponse.

# To: RAN3;

R2-081955: DRAFT Response LS on RLF recovery information over X2 => Agreed in R2-082033

To: RAN3; Cc: SA2

R2-081956: DRAFT Response LS on Cell ID awareness (reading of BCCH after handover) => Agreed in R2-082034

## To: SA3

- R2-081958: DRAFT Reponse LS on authentication at re-establishment
  - It was commented that at re-establishment the UE will always know the GCI. So it could be used in the MAC-I at re-establishment. ALU clarified that in their understanding, SA3 would like to include this identity in the normal KeNB\* derivation. Then at normal handover, the UE will not now the GCI. Will update the LS to clarify the two cases (only in re-establishment or at every KeNB\* derivation)
  - => Will see update in R2-082035
- R2-082035: DRAFT Reponse LS on authentication at re-establishment => Agreed in R2-082038
- To: SA3; Cc: RAN3, CT1

R2-081959: DRAFT Response LS on outstanding message (SMC at IDLE->ACTIVE)

- Ericsson thinks that solution 2 is still valid. Nobody supported option 2, so we should limit the LS to options 1 & 3.
- => Agreed with this change in R2-082036

# To: SA3

- R2-081960: DRAFT Response LS on Security aspects of inter-RAT handover
  - We should highlight implications of the random nr, wonder whether it is really needed, and if it is needed the MME could e.g. send the random nr. to the target eNB. (GJLIST open issue HANDOVER to E-UTRAN)
  - => Will see an update R2-082037
- R2-082037: DRAFT Response LS on Security aspects of inter-RAT handover
  - => Agreed in R2-082046

# To: RAN4, RAN1

- R2-081987: LS on L1 issues like neighbour cell information and antenna configuration
  - Issue 3: Motorola thinks we have agreed to put neighbouring cell information in 3. But then we questions it again.
  - => Agreed in R2-082039

# To: SA2

- R2-081990: Complexity with multiple AMBR
  - IPW thinks LS's should be factual. The current LS seems to biased. Orange agrees with this. The LS should be a bit moderated.

- Chairman proposes to list the "considerable UE complexity" but not state any further RAN2 opinion.
- IPW thinks it is ok to indicate "complexity" but since we have not performed more analysis we should not indicate "considerable complexity". QC agrees with this.
- "Therefore RAN2 sees considerable additional UE complexity if per PDN AMBR would need to be enforced." IPW is not happy about the "considerable".
- Vdf would like to have some restriction per PDN. If you need to shape by packet dropping, there might be some charging consequences.
- => Noted; no LS sent.

# To: SA, SA1

R2-081964: Response on Home-NB requirements (email)

=> Should include agreed comments from R2-081527, and indicate that solution for inbound mobility are still evaluated by RAN2, so difficult to comment on performance. Email approval; (Submit on Monday; Comments up to Wednesday; Final version on Thursday.)

# To: RAN1

R2-081996: PDCCH format for DL data arrival & UL grant in Msg2

- There are 2 sections 4.
- Attachments should be listed in the header
- Include reference to received incoming LS. (R2-081420)
- 3<sup>rd</sup> bullet in "actions" should not refer to "fields below".
- => Agreed with these changes in R2-082040

# To: RAN3; Cc: SA2, CT1

R2-082027: Draft reply LS on broadcast identities

- Vdf thinks that from an OAM point of view, it would be better to have a CI independent of the TAC. However they realise that this means additional information. If we therefore can only have a CI related to a TAC, the would like a CI of at least 16 bits. Should be changed.
- NSN thinks the guidance should come from CT1, not from us. So we should follow requirements. Ericsson is afraid that this approach has caused already a long time deadlock.
- QC thinks we should at least indicate that there are size limitations.
- Action should talk about "RAN2"
- Should have action to CT1 to confirm our understanding. CT1 should be "to".
- More clearly indicate that this is our understanding, we are mainly concerned about the size limitation, abut acknowledge that we assume detailed definition is up to CT.
- Copy CT4
- Last word of 3<sup>rd</sup> paragraph should be "CGI"
- => Go for email approval; Provide by Mon; Comment until Wedensday evening; Final version on Thursday. (R2-082041 for final version)

# R2-082045: LS on NAS–AS interaction for dependent procedures

- ALU clarifies that in option 2, only for dependant procedures, they would be mandatory piggy-back
- It is not correct to say that in option 1, NAS does not "act" on the message. Some more change
- => Agreed with further online edits in R2-082047

# 9 Any other business

Meeting schedule 2008 and 2009:

MEETING	DATES	LOCATION	HOST
RAN2 #60bis	14 Jan – 18 Jan 2008	Sevilla, Spain	European Friends of 3GPP (EF3)
RAN2 #61	11 Feb – 15 Feb 2008	Sorrento, Italy	European Friends of 3GPP (EF3)
RAN #39	04 Mar – 07 Mar 2008	Puerto Vallarta, Mexico	North American Friends of 3GPP
RAN2 #61bis	31 March - 04 Apr 2008	Shenzhen, China	ZTE
RAN2 #62	05 May - 09 May 2008	Kansas City, USA	North American Friends of 3GPP
RAN #40	27 May - 30 May 2008	Prague, Czech Republic	European Friends of 3GPP (EF3)
RAN2 LTE RRC AH	05 June – 06 June 2008	Sophia Antipolis, France	ETSI
RAN2 #62bis	30 June – 4 July 2008	Warsaw, Poland	European Friends of 3GPP (EF3)
RAN2 #63	18 Aug – 22 Aug 2008	Jeju, Korea	Samsung
RAN #41	09 Sep – 12 Sep 2008	Tbd, Japan	
RAN2 #63bis	29 Sep - 03 Oct 2008	Prague, Czech Republic	European Friends of 3GPP (EF3)
RAN2 #64	10 Nov - 14 Nov 2008	Prague, Czech Republic	European Friends of 3GPP (EF3)
RAN #42	02 Dec - 05 Dec 2008	Athens, Greece	European Friends of 3GPP (EF3)
RAN2 #64bis	12 Jan – 16 Jan 2009	EU	European Friends of 3GPP (EF3)
RAN2 #65	09 Feb – 13 Feb 2009	EU	European Friends of 3GPP (EF3)
RAN #43	03 March - 06 March 2009	EU	European Friends of 3GPP (EF3)
RAN2 #65bis	23 March - 27 March 2009	Korea	LG
RAN2 #66	04 May - 08 May 2009	TBD	
RAN #44	26 May - 29 May 2009	US	North American Friends of 3GPP
RAN2 #66bis	29 June - 03 July 2009	US	North American Friends of 3GPP
RAN2 #67	24 Aug – 28 Aug 2009	TBD	
RAN #45	15 Sep - 18 Sep 2009	EU	European Friends of 3GPP (EF3)
RAN2 #67bis	12 Oct - 16 Oct 2009	TBD	
RAN2 #68	09 Nov – 13 Nov 2009	Korea	Samsung
RAN #46	01 Dec - 04 Dec 2009	TBD	

The ad hoc in June 2008 is now confirmed. It will concentrate on 36.331 RRC LTE aspects only.

The following two REL-7 TRs are abandoned and will not be put under CR control or moved to REL-8:TR 25.819 v1.0.0"7.68 Mcps TDD option: Layer 2 and 3 protocol aspects"TR 30.301 v0.2.0" 3.84 Mcps TDD enhanced uplink: RAN WG2 Stage 2 decisions"Rapporteur for both: Derek Richards, IPWireless.

Change in rapporteurship for TS 25.322 (all releases): previous rapporteur: Olivier Hus (Philips) new rapporteur: Kundan Kumar Lucky (Samsung), email: kklucky@samsung.com

General request from the RAN WG2 chairman to the delegates to concentrate future contributions on the completion of open issues and not on further optimisations.

For planned email discussions see Annex H.

# 10 Closing of the meeting

The TSG RAN WG2 chairman Gert-Jan van Lieshout thanked the delegates for participating and contributing to RAN WG2 meeting #61bis. He thanked ZTE Corporation for hosting this meeting expressing the wish that the hotel/facilities we had this week might be considered as reference standard for future hosts. He closed the meeting on Friday April 4th, 2008 at about 17:00 o'clock.

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# Annex A: List of participants

The list of participants of this RAN WG2 meeting #61bis is attached to the report.

Total number of participants: 161

# Annex B: List of Tdocs

The list of Tdocs of this RAN WG2 meeting #61bis is attached to the report.

Total number of Tdocs: 651 (R2-081400 - R2-082050) of which 46 Tdocs are not available, i.e. 605 Tdocs. Note: 1 of the 46 Tdocs (R2-082048) is under email discussion until submission deadline of RAN2 #62. Additional 3 of the available 605 Tdocs are withdrawn which leads to 602 Tdocs.

