TSG-RAN Working Group 3 meeting #8
Abiko, Japan, 25-29 October 1999

TSGR3#7(99)d63

Agenda Item: 3

Source: Secretary

Title: Draft Minutes of Meeting #7

Document for: Approval

3GPP TSG RAN Working Group 3 Meeting #7
Sophia Antipolis, France (20-24 September 1999)

As usual, this report is structured according to the agenda, and not according to the order of the discussion. In some cases, the agenda item under which a contribution was discovered is not clear, so the structure of the report is non-unique. A summary of the Change Requests approved at the meeting for submission to TSG RAN plenary is included in Annex A. The body of the report covers decisions and discussions held in plenary sessions, with the SWG reports included in Annex B and Annex C (see agenda item 23 for the discussion on these reports, and ratification of the SWG decisions). *It should be noted that where an agenda item is marked as having been discussed in a SWG, this does not indicate whether or not the SWG had time to treat it, but that it is covered in a SWG report.*

1 Opening of the meeting

The Chairman, Per Willars (Ericsson) opened the meeting at 9:20.

2 Approval of the Agenda

TSGR3#7(99)a94 'Draft Agenda' (Chairman) was presented by the Chairman. It was proposed to hold the first discussions on the principles for error handling in the Iu SWG, and then to revisit it in plenary. It was noted that many of our specifications are due for completion at this meeting. **The document was approved.**

3 Approval of minutes from last meeting

TSGR3#7(99)a95 'Draft Minutes of RAN3#6' (Secretary) was presented by the Secretary, Richard Townend (BT). He reported that he had made two corrections (shown with change marks) since the email distribution. No comments from other companies had been received. **The document was approved.**

4 Letters / Reports from other groups

TSGR3#7(99)a96 'LS to R2, R3 & R4 on Power Control Issues' (R1) was **assigned to the Iub/r SWG**.

TSGR3#7(99)b12 'LS on L1 Timing Issues' (R1) was presented by the Chairman. The LS made it clear that we need a procedure for adjustement of chip offset. **The document was noted.**

TSGR3#7(99)b13 'LS on outer loop power control' (R1) was presented by Gert-Jan van Lieshout (Ericsson). Ericsson commented that if we did not agree with the principle of uplink outer loop power control, we should reply. **The document was noted.**

TSGR3#7(99)b14 'LS on power control limits' (R1) was presented by Fabio Longoni (Nokia). Ericsson proposed that we should reply that the intention is to place limits on the inner loop power control, but we should be happy for R1 to define how the values are signalled. Nokia suggested that as the signalling was internal to Iub, it was a RAN3 decision. It was emphasised that it must be defined,

so that Node B can act on it. **The document was assigned to the Iub/r SWG, and Fabio will draft a response** (tdoc c82).

TSGR3#7(99)b15 'LS on Support of Speech Service in RAN' (R1) was presented by Alain Maupin (Ericsson). **The document was noted.**

TSGR3#7(99)b16 'LS on Support of Speech Service in RAN for FDD' (R1) was presented by Alain Maupin (Ericsson). Nokia commented that the only issue for RAN3 was the need for a parameter to initialise the blind format detection – they have a contribution on this. **The document was noted.**

TSGR3#7(99)b17 'Answer to the LS about TDD synchronisation methods' (R1) was presented by the Chairman. **The document was noted.**

TSGR3#7(99)a98 'LS on length of SFN' (R2) was presented by the Vice-Chairman, Jean-Marie Calmel (Nortel Networks). **The document was noted.**

TSGR3#7(99)a99 'Reply to LS from R1 on power control issues' (R2) was presented by the Vice-Chairman. **The document was noted.**

TSGR3#7(99)b00 'LS to R3 on overall delay budget' (R2) was presented by the Chairman. **The document was noted.** When we have more information on the delay budget, we will send it to RAN2.

TSGR3#7(99)b01 'Response to LS on Ciphering Mechanisms in case of multiple
presented by Pierre Lescuyer (Nortel Networks). **The document was noted.**

TSGR3#7(99)a97 'Ciphering in case of multiple RABs' (S3) was presented by Atte Länsisalmi (Nokia). It reports that there is no requirement to provide ciphering on a per-RAB basis. **The document was noted. It was agreed to send an LS to R2 and S3 indicating that we would not support per-RAB ciphering in UTRAN Iu signalling, Richard Townend (BT) agreed to draft it.**

TSGR3#7(99)b02 LS to clarify transmission of variable-rate codec mode commands on the Iu interface' (R2) was presented by Alain Maupin (Ericsson). It was noted that we had already indicated that we are working on it, and that there would be more discussions in the Iu SWG. **Following that discussion, an answer will be sent, Alain agreed to draft it.**

TSGR3#7(99)b07 'Transmission of variable-rate codec mode commands on the Iu Interface' (S4) was presented by Alain Maupin (Ericsson). **The response to R2 will be copied to S4, and TFO will be included.**

TSGR3#7(99)b03 'LS to RAN WG3 on SMS cell broadcast' (R2) was presented by Stawros Orkopoulos (Mannesmann Mobilfunk). It was commented that R3 had already sent an LS to S2 asking them to reconsider their architecture. Discussion was held together with b19.

TSGR3#7(99)b19 'LS on CBS Functionality and Responsibility' was presented by the Secretary. There was some confusion as the solution in the T2 LS differs from the one in the R2 LS. It was thought that there was also another LS on this subject coming from S2. Nokia commented that it appeared that the work needed on Iu was probably quite small. Nortel commented that R2 indicated that this was not being carried over Iu, and that this is actually a new logical interface. Further discussions on Cell Broadcast Service and its architecture continued with the next two documents.