# Annex C:

# Incoming liaison statements for TSG RAN WG2 #61bis

s		
additional comments		draft LS answer in R2-081929 (NTT)
final LS answer	Q	postponed
status	noted	noted
RAN2 action requested	not explicitly	yes
IM	LTE	LTE
source	SA	SA
title (incoming LS, to, from, contact)	R2-081403 LS on Release 8 non-essential SAE features (SP-080218; to: CT1, CT3, CT4, CT6, RAN1, RAN2, RAN3, RAN4, SA1, SA2, SA3, SA4, SA5, CT, GERAN, RAN; cc: -; contact: Ericsson)	R2-081404 LS on Decision of MBMS and LCS in SAE Rel8 Scope Discussions (SP-080223; to: SA2, RAN1, RAN2, RAN3; cc: SA1, GERAN2; contact: NTT)
RAN2 Tdoc	R2-081403	R2-081404 Exh

final LS additional comments answer			If anything needs to be commented then this can be included in R2-081929.		No RAN2 LS answer since it is more related to SA2.	R2-082032	postponed draft LS answer in R2-081927 (NSN)	R2-082031	postponed draft LS answer in R2-081928 (NSN)
status fin an	noted no	noted no	noted no	noted no	noted no	noted R2-(	noted post	noted R2-0	noted post
RAN2 action requested	02	2	yes	2	yes	yes	yes	yes	yes
M	ETWS	ETWS	ETWS	UMTS bands, testing	LTE	LTE	GELTE	GELTE	GELTE
source	GERAN2	GERAN	RAN3	RAN	CT1	CT1	GERAN	GERAN	GERAN
title (incoming LS, to, from, contact)	Reply LS to S2-075874 on Earthquake and Tsunami Warning System (G2-080112; to: SA2, SA1, GERAN, GERAN1; cc: RAN2, RAN3, CT1, SA3; contact: Telecom Italia)	Reply LS to G2-080112 and S2-075874 on ETWS (GP- 080410; to:SA1, SA2; cc: RAN2, RAN3, CT1, SA3; contact: Vodafone)	Reply LS to S2-075847 on Earthquake and Tsunami Warning System (R3-080541; to: SA2, RAN2; cc: SA1, GERAN2; contact: NTT)	Reply LS to RP-071046 on Tests on receiving System Info 5bis (RP-080230; to: GSMA DG; cc: RAN2; contact: Ericsson)	LS to establish working assumptions for the scope of responsibility for optimized handover specification (C1-080779; to: RAN2, RAN3, CT4, SA2; cc: -; contact: ALU)	EPS Session management procedure optimisations (C1- 080780; to: RAN2, RAN3, CT4; cc: -; contact: Ericsson)	LS on Equal priority Inter-RAT reselection (GP-080298; to: RAN2; cc: -; contact: NSN)	Reply LS to R2-080609 and R2-081363 on various aspects related to GERAN to E-UTRAN interworking (GP- 080395; to: RAN2, RAN4; cc: -; contact: NSN)	Reply LS to R2-075478 on CSG related mobility (stage 2 text) (GP-080417; to: SA1, RAN2; cc: SA2, RAN3, RAN4,
RAN2 Tdoc	R2-081405	R2-081406	R2-081407	R2-081408	R2-081409	R2-081410	R2-081411	R2-081412	R2-081413

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RAN2 Tdoc	title (incoming I S to from contact)	source	M	RAN2	status	final LS	additional comments
DOD				requested		allowel	
R2-081414	LS on Change Request for LTE TDD Frame Structure to TS.36.300 V8.3.0 (R1-081112; to: RAN2; cc: -; contact: RITT)	RAN1	LTE	yes	noted	01	Same LSin arrived already at the end of RAN2 #61 as R1-081112 but was not treated there due to a lack of time. No LS answer but CATT will provide 36.300 CR to next RAN2 #62.
R2-081415	LS on CR to TS36.306 (R1-081125; to: RAN2, RAN4; cc: - ; contact: NTT)	RAN1	LTE	yes	noted	2	36.306 change already taken into account.
R2-081416	LS reply to R2-075481 on NDI vs. RV (R1-081138; to: RAN2; cc: -; contact: Panasonic)	RAN1	LTE	not explicitly	noted	Q	
R2-081417	LS on Redundancy Version Sequences for HARQ (R1- 081141; to: RAN2; cc: -; contact: NSN)	RAN1	LTE	yes	noted	2	agreed TP in R2-081723
R2-081418	LS on High Interference Indicator (R1-081148; to: RAN3; cc: RAN2, SA5; contact: Ericsson)	RAN1	LTE	Q	noted	Q	
R2-081419	LS on L1-related parameters to be configured by RRC (R1-081156; to: RAN2; cc: -; contact: Ericsson)	RAN1	LTE	not explicitly	noted	Q	No LS answer but follow up LSout in R2-082039
R2-081420	Reply LS to R2-080621 on RACH retransmission delay requirements (R1-081160; to: RAN2; cc: -; contact: Ericsson, Panasonic)	RAN1	LTE	not explicitly	noted	R2-082040	
R2-081421	Reply LS to R4-071813 on Signalling of additional spectrum emission requirements (R3-080449; to: RAN2, RAN4; cc: RAN1; contact: Motorola)	RAN3	LTE	yes	noted	2	necessary signalling support will be provided by RAN2 specifications or not?
R2-081422	LS on RAN performance monitoring (R3-08530; to: SA5; cc: RAN1, RAN2, RAN4; contact: NTT)	RAN3	LTE	ои	noted	ои	

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noted

not explicitly

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**RAN3** 

LS on Self Configuring and Self Optimizing Network Use Cases and Solutions TR (R3-080536; to: SA5, RAN2, RAN4, RAN1; cc: GERAN2; contact: T-Mobile)

R2-081423

additional comments	draft LS answer in R2-081931 (see also email ciscussion <mark>61b_LTE_B03</mark> )				agenda item 4.9 on SON was not treated				RRC signalling will be introduced?	
final LS answer	postponed	R2-082041	R2-082033	R2-082034	postponed	е С	оц.	ou	<mark>0</mark>	Q
status	noted	noted	noted	noted	noted	noted	noted	noted	noted	noted
RAN2 action requested	yes	yes	not explicitly	yes	yes	not explicitly	not explicitly	not explicitly	yes	ои
M	LTE	LTE	LTE	LTE	LTE	LTE	LTE	LTE	LTE	LTE
source	RAN3	RAN3	RAN3	RAN3	RAN3	RAN4	RAN4	RAN4	RAN4	SA5
title (incoming LS, to, from, contact)	Reply LS to R2-075458, S2-080965 and R2-080605 on Applicability of "subscriber type" indication for UTRAN & GERAN (R3-080543; to: SA2, RAN3, GERAN2; cc: -; contact: Vodafone)	LS on LTE-cell- and eNB-identification (R3-080547; to: RAN2, SA2, CT1; cc: -; contact: NSN)	LS on RLF Recovery Information over X2 (R3-080553; to: RAN2; cc: -; contact: Nortel)	LS on the necessity of Location Reporting procedure in S1 (R3-080564; to: SA2, RAN2; cc: -; contact: NTT)	LS on Measurements for self optimisation of cell selection/reselection parameters (R3-080565; to: RAN2; cc: -; contact: NEC)	LS to RAN 2 on mobility from E-UTRA to UTRA without explicit neighbour cell list (R4-080458; to: RAN2; cc: GERAN; contact: Nokia)	Response LS to R3-080472 on LS Automatic Neighbour Relation (R4-080468; to: RAN3; cc: RAN2; contact: Ericsson)	LS on Scale of Reported Measurement Quantities (R4- 080484; to: RAN2; cc: RAN1; contact: Ericsson)	LS on signalling Intra/Inter-frequency measurement bandwidth (R4-080541; to: RAN2, RAN3, GERAN; cc: RAN1; contact: NTT)	Reply LS to R2-075464 on RACH Optimization Use Case (S5-080537; to: RAN2; cc: RAN3; contact: Huawei)
RAN2 Tdoc	R2-081424	R2-081425	R2-081426	R2-081427	R2-081428	R2-081429	R2-081430	R2-081431	R2-081432	R2-081433

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additional comments		should wait for input from SA5 before continuing on performance monitoring related measurements				no WI created by RAN so in principle no work is required			
final LS answer	ou	0	2	оц	<mark>2</mark>	2	R2-081971	е	R2-082039
status	noted	noted	noted	noted	noted	noted	noted	noted	noted
RAN2 action requested	<u>و</u>	yes	2	2	yes	yes	yes	2	yes
M	LTE	LTE	RANimp- 64QamDow nlink, MIMO, RANimp- L2dataRate s	MBMS-RAN	RANimp- HSDSCH	RANFS- UplinkSync	TEI6	ETWS	LTE
source	SA5	SA5	RAN1	RAN1	RAN1	RAN1	RAN3	SA3	SA3
title (incoming LS, to, from, contact)	Reply LS to R3-072401 on Automatic Neighbour Relation (ANR) function (S5-080538; to: RAN3; cc: RAN2, RAN4; contact: Huawei)	LS reply to R2-081364 and R3-080530 on RAN Performance monitoring (S5-080540; to: RAN2, RAN3; cc: RAN1, RAN4; contact: NSN)	Reply LS to R5-080525 on HSPA RB and SRB configurations in 34.108 (R1-081144; to: RAN5; cc: RAN2; contact: Ericsson)	Reply LS to R5-080526 on new MCCH radio bearer configuration in 34.108 (R1-081145; to: RAN5; cc: RAN2; contact: Ericsson)	LS on status of study item "HS-PDSCH serving cell change enhancements" (R1-081149; to: RAN, RAN2; cc: - ; contact: Qualcomm)	LS on Synchronised E-DCH specification impacts (R1- 081150; to: RAN2, RAN3, RAN4 ; cc: -; contact: NSN)	LS on "Changes to the format of TMGI" (R3-080434; to: RAN2, CT4; cc: SA2; contact: Huawei)	Reply LS to SA2 to S2-075875 regarding ETWS Security (S3-080219; to: SA2; cc: RAN2, RAN3, GERAN2, CT1, SA1; contact: NTT)	Response LS to RAN2 to R2-081369 on Authentication at RRC Connection Re-establishment (S3-080226; to: RAN2; cc: -; contact: Samsung)
RAN2 Tdoc	R2-081434	R2-081435	R2-081436	R2-081437	R2-081438	R2-081439	R2-081440	R2-081916	R2-081917

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RAN2 Tdoc	title (incoming LS, to, from, contact)	source	M	RAN2 action requested	status	final LS answer	additional comments
R2-081918	Reply LS to R2-080601 on outstanding NAS messages (S3-080229; to: RAN2; cc: RAN3, CT1; contact: Ericsson)	SA3	LTE	yes	noted	R2-082036	
R2-081919	Reply LS to R2-080540 on assumptions about UE security capabilities (S3-080230; to: RAN2; cc: CT1; contact: Ericsson)	SA3	LTE	not explicitly	noted	ou	
R2-081920	Reply-LS to R2-080602 on security aspects on inter- system handover (S3-080249; to: RAN2; cc: -; contact: Nokia)	SA3	LTE	yes	noted	R2-082046	
R2-081921	LS on CS Fallback (S2-081993; to: RAN2, RAN3, CT1, CT4; cc: -; contact: NTT)	SA2	LTE	not explicitly	noted	postponed	see email discussion 61b_LTE_B09
R2-081998	Reply LS to R2-081974 on HS-DPCCH usage with Enhanced Uplink in Cell_FACH (R3-080963; to: RAN2; cc: RAN1; contact: NSN)	RAN3	RANimp- DRX	not explicitly	not treated	to be decided	Note: Seems to be an answer to R2-081969 instead of R2-081974
R2-082014	LS on Half-Duplex FDD (R4-080805; to: RAN2; cc: RAN1, RAN3; contact: Ericsson)	RAN4	LTE	not explicitly	noted	ou	
R2-082024	Reply LS to R3-080543 = GP-080283 on applicability of "subscriber type" indication for UTRAN & GERAN (G2- 080228; to: SA2, RAN3, RAN2; cc: GERAN, CT1; contact: Ericsson)	GERAN2	GELTE	yes	noted	postponed	draft LS answer in R2-081931 (see also email discussion 61b_LTE_B03)
R2-082025	Reply LS to R2-081363 on E-UTRAN Neighbour Cell List information for GERAN (GP-080231; to: GERAN, GERAN1, RAN2; cc: RAN1, RAN4; contact: Telecom Italia)	GERAN2	GELTE	not explicitly	noted	6	

Although RAN2 action was requested no LS answer was sent.

LS answer was postoned to next RAN2 meeting (note: incoming LS will not be presented again at the next meeting and involved parties are requested to submit proposal for draft outgoing LS answer to next meeting). postponed:

ZTE/HTC

Exhibit 1017-0279

Summary:

In total: 48 new LSs received at RAN2 #61bis (41 related to LTE/E-UTRA, 7 related to UTRA): 47 noted plus 1 (r2-081998) not treated and therefore postponed to RAN2 #62.

4 of the 48 incoming LSs were received during the RAn2 #61bis meeting: R2-081998, R2-082014, R2-082024, R2-082025

For 7 incoming LSs of RAN2 #61bis an LS answer from RAN2 is still pending: R2-081404, R2-081411, R2-081413, R2-081424, R2-081428, R2-081921, R2-082024.

(For the following incoming LSs of RAN2 #61 an LS answer was postponed: R2-080649, R2-080655, R2-080670, R2-080671, R2-080673, R2-081326. R2-080671 is answered in R2-081970, see below.)