TSGR3#7(99)c86 'LS on CBS Functionality and Responsibility' (N1) was presented by Gert-Jan van Lieshout (Ericsson). **The document was noted.**

TSGR3#7(99)c91 'LS on Common Communication Mechanism to be used by the Cell Broadcast
Stawros Orkopoulos (Mannesmann Mobilfunk). The Chairman stated that as Iu was defined as being between RNC and CN, this will be on Iu. Ericsson asked whether the RNC really had to terminate the application protocol, but it was noted that otherwise we would only need to provide a TCP/IP (or UDP/IP) service to the UE (which we are already capable of). BT suggested that this liaison meant that there was a requirement for another plane in the Iu protocol, specified as the bearer (at least up to the IP layer, and maybe including both TCP and UDP to avoid a

gap in the specification). Nokia stated that as we already had all the necessary protocols in the stack, we could probably integrate this into our specifications with a minimum of effort. There was some debate about whether the higher layer protocols should fall into this group, as we are responsible for the services offered by UTRAN to the CN over the Iu interface, but have little or no experience of cell broadcast. Nortel felt that they should be in RAN3, as conceptually this is very similar to the RAB service (in terms of mapping to radio protocols). Ericsson supported this, as we need to ensure that there is a need to ensure that the protocols have sufficient information to allow the mapping in the RNC. Nokia expressed some sympathy for this view, but felt that this could be trusted to the N and T groups. Ericsson felt that we should all study this before the next meeting. **The Chairman will report SMS Cell Broadcast to TSG-RAN as an open issue for RAN3.**

TSGR3#7(99)b04 'Report on Location Services' (R2) was presented by the Secretary. Ericsson commented that most of the report is based on OTDOA, and so there is a direct relation to the Node Sync procedure in this group. If we have limits on accuracy, we should inform RAN2, or else there is a danger that the solution may not work. It was also commented that in places it was confusing how the functional split worked. Nortel suggested that we would need to have a good idea of the periodicity of the information so that we could decide between in-band or out-band signalling. It was also noted that there are many new requirements on our interfaces, and it was proposed to introduce an ad hoc group to discuss the subject – there was little support for this. Nokia thought that it was possible that SA2 would decide that LCS should only be specified at Stage 2 for R99, except on the radio interfaces. The Chairman will call the R2 Chairman to tell him that R3 is not currently doing any work on positioning.

TSGR3#7(99)b05 'Reply to LS on Timing Advance for TDD' (R2) was presented by Massimo Italtel). Nokia commented that under point 2, it was indicated that it was possible to handle this entirely within the Node B, and then under 3, they state that there is always a need for interaction with RRC (in RNC) – they felt that it was not clear whether timing adjustment was always done at RRC level (even for DCHs). Nortel and the Chairman both thought that R2 was only considering one method, i.e. using RRC. **The document was noted.**

TSGR3#7(99)b18 'Response to LS "MExE Support of QoS negotiation' (S2) was presented by the Secretary. **The document was noted.**

TSGR3#7(99)b11 'LS to R3 on UMTS 25.832, Manifestations of Handover and SRNS Relocation v.2.1.1' (R1) was presented by the Chairman. **The document was noted.**

TSGR3#7(99)b06 'LS on support of speech service in RAN' (S4) was presented by Alain Maupin (Ericsson). Ericsson noted that we needed to decide whether we agree to a joint group with R1,2,3 & S4 – it was thought that this will be an email group. There were no objections to this. The requirements in the LS will be considered in the Iu SWG. **The document was noted.**

TSGR3#7(99)b08 'On the format of AMR speech data over the Iu frames' (S4) was presented by Alain Maupin (Ericsson). It was felt by the Chairman that as our protocols are not AMR-specific, that S4 should specify the mapping. **It was agreed to include an answer on this in the LS that Alain is drafting.**

TSGR3#7(99)b09 'LS on Uplink CN Layer 3 message numbering' (N1) was presented by Atte Länsisalmi (Nokia). It was not thought that there was anything for RAN3 to do. **The document was noted.**

TSGR3#7(99)b10 'Response to LS on MExE support of QoS negotiation and handover notifications' was presented by the Chairman. **The document was noted.**

TSGR3#7(99)b21 'Reply to Liaison on TS25.442 UTRAN Implementation Specific O&M Transport' (SA5) was presented by Stephan Recker (Mannesmann Mobilfunk). Ericsson commented that the requirement on RNC and Node B to carry the signalling is dependent on the co-located equipment signalling being carried over IP. Vodafone explained that they were not referring to signalling between co-located equipment and Node B. **The document was assigned to the Iub/r SWG.**

TSGR3#7(99)b22 'LS on I3.05 – Node B O&M Functional Description' (S5) was presented by Stephan Recker (Mannesmann Mobilfunk). Ericsson felt that the goal of I3.05 was to decide the

need not be any relation…". On the subject of the RRC release, the issue is which entity is responsible for initiating it. **This may have some issues for the Iu SWG, to whom the document is assigned.**

TSGR3#7(99)b25 'Response to the LS on LA concept' (S2) was presented by the Chairman. **The document was noted.**

TSGR3#7(99)b26 'LS on UMTS and RAB parameter value ranges and granularity' (S2) was presented by Nicolas Drevon (Alcatel). The attachment was missing – once it had been located, it was assigned the number c90, and **allocated to the Iu SWG.**

TSGR3#7(99)b27 'Response LS on clarification of RAB sub-flows concept and associated definitions' (S2) was presented by the Chairman. **The document was noted.**

TSGR3#7(99)b28 'Response liaison on RAB requirements for CS data and architecture for CS data and architecture for CS data services' (S2) was presented by Alain Maupin (Ericsson). **The document was noted.**