# Annex D: Outgoing liaison statements of TSG RAN WG2 #61bis

R2.081934       LG on MAC-d flow definition for MAC-effax       Lucent       AL2816       -       AL2816       Alcelas       Almop-L2DalaRates       agreed in email discussion of the Lucent       -       AL281       HomeNB       agreed in email discussion of the Alaster of the Alaster of the Lucent       -       AL281       FANImp-L2DalaRates       agreed in email discussion of the Alaster of the A	final LS Tdoc	title	to	S	contact	reply to	release	M	comments
R2-081964       L5 related to CR SP-080188       SA, SA1       SA2, CT, CT, Di CB requirements for CT A       SA, SA1       SA2, CT A       NSN       related to CR       REL-8       HomeNB         R2-081969       L5 on RAV2 status on enhanced uplink for CELL_EACH state in FDD       RAN3       RAN1       Huawei       -       REL-8       RANimp-UplinkEnthState         R2-081970       Repty L5 to S3-080126       R2-       S44       -       Qualocomm       R2-080126 = RE-8       RANimp-UplinkEnthState         R2-081971       Repty L5 to S3-080126 = R2-       S44       -       Qualocomm       R2-080134 = RE-6       RINimp-UplinkEnthState         R2-081971       Repty L5 to R3-080434 = R2-       RAN3       CT4       Huawei       R3-080434 = REL-6       TEl6         R2-081974       L5 on RAN2 status on UE DRX       RAN3       CT4       Huawei       R3-080434 = REL-6       TEl6         R2-081974       L5 on RAN2 status on UE DRX       RAN3       CT4       Huawei       R3-080434 = REL-6       TEl6         R2-081974       L5 on RAN2 status on UE DRX       RAN3       CT4       Huawei       R3-080434 = REL-6       TEl6         R2-081974       L5 on RAN2 status on UE DRX       RAN3       -       Cel1-8       RANimp-DRX         R2-0819140 <td< td=""><td>R2-081934</td><td></td><td>RAN3</td><td></td><td>Alcatel- Lucent</td><td>1</td><td>REL-7</td><td>RANimp-L2DataRates</td><td></td></td<>	R2-081934		RAN3		Alcatel- Lucent	1	REL-7	RANimp-L2DataRates	
R2-081969       LS on RAN2 status on enhanced uplink for cELL_FACH state in FDD       RAN1       Huawei       -       REL-8       RANimp-UplinkEnhState         R2-081971       Reply LS to S4-080126 = R2- 086671 on CS Voice over HSPA       Page 2-081971       Reply LS to S4-080126 = R2- 086671 on CS Voice over HSPA       RAN3       CT4       Huawei       R3-080126 = REL-8       RInImp8-CsHspa         R2-081971       Reply LS to R3-080434 = R2- 08677 on CS voice over format of TMG1       AN3       CT4       Huawei       R3-080434 = REL-6       TEI6         R2-081974       LS on RAN2 status on UE DRX       RAN3       CT4       Huawei       R3-081434 =       REL-6       TEI6         R2-081974       LS on RAN2 status on UE DRX       RAN3       -       Ericsson       -       R2-081440         R2-081974       LS on RAN2 status on UE DRX       RAN3       -       Ericsson       -       R2-081412         R2-081974       LS on RAN2 status on UE DRX       RAN3       -       Ericsson       -       REL-8       RInimp-DRX         R2-081974       LS on RAN2 status on UE DRX       RAN3       -       Ericsson       -       REL-8       RInimp-DRX         R2-081975       Reply LS to CF-080395       R2-081412       R2-081412       RANimp-DRX       RAN4 <td< td=""><td>R2-081964</td><td></td><td>SA, SA1</td><td>SA2, CT1, GERAN</td><td>NSN</td><td>related to CR SP-080188</td><td>REL-8</td><td>HomeNB</td><td>agreed in email discussion 61b_LTE_A02</td></td<>	R2-081964		SA, SA1	SA2, CT1, GERAN	NSN	related to CR SP-080188	REL-8	HomeNB	agreed in email discussion 61b_LTE_A02
R2-081970       Reply LS to S4-080126 = R2-       SA4       -       Qualcomm       S4-080126 = REL-8         080671 on CS Voice over       HSPA       C       Qualcomm       S4-080126 = REL-8         R2-081971       Reply LS to R3-080434 = R2-       RAN2       R2-080671       R2-080671         R2-081971       Reply LS to R3-080434 = R2-       RAN3       CT4       Huawei       R2-081440         R2-081974       LS on RAN2 status on UE DRX       RAN3       -       Ericsson       -       R2-081440         R2-081974       LS on RAN2 status on UE DRX       RAN3       -       Ericsson       -       REL-6         R2-081974       LS on RAN2 status on UE DRX       RAN3       -       Ericsson       -       REL-6         R2-081031       Reply LS to GP-080395 = R2-       GERAN       RAN4       NSN       GP-0803955       REL-8         R2-082031       Reply LS to GF-080395 = R2-       GERAN       RAN4       NSN       GP-0803955       REL-8         R2-082032       Reply LS to GT-080780 = R2-       GERAN       RAN3       Fricsson       C1-080780 = REL-8         R2-082033       Reply LS to GT-080780 = R2-       GERAN       RAN3       Fricsson       C1-080780 = REL-8         R2-082033       Reply LS	R2-081969		RAN3	RAN1	Huawei	1	REL-8	RANimp-UplinkEnhState	A reply to this LS from RAN3 arrived already at RAN2 #61bis in R2- 081998.
R2-081971Reply LS to R3-080434 = R2- format of TMGI"RAN3CT4HuaweiR3-080434 = R2-081440REL-6R2-081974LS on RAN2 status on UE DRXRAN3-Ericsson-REL-8R2-081974LS on RAN2 status on UE DRXRAN3-Ericsson-REL-8R2-082031Reply LS to GP-080395 = R2-GERANRAN4NSNGP-080395 = REL-8-R2-082032Reply LS to C1-080780 = R2-CT1RAN3,EricssonC1-080780 = REL-8-R2-081410on EPS Sessionmanagement procedure081410R2-081410REL-8-Nanagement procedure081410 on EPS SessionCT4RAN3,EricssonC1-080780 = REL-8-R2-081426NortelCT4RAN3,EricssonC1-080780 = REL-8-R2-081426 on RLF Recovery-NortelR2-081426REL-8-N-NortelR2-081426REL-8NNortelR2-081426NNortelR2-081426NNortelR2-081426NNortelR2-081426 <td>R2-081970</td> <td></td> <td>SA4</td> <td></td> <td>Qualcomm</td> <td>S4-080126 = R2-080671 (RAN2 #61)</td> <td>REL-8</td> <td>Rinimp8-CsHspa</td> <td></td>	R2-081970		SA4		Qualcomm	S4-080126 = R2-080671 (RAN2 #61)	REL-8	Rinimp8-CsHspa	
R2-081974       LS on RAN2 status on UE DRX       RAN3       -       Ericsson       -       REL-8         R2-082031       Reply LS to GP-080395 = R2-       GERAN       NSN       GP-080395 = REL-8       REL-8         R2-082031       Reply LS to GF-080395 = R2-       GERAN       RAN4       NSN       GP-080395 = REL-8         081412       on various aspects       related to GERAN to E-UTRAN       RAN4       NSN       GP-080395 = REL-8         R2-082032       Reply LS to C1-080780 = R2-       CT1       RAN3,       Ericsson       C1-080780 =       REL-8         R2-082033       Reply LS to C1-080780 = R2-       CT1       RAN3,       Ericsson       C1-080780 =       REL-8         R2-082033       Reply LS to C1-080780 = R2-       CT1       RAN3,       Ericsson       C1-080780 =       REL-8         R2-081410       management procedure       081410 on EPS Session       R2-0814110       R2-081410       R2-081410         R2-082033       Response LS to LS R3-080553       RAN3       -       Nortel       R2-081426       REL-8         R2-081426 on RLF Recovery       Information over x2       -       Nortel       R2-081426       REL-8       REL-8	R2-081971	Reply LS to R3-080434 = R2- 081440 on "Changes to the format of TMGI"	RAN3	CT4	Huawei	R3-080434 = R2-081440	REL-6	TEIG	
R2-082031Reply LS to GP-080395 = R2- 081412 on various aspects related to GERAN to E-UTRAN interworkingRAN4NSNGP-080395 = R2-081412REL-8R2-081412 interworking081412 on various aspects related to GERAN to E-UTRAN interworkingRAN3, R2-081410R2-081412REL-8R2-082032Reply LS to C1-080780 = R2- 081410 on EPS Session management procedure optimizationsCT1RAN3, CT4EricssonC1-080780 = R2-081410REL-8R2-082033Response LS to LS R3-080553RAN3-NortelR3-080553 = R2-081426REL-8NR2-081426 on RLF Recovery Information over x2-NortelR3-081426REL-8	R2-081974	-	RAN3		Ericsson	1010	REL-8	RANimp-DRX	
R2-082032         Reply LS to C1-080780 = R2- 081410 on EPS Session         CT1         RAN3, CT4         Ericsson         C1-080780 =         REL-8           081410 on EPS Session         081410 on EPS Session         CT4         R2-081410         R2-081410           management procedure         optimizations         CT4         CT4         R2-081410         R2-081410           R2-082033         Response LS to LS R3-080553         RAN3         -         Nortel         R3-080553 =         REL-8           R2-082033         Response LS to LS R3-080553         RAN3         -         Nortel         R3-080553 =         REL-8           No         Information over x2         -         Nortel         R2-081426         REL-8	R2-082031	Reply LS to GP-080395 = R2- 081412 on various aspects related to GERAN to E-UTRAN interworking	GERAN	RAN4	NSN	GP-080395 = R2-081412	REL-8	GELTE	
R2-082033         Response LS to LS R3-080553         RAN3         -         Nortel         R3-080553 =         REL-8           =         R2-081426 on RLF Recovery         -         Nortel         R2-081426           Nortel         R2-081426         -         R2-081426         R2-081426			CT1	RAN3, CT4	Ericsson	C1-080780 = R2-081410	REL-8	LTE	
	1		RAN3	1	Nortel	R3-080553 = R2-081426	REL-8	LTE	

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comments		Note: Although it is stated "draft LS" on R2-082036 it is the final LS.				agreed in email discussion 61b_LTE_A01			under email discussion in 61b_LTE_B13 before RAN2 #62 submission deadline
IM	LTE	LTE	LTE	LTE	LTE	LTE	LTE	LTE	<u>Ш</u>
release	REL-8	REL-8	REL-8	REL-8	REL-8	REL-8	REL-8	REL-8 I	REL-8
reply to	R3-080564 = R2-081427	S3-080229 = R2-081918	S3-080226 = R2-081917	R1-081156 = R2-081419	R1-075105 = R2-080590 (RAN2 #61), R1-081160 = R2-081420	R3-080547 = R2-081425	R2-081920 = S3-080249	1	
contact	TTN	Ericsson	Alcatel- Lucent	Ericsson	Qualcomm	Ericsson	Alcatel- Lucent	Alcatel- Lucent	Ericsson
3	,	CT1	1	1		SA2, CT4	г	- <b>1</b>	-
þ	RAN3, SA2	SA3	SA3	RAN1, RAN4	RAN1	RAN3, CT1	SA3	CT1	RAN1
title	Reply LS to R3-080564 = R2- 081427 on Location Reporting procedure	Reply LS to S3-080229 = R2- 081918 on outstanding NAS messages	Response LS to S3-080226 = R2-081917 on Authentication at RRC Connection Re- establishment	LS related to R1-081156 = R2- 081419 on Transmission of physical layer parameters	LS related to R1-075105 = R2- 080590 and R1-081160 = R2- 081420 on PDCCH for DL data arrival and random access response format	Reply LS to R3-080547 = R2- 081425 on LTE-cell- and eNB- identification	Reply LS to R2-081920 = S3- 080249 on security aspects on inter-system handover	LS on NAS–AS interaction for dependent procedures	LS on MAC editors notes regarding assumption on L1
final LS Tdoc	R2-082034	R2-082036	R2-082038	R2-082039	R2-082040	R2-082041	R2-082046	R2-082047	R2-082048

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In total 17 outgoing LSs of RAN2 #61bis (including 2 agreed by email after the meeting): 11 related to LTE/E-UTRA and 6 related to UTRA. Note: One additional LS R2-082048 is still under email discussion.