TSGR3#7(99)b29 'SRNS Relocation and Real Time Handover' (S2) was presented by the Secretary. **It was agreed to start the detailed discussion in the Iu SWG.**

TSGR3#7(99)c87 'LS on L3 segmentation' (N1) was presented by Kalle Ahmavaara (Nokia). It was noted that we don't use MTP3, we use MTP3b, which doesn't have such a low limit (about 4k octets). Siemens asked about the limits of SCTP, which has no segmentation. Nokia thought that SCTP should have a segmentation to cope with different transports under the IP layer. **It was agreed to draft a response indicating that we do not have the same limitation as GSM. Atte Länsisalmi (Nokia) agreed to draft it.**

TSGR3#7(99)c88 'Response to the LS on Location Area Concept' (N1) was presented by Kalle Ahmavaara (Nokia). **The document was noted.**

TSGR3#7(99)c89 'LS on Classmark Split' (N1) was presented by Alain Maupin (Ericsson). Nokia felt that most of the answers were in the domain of R2 – the Chairman proposed that we should acknowledge that we do not see any impact on our specifications. Ericsson stated that there may be some aspects related to this that need to be considered when we discuss the inter-system handover case, and especially the transparent containers. Nokia stated that it is up to R2 how we get the information, and then up to us to move it to the new radio system. Ericsson wanted to study this, to make sure that there are no impacts on our specifications. **Contributions are invited to the next meeting.**

Ehrstedt (Ericsson). He noted that 25.832 had not been approved as indicated, but it was likely to be at this meeting, so he did not propose correcting this. **The document was approved.**

5.2 Appointment of representatives/editors

It was announced that Jean-Marie Calmel (Nortel Networks) would be handing over the editorship of 25.401 to Pierre Lescuyer (Nortel Networks). They will work together to ensure continuity over the handover.

5.3 Future meeting dates and hosting

Companies were urged to consider hosting meetings, especially early next year.

5.4 SA coordination group planning

The Chairman stated that the group considering LCS had had some discussions. He had explained to the group that R3 had not been working on this, and that R3 would find it difficult to meet much of this in R99.

The Vice-Chairman stated that he had been following the CS/PS Architecture group. He had inputted the R3 workplan, and it was felt that most impacts would be to 25.413 and 25.415; one open issue is related to CS data.

6 General UTRAN Architecture

6.1 UTRAN Architecture (25.401)

TSGR3#7(99)a77 'UMTS 25.401 UTRAN overall description' (Editor) was presented by Jean-Marie Calmel (Nortel Networks). Ericsson commented that working assumptions on CFN and SFN could be accepted, as this has now been agreed. In 9.6.2, they felt that the explanation after modulo 256 should be removed. Under 9.8.3, they thought there should be a rounding to the nearest 256 chip boundary. It was further commented that the current text was in line with the decisions of the last meeting. Nokia thought that the length of CFN for paging channel was shorter. As there are contributions on this topic, it was decided to focus on the editor's changes. **The document was approved.**

As we have now decided that SFN is 12 bits, the editor was asked to remove the references to this being a working assumption.

The editor's list of open issues was briefly discussed – chapter 7 (functions) needs review. The Chairman proposed that the section should be drastically shortened and updated. Chapter 9 needs some high-level introductory text, and it should be noted that it is an informative overview (Stage 2 description).

It was agreed to form a drafting ad hoc to consider the list of functions (and descriptions).

TSGR3#7(99)b44 'CN domain indicator and TS 23.121 requirements' (Motorola) was presented by Kethees Ketheesan (Motorola). Lucent and Ericsson asked whether the CN domain identifier was still used for routing – they both thought that the protocol discriminator was now used. Motorola thought that this was used for something else. It was asked whether this is really a RAN2 issue. Lucent asked whether this contribution had also been put into other groups. Motorola replied that they had put it into R3 as the mechanism is described in 25.401. A LS will be sent to R2 containing the document (c84) and asking R2 to decide on it, Kethees will draft it. It was decided to hold an ad hoc review of the draft LS so that it could be sent urgently; at the ad hoc, **it was agreed to send the LS to R2.**

6.2 Terminology (25.401)

No Discussions.

6.3 Synchronisation (25.401)

TSGR3#7(99)c76 'Node Synchronisation Clarifications' (Ericsson, Alcatel and NTT DoCoMo) was presented by Peter Lundh (Ericsson). Nortel pointed out that this was contradicting the agreement from the sync ad hoc. It had been agreed that if it was to be a high priority VC, this was an implementation issue. Nokia agreed, and felt that it would not be enough to include this in the 25.401, it would also need another specification to specify the protocols. Ericsson felt that their proposal clarifies the meaning of high priority VC. Nortel stated that not all companies had agreed to the use of AAL0. Alcatel said that there would just be one AAL2 connection in the VC, but Ericsson disagreed with this. Nortel pointed out that until we have done the coding, we cannot be sure that the frame will not exceed one ATM cell, and then there is a requirement for some SAR. Nokia asked whether the performance of the high priority VC would be specified. Ericsson replied that the decision whether to use this was for the operator. Ericsson stated that it was not the intention of the contribution to mandate the use of AAL0. Nokia stated that it had been agreed in the ad hoc not to mention any new transport solutions, or explicit mention of AAL0; they wondered if there were any new arguments.

As there was no consensus, the paper was left for off-line discussion.