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Annex E:	ΰi	S SUMMER ST				
List of e	List of endorsed CRs from TSG RAN WG2 #61bis	WG2 #61bis				
Note:No CR All end These sheets	Note: No CR numbers were allocated for CRs submitted to TSG RAN WG2 #61bis. All endorsed CRs of TSG RAN WG2 #61bis have to be resubmitted to TSG RAN WG2 #62 in Kansas City for quick approval. These endorsed CRs of TSG RAN WG2 #61bis will have to use the CR numbers (indicated in the table below) on their CR cover sheets (revision field has to be set to "-").	TSG RAN WG2 #61bis. be resubmitted to TSG RAN WG ave to use the CR numbers (indic	2 #62 in K ated in th	ansas Ci e table b	ty for qu elow) on	ick approval. their CR cover
Corre	Corresponding Tdoc numbers for these CRs have to be requested as usual via the automatic Tdoc numbering tool.	be requested as usual via the auto	omatic Td	oc numb	ering too	-
Tdoc	Title	Source	CR number	spec	release	SI/WI
R2-081451	Clarification of the BSR calculation	Ericsson	0002	36.322	REL-8	LTE
R2-081452	Clarification of the BSR calculation	Ericsson	0002	36.323	REL-8	LTE
R2-081460	PDCP minor changes	LG Electronics Inc.	0003	36.323	REL-8	LTE
R2-081470	Removal of Editor's Note on updating of VR(MS) upon expiry of T_reordering	Ericsson	0003	36.322	REL-8	LTE
R2-081495	Clarification on MAX_CID	Ericsson	3278	25.331	REL-4	TEI4
R2-081496	Clarification on MAX_CID	Ericsson	3279	25.331	REL-5	TEI4
R2-081497	Interpretation of the 'Neighbouring cell identity' in	Ericsson	3280	25.331	REL-6,	MBMS-RAN
	MBMS NEIGHBOURING CELL PTM RB INFO		3281 3282		REL-7, REL-8	
R2-081498	Clarification on MBMS dispersion	Ericsson	3283	25.331	REL-6,	MBMS-RAN
			3284 3285		REL-7, REL-8	
R2-081499	Minor ASN.1 corrections due errors detected during v780 implementation	Ericsson	3286 3287	25.331	REL-7 REL-8	TEI7
R2-081506	Configurable values for the minimum and maximum RLC PDU size	Ericsson	3288	25.331	REL-8	RANimp- Uplinkt 2dataRates
R2-081507	HS-SCCH orders for HS-SCCH-less operation	Ericsson	0032	25.308	REL-8	RANimp-CPC
R2-081508	HS-SCCH orders for HS-SCCH-less operation	Ericsson	0400	25.321	REL-8	RANimp-CPC
R2-081518	Removal of MBMS	LG Electronics Inc.	0004	36.323	REL-8	LTE
R2-081562	Introduction of CELL_FACH DRX	Nokia Corporation, Nokia Siemens Networks	0033	25.308	REL-8	RANimp-DRX

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64QAM for 1.28 Mcps 64QAM for 1.28 Mcps TDD HSDPA RANimp-EnhState RANimp-EnhState RANimp-EnhState RANimp-RABSE-CodeOptFDD RInImp8-CsHspa LCRTDD-EDCH LCRTDD-EDCH LCRTDD-EDCH LCRTDD-EDCH SI/WI **FDD HSDPA** TEI7 TEI7 Щ TEI7 TEI7 TEI7 REL-7, REL-8 REL-7, REL-8 release REL-7, REL-8 REL-6, REL-7, REL-7, REL-7, REL-7, REL-8 REL-7 REL-7 REL-7 REL-7, REL-7 25.306 36.322 25.322 25.319 25.319 25.331 25.308 25.321 25.331 25.322 25.322 25.331 25.331 25.331 25.331 25.331 25.321 spec number ß 3299 3300 3289 0193 3292 3293 3294 3295 0034 0035 3296 3297 3298 3298 0004 0327 0328 0329 0329 0330 0402 0014 0016 0017 0403 3290 0401 0331 Nokia Siemens Networks, Nokia ZTE, RITT, CATT, TD-TECH, Spreadtrum Communications, Spreadtrum Communications, ZTE, RITT, CATT, TD-TECH, Source Qualcomm Europe Qualcomm Europe LG Electronics Inc. NTT DoCoMo corporation Samsung Samsung HUAWEI HUAWEI HUAWEI HUAWEI Potevio Potevio CATT CATT CATT CATT Correction to the calcuration of DPCH frame offset Information transmission on MAC-e PDU alone for Information transmission on MAC-e PDU alone for Introduction of 64QAM in UE LCR TDD capability specification for F-DPCH on timing re-initialised hard handover RLC TM mode allowed when BCCH mapping on Modification of TBS tables and E-TFC selection Correction on the attribute of Treset in system Completion of the mechanism for Scheduling Completion of the mechanism for Scheduling Correction on the Mapping of TRRI field and MSB/LSB for 1.28 Mcps TDD EUL Editorial correction to variable description of Editorial correction to reconfigure MAC-ehs Introduction of 64QAM in RRC LCR TDD Removal of STATUS receiving window Handling of TRANSPORT FORMAT COMBINATION CONTROL Handling of TRANSPORT FORMAT COMBINATION CONTROL Correction on UM model depiction Clarification on DAR Operation **CS-HSPA UL Segmentation** Title 1.28 Mcps TDD in EUL 1.28 Mcps TDD in EUL CELL INFO LIST reordering queue for LCR TDD specification information HS-DSCH R2-081818 R2-081645 R2-081646 R2-081714 R2-081819 R2-081717 R2-081738 R2-081745 R2-081617 R2-081620 R2-081648 R2-081665 R2-081681 R2-081750 R2-081783 R2-081647 R2-081751 Tdoc

Draft Report of TSG RAN WG2 #61bis, Shenzhen, China, March 31 – April 4, 2008

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	NIAN DO LOUINAN INAN		- April 4, 2000			
Tdoc	Title	Source	CR	spec	release	SI/WI
R2-081830	Removal of UTRAN behaviour	LG Electronics Inc.	0332 0333	25.322	REL-7 REL-8	TEI7
R2-081878	Correction to transmitting AM RLC entity	Samsung	0334	25.322	REL-8	RANimp- UplinkL2dataRates
R2-081925	Correction of a spelling error of E-TFC selection	Ericsson	0405	25.321	REL-8	RANimp- UplinkL2dataRates
R2-081935	Change of MAC-d flow definition for MAC-ehs	Alcatel-Lucent	0036	25.308	REL-7	RANimp-L2dataRates
R2-081936	Change of MAC-d flow definition for MAC-ehs	Alcatel-Lucent	0037	25.308	REL-8	RANimp-L2dataRates
R2-081937	Change of MAC-d flow definition for MAC-ehs	Alcatel-Lucent	0406	25.321	REL-7	RANimp-L2dataRates
R2-081938	Change of MAC-d flow definition for MAC-ehs	Alcatel-Lucent	0407	25.321	REL-8	RANimp-L2dataRates
R2-081939	Clarification of method in determine state of a E-	CATT, TDTech, ZTE, RITT,	0408	25.321	REL-7,	LCRTDD-EDCH
	TFC for TDD	Spreadtrum Communications	0409		REL-8	
R2-081940	Modification of TBS tables and E-TFC selection for LCR TDD	CATT, TDTech, ZTE, RITT, Spreadtrum Communications	0410 0411	25.321	REL-7, REL-8	LCRTDD-EDCH
R2-081941	Completion of the mechanism for Scheduling	CATT, TDTech, ZTE, RITT,	3301	25.331	REL-7,	LCRTDD-EDCH
	Information transmission on MAC-e PDU alone for 1.28 Mcps TDD in EUL	Spreadtrum Communications	3302		REL-8	
R2-081942	Triggers, transmission and reliability of Scheduling Information for LCR TDD	CATT, TDTech, ZTE, RITT, Spreadtrum Communications	0018 0019	25.319	REL-7, REL-8	LCRTDD-EDCH
R2-081943	Triggers, transmission and reliability of Scheduling	CATT, TDTech, ZTE, RITT,	0412	25.321	REL-7,	LCRTDD-EDCH
	Information for LCK IDD	Spreadrum Communications	0413		XEL-8	
R2-081944	Counter and timers for Scheduling Inforamtion Reporting of LCR TDD	CATT, TDTech, ZTE, RITT, Spreadtrum Communications	3303 3304	25.331	REL-7, REL-8	LCRTDD-EDCH
R2-081945	Clarification of the definition of PRRI for TDD	CATT, TDTech, ZTE, RITT,	0020	25.319	REL-7,	LCRTDD-EDCH
		Spreadtrum Communications, IPWireless, Nextwave	0021		REL-8	
R2-081946	Clarification of the definition of PRRI for TDD	CATT, TDTech, ZTE, RITT, Spreadtrum Communications, DMiredocc, November	0414 0415	25.321	REL-7, REL-8	LCRTDD-EDCH
R2-081947	Clarification of the definition of PRRI for TDD	CATT, TDTech, ZTE, RITT, Spreadtrum Communications, IPWireless Nextwave	3305 3306	25.331	REL-7, REL-8	LCRTDD-EDCH
R2-081948	Correction and Clarification of E-RUCCH Info for LCR TDD	CATT, TDTech, ZTE, RITT, Spreadtrum Communications	3307 3308	25.331	REL-7, REL-8	LCRTDD-EDCH
R2-081949	Extended power control gap for E-PUCH in LCR TDD	CATT, TDTech, ZTE, RITT, Spreadtrum Communications	3309 3310	25.331	REL-7, REL-8	LCRTDD-EDCH