TSGR3#7(99)b81 'TDD Synchronisation on air' (Italtel, Siemens) was presented by Flavio Piolini (Italtel). It was clarified that this was intended to be included in the section on TDD synchronisation (9.7.2). Nokia asked whether we need an idle period in the transmission to make it simpler for the measurements to be made – Italtel replied that the initial measurements were made when it was out of service. However, for subsequent measurements this may be a problem – Italtel agree that there should not be interference, but this is an issue for R1. Vodafone asked whether we need to reserve a period in the UL frame structure for it to take the measurement, or whether it uses idle timeslots. Italtel replied that the Node B can schedule measurements based on the traffic situation. Ericsson commented that 9.7.2 was a parameter description section. They also felt that the beginning of section 2 had a contradiction concerning when a Node B was master or reference. Italtel explained that an already synchronised Node B can act as master (i.e. each Node B has a master). Only those Nodes B that are externally synchronised will be reference Nodes B. Vodafone felt that there was no need to refer to external reference, as one of the Nodes B could act as a free-running master. Motorola asked whether there was a limit to the number of hops that could be made, and what the limits on performance were. Italtel felt that this was an issue for WG4, and that there was a limit based on clock stability. **The document was approved, with a note to state that it was dependent on WG1 and 4 confirmation – the text is included in a new sub-chapter of section 9.12. However the sequences (i.e. everything after the paragraph after figure 1) were included in 25.931 instead of in 25.401 (with the figures redrawn to match the conventions).**

TSGR3#7(99)b82 'TDD Synchronisation by a GPS receiver via the standardised Synchronisation Port' (Italtel, Siemens) was presented by Flavio Piolini (Italtel). **The document was approved.**

TSGR3#7(99)b83 'Node B states during TDD Synchronisation procedure on the air' (Italtel, Siemens) was presented by Flavio Piolini (Italtel). It was clarified that the information was only intended to be an informative description from the perspective of Node B. The Chairman asked why this could not be in 25.931 – Italtel stated that this was not an information flow. Nortel suggested that we either should have a state-based modelling for all our protocols or we should describe this in the same way that we use for other synchronised procedures. Ericsson suggested that if this is protocol information, it should be included in NBAP specification, but also were not sure what it added. **This will be further discussed in the Iub/r SWG.**

TSGR3#7(99)c77 'LS to WG1: Using 8 LSB of SFN in each BCH radio frame' (Ericsson) was presented by Peter Lundh (Ericsson). Nortel felt that this was more of a RAN2 issue, as there is no impact on RAN3 protocols. Nokia agreed with Nortel, and stated that the encoding on BCH was for discussion between R1 and R2. **The document was not approved.**

TSGR3#7(99)c78 'Radio Synchronisation Timing Diagram for 25.401' (Ericsson) was presented by Peter Lundh (Ericsson). It was clarified that it did not add any technical changes – Nortel did not

understand the UL and DL CFN and CFN_2. Ericsson stated that the two cells belong to different Nodes B; Nortel believed that OFF should have multiple values in macrodiversity, but there should only be one CFN. Ericsson stated that there was basically only one CFN. Nokia proposed that the diagram shows the frames of a certain DPCH, and each is associated to a CFN number. **With this change, the document was approved.**

6.4 Manifestations of Handover and SRNS Relocation (25.832)

TSGR3#7(99)a90 'UMTS 25.832, Manifestations of Handover and SRNS Relocation' (Editor) was presented by Richard Townend (BT). It was noted that there is one Iub interface missing from step (vi) of section 5.7. **With this change, the document was approved at version 2.4.0, and will be sent to TSG RAN for approval.**

6.5 Delay budget (Arc/3)

TSGR3#7(99)c05 'Study Item (Arc/3) 'Overall Delay Budget within the Access Stratum'' (Siemens, Italtel) was presented by Massimo Dell'Acqua (Italtel). He noted that in section 4.2 (the formula for UL Node B) it should read "0.015 *…". Ericsson asked why (in 4.4.1) the delay was 25msec rather than 20msec – Italtel replied that it came from a Vodafone contribution. Vodafone stated that it came from a look-ahead function. Nokia agreed that there is a 5msec look-ahead in the AMR codec. Alcatel asked why there is no AAL2 switching delay for PS services – Italtel answered that there is no switching on the Iu side (the reference to the DRNC is superfluous). Nokia asked whether the AAL2 multiplexing had been included in the 600µs, or was it additional – Italtel stated that this referred to internal transport within the node. Nokia stated that there is a trade-off between performance and capacity, and so we should be careful when specifying processing delays. They also feel that these delays are too small. Italtel stated that we were trying to guess the delay introduced by a general architecture (using present technology), rather than trying to constrain implementations.

The Chairman tried to refocus the discussion onto the purpose of the template – **it was agreed to establish a delay ad hoc in the evening; this would consider other contributions on the subject of delay.**

6.6 Ciphering

There are no contributions, but it is thought that the issue (ciphering of initial message to PS domain) has been cleared up in one of the CN groups.

6.7 Others

TSGR3#7(99)b43 'SCTP Evaluation' (Motorola) was presented by Keethes Ketheesan (Motorola). Nokia stated that while there may be no Q.AAL2 source code available, there are well tested SDLs, which also tell a lot about the protocol stability. Siemens stated that an Internet Draft was (according to the IETF) unsuitable for reference, other than as "work in progress". Motorola stated that it was possible to refer to Internet Drafts if marked as Work In Progress. They also commented that we had referred to Q.AAL2 when it was WIP – the Chairman pointed out that our specifications have been approved since then. Nortel pointed out that the heart of the debate is not procedural, but really about the acceptability of IP based signalling bearers. When asked for objections to it being ready for reference, Siemens objected as they feel that the SCTP specification is unstable. Motorola did not accept the comments. Ericsson proposed leaving the discussion until the end of the year. Nokia were concerned about the credibility of RAN3, as we had agreed to decide in September. Motorola were not happy to accept the rejection of the contribution based on a single objection, and agreed to prepare CRs during the week.