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- 92 endorsed CRs from RAN2 #61bis: .
  - 0 CRs for Rel.99 •
- 1 CR for Rel.4 1 CR for Rel.5
  - •
- 3 CRs for Rel.6 •
- 31 CRs for Rel.7 .
- 56 CRs for Rel.8 (42 for UTRA Rel.8 and 14 for E-UTRA/LTE) •

# Annex F: Report of LTE user plane session (AI 5.1)

For convenience the summary R2-082026 of the LTE user plane session (agenda item 5.1) is copied into this annex. Note: The report of this session was already agreed separately under agenda item 7.2.

# 5.1 User plane

# 5.1.1 MAC (36.321)

# 5.1.1.1 Status

Input from rapporteur only. E.g. endorsement of latest overall rapporteur CR covering changes agreed so far, open issue list and potential further rapporteur update proposals.

- R2-081799: Report of MAC activitiesMAC Rapporteurs (Qualcomm Europe, Ericsson)
  - Etienne announces that Ericsson (Magnus) will be the rapporteur from now on, and Arnaud will be the new editor for MAC.
  - => Noted
- R2-081801: Comment on MAC specification v6 MAC Rapporteurs (Qualcomm Europe, Ericsson) => Noted without presentation
- R2-081718: MAC Open Issues list MAC Rapporteurs (Ericsson, Qualcomm Europe)
  - Panasonic wonders how the worksplit between RAN1 and RAN2 is assumed for TB sizes ? RAN1 is specifying the MCS values. Ericsson assumes that this could to a large extend be handled in RAN1. If there are RAN2 aspects they should be identified so that they can be discussed in RAN2. Panasonic assumes that it would be good if RAN1 would get some input on typical MAC PDU sizes.
  - Panasonic assumes that the MAC CE prioritisation is still open (only BSR at handover has been agreed).
  - NSN is wondering if nothing concerning CQI reporting needs to be specified in MAC ? At least the relation between DRX and CQI/SPS will need to be specified. NSN was thinking about the scheduled CQI reports. Ericsson wonders what aspect is MAC ? NSN assumes this is MAC because it is a scheduled behaviour. Ericsson assumes MAC in the UE would not need to be involved. Panasonic assumes this should be handled in L1.
  - Motorola thinks it is not that clear from the MAC spec that we will always have a PHICH configured. It seems to be specified only very implicitly ?
  - Motorola assumes that DR04 would be more an system implementation issue. Ericsson is not sure there is no problem : e.g. if the long-DRX is distributed, does that enable a limited « change indication » ? Should show there is a problem before we solve anything.
  - => Noted
- R2-081719: E-UTRA MAC protocol specification update (CR) MAC Rapportuers (Ericsson, Qualcomm Europe)

=> Agreed as baseline for the future

Note: After RAN2 #61bis R2-081719 was revised in R2-082049 (see email discussion 61b\_36.321).

- R2-081720: Clarification of Random Access identities MAC Rapporteurs (Ericsson, Qualcomm Europe) - LG wonders if there is a definition of "RAPID" in the spec ?
  - => Text proposal is agreed
- R2-081721: Correction of dedicated preamble handling in absence of expiry time MAC Rapporteurs (Ericsson, Qualcomm Europe) => Text proposal is agreed

- R2-081722: Correction to local-NACK MAC Rapporteurs (Ericsson, Qualcomm Europe) => Text proposal is agreed
- R2-081724: UE behaviour for sub-80-bit grant for RA msg3MAC Rapporteurs (Ericsson, Qualcomm Europe)
  - Motorola indicates at least for RRC we would not too frequently use this "UE behaviour not specified", but instead describe the mandated network behaviour.
  - Chairman asked why the "first" UL transmission is mentioned ?
  - Could instead of the suggested sentence, indicate in a note in this section "In case an UL transmission is required, the eNB shall not provide a grant smaller than 80 bits in Msg2".
  - Ericsson thinks if the network would give such a grant, it would be good that the UE does not end up in a deadlock.
  - Panasonic assumes that in the current spec, the UE would send padding (UE has to follow the grant).
  - => Add a note in this section "In case an UL transmission is required, the eNB should not provide a grant smaller than 80 bits in Msg2".
- R2-081725: Streamlining of the description of UL HARQ MAC Rapporteurs (Ericsson, Qualcomm Europe)
  - NSN assumes that in some cases where it says retransmission it could also be a new transmission. So the "re-" should be placed in "(re-)". Ericsson assumes the text is correct: the eNB should not schedule a first transmission in a measurement gap.
  - NSN agrees that the current update is in line with the current spec. However we might have
    to reconsider this for persistent scheduling.
  - => Text proposal is agreed
- R2-081800: Correction to Random Access power setting MAC Rapporteurs (Qualcomm Europe, Ericsson) => Text proposal is agreed

# 5.1.1.2 Dynamic scheduling

Anything left to be clarified/specified?

# **Redundancy version determination**

R2-081529: RV for non-adaptive retransmissions Nokia Corporation, Nokia Siemens Networks

- QC wonders whether this proposal the redundancy versions are not incremented during "suspension" ? QC thinks now the redundancy version is also updated in case of suspension, and this was not the situation before.
- NTT DCM thinks that the proposed behaviour might be better, because otherwise due to a false ACK a misalignment in RV could arise.
- In Panasonic's assumption after suspension you would only restart after a PDCCH with an explicit RV indication. So there is no risk for misalignment.
- NTT DCM indicates that if we don't have an implicit rule for the RV, then you cannot adapt the MCS. Panasonic clarifies that you can adapt the MCS and go to RV=0. Ericsson assumes that if this is signalled, it is a new transmission. Panasonic clarifies that there is still the NDI field.
- Ericsson wonders whether the intention is to indeed not to take the RV signalled for retransmissions into account ? This is indeed a restriction.
- => Noted

R2-081723: TP on uplink RV handling MAC Rapporteurs (Ericsson, Qualcomm Europe)

- Panasonic indicates that the CURRENT\_IRV is now an index to the RV. However the PDCCH signals RV itself. So if we receive a grant for a retransmission, we should set the CURRENT\_IRV to the index value corresponding to the indicated RV (or similar formulation).
- => Text proposal is agreed with this change
- R2-081573: RV usage for UL HARQ Panasonic => Noted

# PHICH in measurement gap

- R2-081602: HARQ feedback and Measurement GapLG Electronics Inc.
  - => We agree we need to specify the HARQ behaviour for this case.

- R2-081727: UL HARQ handling when P-HICH collides with measurement gap NTT DoCoMo, Inc.
  - NSN assumes that in the proposal it is still a "tentative ACK", so suspension. NTT DCM confirms.
  - LG supports this proposal.
  - Chairman wonders how this works with UL bundling ? NTT DCM sees no specific problems: there is still only 1 ACK/NACK.
  - Samsung is a bit worried about the number of options. In general we could assume a NACK when PHICH cannot be received. Samsung would prefer that skipping the UL transmission and skipping the PHICH reception should be handled in a unified way.
  - QC assumes it would be better to consider it an ACK.
  - NTT DCM wonders what the UE behaviour is for the other case (i.e. UL tx not performed due to measurement, thus no PHICH allocated). So in this case you have to assume a NACK.
  - Ericsson wonders how often this will happen ? If this happens frequently we need more retransmissions. Depends on configuration.
  - => Proposal is technically endorsed. Will see a text proposal in R2-081991

R2-081991: TP for UL HARQ handling for P-HICH in measurement gap

- Ericsson thinks there is a problem with how to capture this but the section also is updated by other CR's. Rapporteur will try to take care of this (moving/slight revision).
- => Agree on the text proposal

# **UL Bundling**

R2-081446: RAN2 aspects of the solutions for Subframe Bundling Alcatel-Lucent

- NSN thinks that 2 aspects are missing: how do the bundling proposals fit to TDD and HD ? None of the proposals seems to consider that ? ALU thinks that since all 3 proposals come from RAN1, they should all be feasible.
- Ericsson thinks it would be a bit premature to already discuss HD a lot since we only now introduce it in MAC. Ericsson thinks that at least alternatives 1 and 2 seems no specific problem for HD. Maybe alternative 3 would cause more problems for HD. TDD will need to be considered further for all proposals (e.g. in combination with only allocation 1 UL subframe).
- QC wonders if UL bundling is really required for TDD: if a cell is so big that you need bundling, the UL/DL switching times will be very large. So maybe you should not have bundling.
- CATT thinks UL bundling for TDD is much more complex. So we need more time to consider this. So CATT would like to wait for the conclusion from RAN1 first on TDD.
- Ericsson thinks that for TDD the same coverage problem exists for TDD than for FDD. Based on a first analysis, Ericsson does not see any major consequence for alternative 1 with TDD.
- Ericson assumes that in TDD the UL subframes do not have to be consequetive.
- Ericsson would prefer to have a decision in this meeting, and we will make it for TDD as well.

# R2-081465: Evaluation of TTI-Bundling Alternatives Ericsson

- Ericsson values the "used resources" higher than the "latency gain" potentially provided by proposal 2.
- Philips wonders whether there are also simulation result for 3 ? Ericsson has no results.
- R2-081768: UL coverage enhancement for VoIP transmission Philips, NXP Semiconductors

Discussion:

- Nokia prefers to have 1 HARQ number bundling for testing purposes. They think this would also be enough to meet the HARQ msg3 performance. For FDD Nokia was thinking about the value 4. (TDD FFS).
- Motorola wonders whether bundling is a static or a semi-static configuration ? Ericsson assumes it is a semi-static configuration configured with RRC. This is also reflected in R2-081326.
- QC thinks that this is an optimisation and would like to keep the #options low, so it would be good to limit to one value.
- Motorola wonders whether the fact that we would limit to 4 HARQ retrans would impact the decision.
- Samsung is happy to do an indicative show of hands.

 Ericsson assumes all alternatives work with 4 HARQ retrans. ALU indicates that for alternative 3 complexity is added with a flexible bundling.

For indication:

- "Alternative 1": [4]
- "Alternative 2": [2]
- "Alternative 3": [3]
- NSN indicates they did not vote because it is to early. NSN would like more time to think about especially the TDD aspect.
- QC wonders if we could agree to limit to a bundle of 4. Ericsson thinks we could wait for the further analysis.
- => Will defer until next meeting; hopefully take a decision at the coming meeting.

R2-081466: Text Proposal for TTI bundling Ericsson

# 5.1.1.3 DRX handling

E.g. when are CQI/SRS transmissions to be performed ?

# DRX control

R2-081603: Corrections on DRX LG Electronics Inc.

Proposal 1:

- Put "when configured" at the beginning of the cycled.
- Motorola things this is not strictly required. The procedure text should make this clear, not in the definition section.

=> Not needed (already clear in procedure text)

Proposal 2:

 It was questioned whether we should also add "SR pending time" or UE waiting for UL transmissions. Sunplus thinks it might be easier to define the "active time" as the time when UE is reading PDCCH.

=> Agreed (can revisit if we want to extend it even more); Later overruled by decisions on R2-081879

Proposal 3:

- QC things considering the timer "expired" at receipt of the MAC CE would also solve the problem. So the timer would be "considered expired" when the MAC CE is explained.
- Sunplus asks what happens if the inactivity timer is not running when the MAC CE is received ? Is the DRX short DRX cycle not started ? LG assumes there is little reason to sent the MAC CE when the inactivity timer is not running. Sunplus things that the MAC CE could also be received during on-duration without inactivity timer running.
- => Agreed with this change; later overruled by decisions on R2-081879
- R2-081680: Discussion on DRX cycle ASUSTeK => Noted
- R2-081879: DRX related correction and clarification Sunplus mMobile Inc. Proposal 1:
  - NSN thinks this was discussed in the past but does not remember the reason for not having it. Ericsson thinks if we allow this it is kind of abusing the fact that the UE is in principle only waiting for a retransmission.
  - Samsung think it would be simpler to say that the inactivity timer is started whenever a new transmission is received.
  - RIM thinks the DRX retransmission timer is never stopped. Sunplus thinks it is stopped when a PDCCH is received.
  - Panasonic thinks this was a deliberate choice: the UE already went to a kind of sleep mode but only wants to receive retransmissions.
  - Motorola thinks the current behaviour is indeed a bit strange.
  - Can we agree that whenever the UE receives a new grant it shall start the inactivity timer ?
  - Nokia agrees with Panasonic that the current behaviour is safer. Panasonic has no strong concerns and think it might make sense to always start the inactivity timer. UE has to follow the grant anyway.

- => Might Agree that: whenever the PDCCH indicates a new transmission (DL or UL), the UE starts or restarts the DRX Inactivity timer ?
- Continuation on Thursday: QC support the proposal
- NSN is not convinced about the need. Ericsson does not see a strong need but is fine if there
  is a majority. Panasonic sees a benefit for the simplification and supports this change. LG is
  also in favour of the change.
- => Agree that whenever the PDCCH indicates a new transmission (DL or UL), the UE starts or restarts the DRX Inactivity timer (include in QC CR).

Proposal 2:

- Proposal is to read the active time in the definition section as "the time the UE monitors the PDCCH".
- QC support this proposal.
- Ericsson likes the idea of simplification but would like to check the impact

After revisit on Thursday

- QC thinks it cleans up the definition. NSN thinks it would be a good idea.
- => Agree with the change in definition (include in QC CR).

Proposal 3:

- RIM thinks the MAC CE could give the option to go to ether long or short DRX.
- Chairman thought it would be ok to always go to short DRX. Motorola thought it would be more logical to go to a long DRX. Going to short DRX would only save a few ms of monitoring.
- Ericsson thinks that the MAC CE could e.g. be used when you have removed the PUCCH resources, and then bring the UE to the cycle it was in before.
- Samsung assumes that the inactivity timer can be short for VOIP, but for packet service with lower priority, the inactivity timer could be quite long for scheduling flexibility. Samsung thinks it would be nicest to have a simple behaviour.
- QC would like 1 behaviour when the MAC CE is sent. QC's understanding was that we would always go to the long DRX. NSN has no preference on what DRX to go to but it should only be 1. Ericsson thinks the original intend was to stay in the DRX you were.
- Motorola wonder if that was the intention, why not wait for the inactivity timer. Then the UE would anyway have gone to that DRX.
- IDT thinks it would be most logical to start the short DRX Cycle Timer.
- Huawei thinks this MAC CE enabled a quite long Inactivity timer. So Huawei is fine with going to the short cycle.
- There are 3 options:
- 1) Always go to short DRX
- 2) Always go to long DRX
- 3) Go to the "DRX you were in"
- On Thursday, QC reported that 9 companies are in favour of going to short DRX only (if configured). However still some companies would some other behaviour.
- NSN thinks we should not have so much discussion on such a detailed issue. NSN would be happy to follow the majority.
- => Agree that we will go to short DRX if configured.
- => [CB text proposal with 3 proposals in R2-081997]

# R2-081874: DRX clarification in TDD CATT, CMCC

Proposal 1

=> Agreed

Proposal 2

- QC wonders if this is a proposal only for TDD ? CATT thinks it could be applicable for FDD and TDD. Samsung sees no big problem to have this for FDD also.
- NSN is fine for TDD, but would like to keep the FDD part as part of the email discussion on RRC MAC parameters.
- => Agree for TDD; FDD FFS.

Proposal 3:

Chairman asks if proposal 2 is not sufficient ? If the "DRX starts offset" is configured to be a
DL subframe, then any subframe x times 10ms away is also always a DL subframe ? So it
would be sufficient to mandate that the "DRX Starts Offset" always points to a DL subframe.
So this is an implementation issue (eNB configuration).