TSGR3#7(99)b42 'Proposed Principle on the Support for RRC Connection' (Fujitsu) was presented by Akinori Shimamura (Fujitsu). Ericsson agreed with the proposed handling, but had doubts about whether this should be included in 25.401. Nortel agreed, and suggested that as it was more relevant to the RRC protocol, it should be treated in RAN2 rather than RAN3. Siemens noted that R2 is producing a document on radio resource management, and felt that this would be best included there. **The document was noted.**

TSGR3#7(99)b31 ‘Call Trace’ (Motorola) was presented by Dennis Behrens (Motorola). Lucent asked whether there were any requirements for Node B initiated tracing, as the equivalent had been removed from GSM. Motorola pointed out that this is different, as the UTRAN is not instructing the CN to perform a trace. Ericsson asked what data would be traced – Motorola stated that it is implementation specific. BT asked how the Node B trace would work, when there was no permanent ID – Motorola stated that Node B trace was not necessarily call specific. There was concern expressed that what was proposed was different to the IMSI-trace that is specified in GSM. Motorola could not see the difference in the data that you would collect. T-Mobil could see two kinds of call trace – one to debug a specific Node B, and one to do network optimisation. They also wondered whether this could be covered by the existing measurement reporting in NBAP. The Chairman also wondered whether there might be also the case of tracing complaining subscribers. BT asked what the requirements were for Node B triggered trace; Nortel expressed concern about the feasibility of the “bottom up” approach. Lucent and Ericsson both expressed concern about the lack of requirements that should come from SA5. **The RANAP related proposals were assigned to the Iu SWG.** The Chairman asked whether we needed the possibility for the RNC to initiate the trace – some doubts were expressed about what should be measured, and where (if anywhere) this should be specified.

TSGR3#7(99)c50 ‘Allocation of DL Channelisation Code’ (Fujitsu) was presented by Akinori Shimamura (Fujitsu). Ericsson commented that figure 2 cannot occur, as RL deletion is a confirmed procedure. For the same reasons, Nortel did not understand what kind of inconsistency could occur between RNC and Node B. NEC stated that you might not know the failure reason. Nortel stated that there were some benefits by having the RNC doing the management. Ericsson stated that even if figure 2 were correct, the proposal would not solve the issue, and re-iterated that they felt that it was not an issue anyway. **The document was not accepted.**

7 General Protocol Principles

7.1 Compatibility and error handling principles

Treated in Iu SWG.

7.2 ASN.1 usage (Iu/7)

No Discussions.

7.3 Others

No Discussions.

8 Iu General Aspects

8.1 General Aspects and Principles of Iu interface (25.410)

Treated in Iu SWG.

8.2 Actions

Treated in Iu SWG.

8.3 Other contributions

Treated in Iu SWG.

8.4 Review specification

Treated in Iu SWG.

9 Iu User-plane protocols (25.415)

9.1 Contributions

Treated in Iu SWG.

9.2 Review specification

Treated in Iu SWG.

10 Iu signalling (RANAP) (25.413)

10.1 Study Items report and decision

Treated in Iu SWG.

10.2 Actions

Treated in Iu SWG.

10.3 Procedure specifications (freezing the list of procedures)

Treated in Iu SWG.

10.4 Message contents and parameter range

Treated in Iu SWG.

10.5 Review specification

Treated in Iu SWG.

10.6 Other issues

Treated in Iu SWG.

11 Iu Data Transport + Transport network control plane (25.414)

Treated in Iu SWG.

12 Iu signalling transport (25.412)

12.1 Evaluation of CTP

Covered elsewhere.

12.2 Others

No Discussions.

13 Iur / Iub General Aspects

13.1 General Aspects and principles of Iur interface (25.420)

Treated in Iub/r SWG.

13.2 General Aspects and Principles of Iub interface (25.430)

Treated in Iub/r SWG.

13.3 Review specifications

Treated in Iub/r SWG.

14 Iur/Iub User-plane protocols

14.1 Study item reports

Treated in Iub/r SWG.

14.2 Iur/Iub DCH data streams (25.427)

Treated in Iub/r SWG.

14.3 Iub CCH data streams (25.435)

Treated in Iub/r SWG.

14.4 Iur CCH data streams (25.425)

Treated in Iub/r SWG.

14.5 Review specifications

Treated in Iub/r SWG.

15 Iub signalling (NBAP) (25.433)

15.1 Study item reports

Treated in Iub/r SWG.

15.2 Contributions on general sections

Treated in Iub/r SWG.

15.3 Text, message and parameter proposals for NBAP procedures:

Treated in Iub/r SWG.

15.4 General parameter proposals

Treated in Iub/r SWG.

15.5 Review specification

Treated in Iub/r SWG.

15.6 Other issues

Treated in Iub/r SWG.

16 Iur signalling (RNSAP) (25.423)

16.1 Study item reports

Treated in Iub/r SWG.

16.2 Contributions on the general sections

Treated in Iub/r SWG.

16.3 Text, message and parameter proposals for RNSAP procedures

Treated in Iub/r SWG.

16.4 General parameter proposals

Treated in Iub/r SWG.

16.5 Review specification

Treated in Iub/r SWG.

16.6 Other issues

Treated in Iub/r SWG.

17 Iur Signalling transport (25.422)

17.1 Evaluation of CTP

Treated elsewhere.

17.2 Others

No Discussions.

18 Iub Signalling transport (25.432)

18.1 Iur/Iub Data transport + Transport network control plane

Treated in Iub/r SWG.

18.2 Iur/Iub DCH, transport layer (25.426)

Treated in Iub/r SWG.

18.3 Iub CCH, transport layer (25.434)

Treated in Iub/r SWG.

18.4 Iur CCH, transport layer (25.424)

Treated in Iub/r SWG.

18.5 Review specifications

Treated in Iub/r SWG.

19 Implementation specific O&M Transport (25.442)

19.1 Contributions

Treated in Iub/r SWG.

19.2 Review specification

Treated in Iub/r SWG.

20 Node B O&M Functional Descriptions (I3.05)

Treated in Iub/r SWG.

21 Layer 1 specifications (25.411, 25.421, 25.431)

TSGR3#7(99)b32 was replaced with b35.

TSGR3#7(99)b35 'CR to 25.431' (Motorola) was presented by Beena Connors (Motorola). Nortel asked why it only applied to Iub – Motorola responded that it was in response to the France Telecom contribution from RAN3#1. Motorola agreed that they could rephrase the CR to apply it to 25.411 and all interfaces. Nortel wanted some more technical discussion as they thought that this may only be a partial solution, and were not sure how SSCOP would react to a VC switch, as this technology handles switching at the ATM layer. Nokia wondered whether we should just rely on the work of other groups who are experts in this. Nortel stated that we would need to discuss how the redundancy of the nodes will be handled. Alcatel believed that the APS would be transparent to this, but Nortel stated that we would need to consider the synchronisation between redundant pairs. In general we will need to consider how nodes should react in failure situations. Nortel want to avoid multiple protection layers on top of each other – Motorola had assumed that we do not have application level protection. Nortel stated that mechanisms might be needed to handle redundant SSCOP entities, which would make this

proposal not necessary. Alcatel did not understand the Nortel concerns, as APS switches the transport below SSCOP in (?) 50msec. BT asked whether APS should be in the Layer 1 specification anyway – Nortel agreed, as it sits on top of ATM. So it should be included in signalling bearer and data transport specifications. **It was agreed to use APS, and it will be discussed off-line where it should be documented. Motorola will then generate the change requests.**

22 UTRAN Functions, signalling procedures (25.931)

22.1 Contributions on example functions, in line with 25.413, 25.423 and 25.433

No Discussions.

23 Reporting from SWGs

23.1 Iu SWG

TSGR3#7(99)d24 'Iu SWG Report'(Iu SWG Chairman) was presented by the SWG Chairman, Atte Länsisalmi (Nokia). **The document was approved, and all of the decisions were accepted.**

23.2 Iur/Iub SWG

TSGR3#7(99)d25 'Iub/r SWG Report' (Iub/r SWG Chairman) was presented by the Iub/r SWG Chairman, Per Willars (Ericsson). It was noted that Jean-Marie Calmel (Nortel Networks) had been acting as Chairman during this meeting.

It was noted during the presentation that document a86 was not set to version 0.3.0, but rather to 0.2.4.

Vodafone asked about how the version numbering for Frame Protocols fitted with the decisions taken on version numbering in the Iu SWG. It was clarified that the version number referred to was the UP version number, and not the CP version number (although it is carried in the CP). Nokia asked how this issue would be progressed – it was agreed to have a study item for the compatability handling of the User Plane protocols – Fabio Longoni (Nokia) will moderate this (unless otherwise agreed in the discussions). Nokia also asked whether the version information could be included in the RNSAP messages as discussed – Vodafone proposed leaving the issue open, until further clarification had been received. **It was agreed to include the Nokia proposal from c36 into NBAP and RNSAP as a working assumption, with the study item to continue the discussion.**

Vodafone stated that the measurement characteristics did not include an averaging type, as we were assuming that there was only one averaging type. **It was agreed to leave the text as it is, and if the outcome of the specification work was that there were several averaging types, then we would need to include a type.**

Vodafone (agenda item 20.1, document b21) stated that the conclusion was that no requirements could be added, but that was not an agreement! Some companies still wish to contribute on this subject.

Nokia (14.0, c40) proposed email approval for the draft text. They will send it out on Monday. They asked for clarification that the use of RL restore was only for out of sync – this was confirmed.

Ericsson (15.2, c32) clarified that it was for procedure errors where normal procedure handling is not sufficient to cover the failure.

With these changes, the document was approved, and the decisions were accepted.

24 Study items for future releases (25.831)

No Discussions.

25 Summary of versions to be sent to TSG RAN

TSGR3#7(99)d20 ’25.410’ (Editor) was presented by Richard Townend (BT). He noted that it had been pointed out to him that the ITUN layer from the SCTP stack was missing; it was agreed to add it. Telia asked about the quotes in figure 4.1, and what they meant. It was clarified that they were intended to convey that there is only one Iu interface, and that Iu-ps and Iu-cs are really just labels for the instances; **it was agreed to leave them in the figure**. In the same figure, the Chairman asked for the MSC to be changed to CS domain, and the SGSN to PS Domain; **this was agreed**. Accordingly, the sentence before the figure was changed so that it made no reference to the CN access point. **With these changes, the document was approved to 2.0.0, and sent to RAN Plenary for approval to v.3.0.0.**

TSGR3#7(99)d37 ’25.420’ (Editor) was presented by Kiran Thakare (Telecom Modus). It was agreed that in section 8, the modified protocol stack should be shown, and the two notes should be removed. T-Mobil asked what the editor’s notes about the logical model meant – it was clarified that it referred to one of the open issues. Fujitsu commented that the annexes should follow the history; this was not agreed.