- => Agree to include in the spec that the "DRX Starts Offset" should always be set to a DL subframe for TDD. CATT is requested to come with an RRC CR for the next meeting to clarify this.
- R2-081682: The operation of DRX Short Cycle Timer ASUSTeK
  - Sunplus thinks this is related to proposal 4 from their paper.
  - => Can also be discussed in the offline discussion.
- R2-081698: Activation of DRXHUAWEI
  - QC thinks we should try to stick to the principle to have no activation time in LTE. Huawei
    wonders how you would do this type of configuration then ? QC thinks it can be left to
    implementation. Huawei wonders how to achieve a synchronised view.
  - RIM sees some benefits of signalling an activation time. IDT thinks this could potentially use any solution that might come out of the email discussion on "synchronised reconfiguration".
  - Chairman wonders if there is a real problem ? The UE will try to deliver the RRC response message irrespective of the DRX and then the eNB knows the DRX.
  - NSN had the same proposal in the last meeting, but now thinks that it is not needed: the eNB can try all subframes he thinks the UE could be listening in.
  - Ericsson thinks that for DRX the eNB could ensure that the patterns are multiples and only
    assume the longer until the shorter has been confirmed.
  - Samsung thinks the desynchronisation is a quite rare case and there are solutions to recover.
  - => Noted; No large need is seen
- R2-081868: Go to Long Sleep Command for LTE DRX Research In Motion
  - Is related to the offline discussion.
  - Huawei wonders when one command would be used, and when you would use the short command ? Huawei sees no use for 2 commands since there would be only 1 situation in which you use it. This is also the Ericsson view.
  - => Can be considered as part of the offline discussion

# PUCCH resources

R2-081533: PUCCH handling during DRX Samsung

Proposal 1:

- NSN thinks if you have big traffic, the on-duration will be longer and you can sent the CQI during on-duration. NSN does not like to reserve PUCCH resources when you are not sure they will be used. NSN thinks today it is clear in the stage-2 that you would only sent it during on duration.
- Ericsson thinks that NSN can still achieve its goal with the Samsung proposal by only configuring CQI resources in the on-duration. So it becomes a configuration issue.
- RIM sees some benefits for the proposal.
- NSN thinks we can still always have the aperiodic ones.
- Samsung thinks there is no perfect solution, and agrees it can be solved with the aperiodic CQI. Which one is better is probably depending on the scenario. If you expect heavy traffic then the active period could be quite long.
- NSN thinks the probability is larger to end up with unused PUCCH resources with this
  proposed solution. It is true that heavy DL traffic will normally also result in quite some UL
  traffic.
- NTT DCM would prefer to have the possibility not to totally depend on polling, so would support the proposal. They think the NSN concern can be addressed by only configuring the resources during the on-duration. Panasonic agrees with this.
- NSN is fine as long as the configuration allows the possibility to only configure the PUCCH in on-duration.
- => Agree that CQI is sent during "active time", but it shall be possible to configure this such that it results in only periodic CQI during the on-duration. (So AND function between RRC configuration and the "active time")

=> Samsung will bring a corresponding RRC CR that enables this behaviour for the next meeting Proposal 2:

- Samsung likes to align UL traffic and SRS but not to make the proposal to complex. RIM thinks it is a waste to transmit SRS also when there is only DL activity. Samsung agrees the

solution is not perfect, but we should also consider simplicity. RIM thinks maybe alternative trade-offs between alignment and simplicity are possible.

- LG thinks that UL SRS is also used for UL TA, so also in case of DL activity only this is required.
- Panasonic indicates that currently the active time does not include the PDCCH reading time
  used for UL retransmission. Is it the intention of Samsung to also include this time. Samsung
  thinks this can depend on whatever the outcome of the offline discussion is.
- => Can agree to this as a starting point
- => Will see MAC text proposals in R2-081993
- R2-081993: TP for PUCCH resource handling during DRX
  - QC thinks there could be better sections to put this. Samsung admits they could not really find a good section and is fine if the rapporteur would move it.
  - RIM thinks we could talk about "if a periodical CQI is configured for this TTI" instead of mentioning the PUCCH resource.
  - Ericsson thinks we should indicate to L1 to transmit the CQI.
  - => Agreed with text proposal but change to "if periodical CQI is configured for this TTI", "if SRS is configured for this TTI" and "indicate to L1 to transmit the CQI"
- R2-081866: Some Details on CQI Transmission during DRX Research In Motion
  - Proposal 2 already covered in previous discussions.
  - Proposal 1 proposes one more CQI reporting, i.e. the one just before the on-duration.
  - IDT thinks an alternative would be to use the aperiodic immediately at the beginning. RIM would prefer not to rely purely on aperiodic.
  - NSN thinks that if we start to try this, why do we even have the aperiodic at all. Panasonic
    agrees with NSN.
  - Motorola thinks functionally this behaviour is already possible (but within the on-duration)
  - => No support for proposal 1
- R2-081875: CQI and SRS transmission during DRX in TDD CATT
  - So taken previous agreements into account, the proposal would be that the CQI is transmitted when configured in any UL subframe part of a frame which overlaps with the active time.
  - Motorola wonders why in figure 4 you would send the CQI in 2 subsequent UL subframes ? CATT explains that figure 4 only indicates the subframes in which UL CQI could be possible. It still depends on RRC configuration for which UL subframes actually PUCCH resources are configured.
  - CATT clarifies that if the on-duration would collide with the start of a radio frame, then no CQI
    opportunities can be configured before the on-duration.
  - QC does not understand the first arrows in figure 4. Why is this UL frame available for CQI transmission ?

Return on Thursday:

- Proposal is still to agree on: "CQI is transmitted when configured in any UL subframe part of a frame which overlaps with the active time."
- Samsung is a bit hesitant. QC agrees that this "looking a radio frames" really adds something.
- We agree that something needs to be done because saying "CQI is transmitted during active time" will not work for HD and TDD.
- Would be good to have a common solution for HD and TDD.
- => Allow one more meeting GJLISTAGENDA

R2-081867: SRS Transmission Timing during DRX Research In Motion Proposal 1:

- NSN wonders if this means linking the SRS to SR ? So what is meant "anticipation" ?
- It was remarked that current agreement on SRS in RAN1 is periodic sending. So how can proposal 1 work ?
- Ericsson wonders if you have to delay the SR, because you first need to send the SRS ?
- NTT DCM also has concerns with this proposal: eNB should be able to know when the UE is going to transmit the SRS so it cannot just be a UE decision.

Proposal 2:

 End time suggested is probably ok since we agreed that CQI would be transmitted during active time.

Proposal 3:

- Motorola wonders how you can have a highly mobile UE and long DRX ? This seems not reasonable.
- Proposal 4:
- Implementation issue
- => Contribution is noted

# 5.1.1.4 QoS

E.g. how to specify the guidelines/constraints/requirements for the UL logical channel prioritisation (including results of email discussion [Ericsson])?

R2-081456: Report from the email discussion on Logical Channel Prioritisation Requirements for 36.321 Ericsson (Rapporteur)

=> Noted

R2-081887: Analysis of the requirements for logical channel prioritization Ericsson

- Figure 1 shows a 16% overhead difference at 196kbps between enforcing it at every TTI or over 2 TTI's.
- QC wonders about Req1&4: don't they conflict ? Which requirement takes precendence ? Ericsson thinks requirement 4 has the highest priority. QC is wondering whether a minimum segment size could be defined so that the UE does not sent a segment of 4 bytes. Ericsson thinks this could be a potential optimisation.
- LG thinks that stage-3 text is normally intending predictable behaviour. But now we seems to allow a lot of UE implementation freedom. So why do we need to define anything in the stage-3 ? E.g. outcome of requirement 1 is not predictable UE behaviour. Ericsson would like to have some requirement on avoiding unnecessary segmentation. Detailed text can be discussed. So e.g. exclude PBR enforcement per TTI.
- IPW is wondering whether "not-strictly enforced" means that it is not testeable ? Do we have to specify it at all in the spec then ? Ericsson assumes indeed that these requirements are not testeable since there is no normative text in the spec.

Proposal 1:

- Ericsson clarifies this is addressing a per-RB requirement
- LG proposes a 0-PBR. Motorola wonders what this means ? LG explains it means that the LCG will not allocate any resources to this RB in the first round.

Requirement 1:

 Samsung agrees that this type of requirement is needed. Ericsson would like to emphasize segmentation avoidance (e.g. no enforcement per TTI is allowed).

Requirement 2:

- IDT wonders how, if it is not testable, we can ensure that starvation is avoided ? Ericsson would like to leave it to UE implementation how to enforce this. (In the email discussion it turned out very difficult to come to a clear requirement).
- Motorola thinks that is a general problem. So we should first focus on formulations.
- It is the proposal not to have proposal 2 & 3 as part of the LCP.
- It was clarified that if the UL grant is higher than the sum of the PBR's for a longer period fo time, there is no reason to limit any RB to the PBR.
- IPW thinks that if we specify it over a longer period, this could be testeable. Ericsson would be fine to see if RAN5 could make a testcase. Ericsson thinks RAN5 could potentially make testcases to check if the UE meets the "guidelines".
- IPW thinks it is better to specify a requirement over a long time. Ericsson indicates that there
  were already 2 attempts to try to achieve this (tocken bucket & "shall meet the PBR over a
  certain time"). E.g. on the second approach, companies still commented it could only roughly
  be met. So then it is probably better to only have a guideline approach.
- QC supports a "guideline approach" for the PBR. Panasonic also supports this guideline approach.
- Huawei would like to see test cases for PBR at some point of time. However this should be possible based on guidelines
- Motorola thinks that if guidelines can be tested by RAN5, then why not do the real work in RAN2. If RAN5 can test something then it is a requirement for the UE not a guideline.