Ericsson commented that in the Iu document, the SCCP references were included, and proposed that they should be included here also. It was proposed that the SCTP related references are removed from this document, as there is no detailed discussion on SCTP.

Siemens noted that there are some struck-out characters and some highlighted characters, which should be corrected.

Alcatel asked how it could be approved when there is no DSCH data port, and stated that they did not feel that it was ready for approval.

It was agreed to send to RAN as version 1.0.0, not agreed as recommended for approval, based on the list of open issues.

TSGR3#7(99)d40 ’25.430’ (Editor) was presented by Mick Wilson (Fujitsu). It was noted that the figure numbers needed updating. Nokia commented that at the end of chapter 7, the statement concerning use of AAL2 was not valid, and proposed that it should be removed. However, it was instead agreed to alter “transport channel” to read “RACH transport channel and one for each FACH

Alcatel stated that they were confused by the two types of control port in the Node B logical model, and how synchronisation was done between them. Nortel explained that this was done in the radio link setup procedure. It was also clarified that UE-specific signalling transport connections are not present on Iub.

Ericsson proposed that explicit references to Q.AAL2 and SSCOP should be removed, as they are not discussed.

With these changes, it was agreed to be updated to version 2.0.0, and sent to TSG RAN, but not recommended for approval to v.3.0.0, as there were concerns from Ericsson expressed about stability; both Siemens and Nokia disagreed, as they felt that it was less unstable than Iur.

TSGR3#7(99)d43 ’25.415’ (Editor) was presented by Alain Maupin (Ericsson). Nokia were unsure about whether the AAL-primitives should actually be SSAR-primitives. Ericsson stated that the SSAR can be deduced on RAB setup, based on the SDU size. Nokia stated that the primitives were named as AAL-primitive when SSAR was null, and in the general case the primitives were called SSAR-primitive. Nortel asked whether mention of AAL breached the independence of radio network layer, and transport layer. Ericsson replied that we needed to specify how the transport layer is used, and this was how the Iu group had decided to do it. Nokia stated that this was not the approach used in Iub and Iur, but that the frame structure would work anyway over other transport mechanisms. Nortel suggested that it should be included in the transport layer specification, so that we can define generic primitives to

use in this document. Nokia proposed moving this into an informative annex, but this was not agreed. **It was agreed to change the AAL-primitives to SSAR-primitives.** Nokia stated that the use of the spare bits should be defined, for example like the Iub/r protocols. The editor stated that this is part of the open item on error and exception handling. **It was agreed to add an annex listing the open issues.**

It was agreed that with the changes this document was agreed as version 2.0.0, and will be sent to the RAN plenary for approval.

TSGR3#7(99)d47 '25.427' (Editor) was presented by Fabio Longoni (Nokia). He noted that there was one other open issue mentioned in the SWG report, and he will import the text. For the other ones, the detailed text will be removed. The Chairman asked whether the Node B behaviour should be specified in the section 7.7. Nokia stated that we had not done this for other procedures. Nortel Networks noted that there were several hanging paragraphs (between a section heading and a subsection) in the document, and proposed that these should be cleared up. Alcatel asked where the Quality Estimate mapping had come from, and whether it had been approved somewhere. It was replied that it had been discussed in the Iub/r group.

It was agreed to set the version number to 2.0.0 (after the changes mentioned above), and recommend to RAN that it should be approved to v.3.0.0.

TSGR3#7(99)d44 '25.435' (Editor) was presented by Jean-Marie Calmel (Nortel Networks). Siemens asked for some changes to make the sentence concerning pilot bits read "pilot bits [FDD]…,or transmit data obtained by rate matching [TDD]." **This was agreed.** In addition, some other minor editorial corrections are required. **With these changes, it was agreed to update to version 2.0.0, and to recommend RAN plenary to approve to version 3.0.0.**

TSGR3#7(99)d46 '25.425' (Editor) was presented by Nicolas Drevon (Alcatel). There was some discussion about whether such a substantial editor's proposal could be approved without discussion. Nortel Networks proposed that coding and value range for all parameters is an open issue, and the document could then be approved. Siemens volunteered to provide information about USCH to the editor. It was commented that Figure 6 shows the FACH frame with Rx timing deviation, which makes no sense. **The document is not approved by this group, but will be sent to TSG RAN (including the editor's proposal).**

TSGR3#7(99)d45 '25.401' (Editor) was presented by Pierre Lescuyer (Nortel Networks). He then reported that there had been a proposal to move most of the synchronisation text into a technical report. Alcatel noted that the sections on inter-system handover had disappeared – Nortel replied that this document was intended to be a stage 2, and that this section was very detailed, and also dated back to before it had been agreed how the handover to GSM would be done. Nokia wondered whether the inter-system case is covered by the relocation section, and the details are now in the stage 3. Nokia commented that in the Node Sync it had never been agreed that it would actually speed up cell search for FDD, so the first sentence of the fourth paragraph is removed from 9.3 – the third paragraph will be discussed separately, but should be included as an editor's proposal.

It is agreed to remove all of Ch9, except 9.1 to a separate technical report, along with the annex on TDD sync port. Flavio Piolini (Italtel) will be the editor.

Siemens were concerned that USCH stacks were not included in the annex. Siemens objected to sending it to RAN for approval without USCH. The editor agreed to include this.

It was agreed to send the current version to RAN as 2.0.0, recommended for approval as 3.0.0.

TSGR3#7(99)d36 '25.442' (Editor) was presented by the Chairman. **It was accepted as v.2.0.0, and will be sent to RAN recommended for approval to v.3.0.0.**

26 Outgoing liaisons

TSGR3#7(99)d13 'LS on Adjustment Loop' (Telecom Modus) was presented. It was agreed to add "...for DL power drifting problem". Also, to add "...WG3 would also like R1 to clarify .....and the

Ericsson) was presented. **The document was approved.**

TSGR3#7(99)c85 'Support over Iu for Ciphering for Multiple RABs' (BT) was presented by Richard Townend (BT). Nokia commented that the ciphering was per-domain. Ericsson suggested that the signalling bearer should also be mentioned – this was not agreed. **The document was approved, with the change regarding domain.**

TSGR3#7(99)d16 'A draft LS to RAN1 regarding SSDT' (SSDT Ad Hoc) was presented by Kiran Thakare (Telecom Modus). Nortel Networks commented that RAN3 is actually studying SSDT, rather than making a specification. Ericsson proposed the following change to the first numbered point, so that the end states "i.e. to say activate ssdt irrespective of the number of radio links in the active set". Ericsson also proposed changing Tx power measurement to transmitted power measurement. They suggested changing the first sentence to state that we want an indication from both R1 and R2. **With these changes, the document was approved.**

TSGR3#7(99)d17 'Draft LS to R1 regarding Physical Channel Structure selection' (SSDT Ad Hoc) was presented by Kiran Thakare (Telecom Modus). **The document was approved.**

TSGR3#7(99)d30 'Proposed answer to LS from WG1 on power control limit' (Nokia) was presented. It was agreed to change such that it reads "RAN1 and RAN4 is kindly asked...", and it is sent to both R1 and R4. **With these changes, the document was approved.**

TSGR3#7(99)d31 'Proposed LS to WG1 and WG2 on the decoding of TFCI' (Nokia) was presented by Fabio Longoni (Nokia). It was changed to Cc to R2. **The document was approved.**

It was agreed that all other outgoing LSs would be approved by email after the meeting. They should be sent out on the email reflector on Monday, and if no comments had been received by Friday, they should be sent to the secretary for forwarding to other groups.

27 Next meeting (agenda etc)

No discussions.

28 Any other business

Change Requests for Approval

TSGR3#7(99)c74 'Iub NBAP Signalling Bearer' (Ericsson) was presented by Björn Ehrstedt (Ericsson). **The document was approved.** Björn will send it to David Williams (3GPP Support).

TSGR3#7(99)d03-09 (Motorola) were presented by Beena Connors (Motorola). It was agreed to change the first sentence to read "is supported at the ATM layer". The second sentence is removed.

Annex A – Summary of Change Requests

Document No.	CR to:	Discussed	Approved (As presented)	Approved (With Changes)
TSGR3#7(99)c08	25.414	✓	✓	
TSGR3#7(99)c74	25.432	✓	✓	
TSGR3#7(99)c75	25.414	✓	✓	
TSGR3#7(99)c93	25.412	*	*	*
TSGR3#7(99)c94	25.422	*	*	*
TSGR3#7(99)c95	25.426	*	*	*
TSGR3#7(99)d03	25.414	✓		✓
TSGR3#7(99)d04	25.412	✓		✓
TSGR3#7(99)d05	25.422	✓		✓
TSGR3#7(99)d06	25.426	✓		✓
TSGR3#7(99)d07	25.424	✓		✓
TSGR3#7(99)d08	25.434	✓		✓
TSGR3#7(99)d09	25.432	✓		✓

* The CRs related to SCTP will be approved by email, with comments due before Friday 1 October.

Annex B – Iu SWG Report

TSG-RAN Working Group 3, meeting #7 ***TSGR3#7(99)D24***
Sophia Antipolis, France, 20-24 September 1999
Source: Iu SWG Chairman
Title: Summary of Iu SWG

Introduction

This document presents the report from Iu SWG meeting held on September 21-23 1999 during TSG RAN WG3 meeting #7 in Sophia Antipolis, France (ETSI Headquarters). The meeting was chaired and the report prepared by Atte Länsisalmi. The report is in line with the agenda that was agreed in the opening plenary for the meeting. The order does not correspond necessarily to the order the items were handled. The LS handling is reported as the last item of this report.

8 Iu General Aspects

8.1 General Aspects and Principles of Iu interface (25.410), A78, B74;

Tdoc A78 "25.410 v1.0.0" was presented by the editor, Richard Townend of BT. The document contains the modifications agreed in the previous meeting. The document was approved without any comments.
Tdoc B74 "Editors proposal for 25.410" was presented by the editor, Richard Townend of BT. Richard reported that some proposed changes are according to the editors meeting held during meeting #6. The following was agreed:

- In Iu Capabilities section 4.4:
  - Item "A/Gb IWU" moved to section Specification Objectives, and we call it "Interworking to GSM CN"
  - mechanisms for resource reservation for packet data streams is kept in the capabilities. This is because it was understood that S2 who has set the requirement has also participated in the design of the U-plane transport for packet data.
  - The location services item: We have to return into after discussion on various items we have for this meeting on Location Information.
- Section: 7.3: title format needs to be aligned with other titles.
- Section: 7.5: Iu user plane protocol is in singular, not in plural
- Section: 7.8: mention above the figure that 25.410 covers the whole Iu.
- Section: 4.5.1: It was agreed to split the section to TNCP for C-Plane (with the current text) and TNCP for U-plane, which contains the CS and PS subsections. Text below figures 6.1 and 6.2 is placed in these sections. Richard will draft this with the help of Alain.
- O&M needs to be added to definitions.
- All occurrences of ALCAP will be removed.
- All other sections agreed without modifications

The document was agreed as version 1.0.1 of 25.410, and it is used as basis of the discussions.

8.2 Actions:

List of functions over Iu (Outcome of A00 (Nokia) and A59 (Ericsson)) **--B49**
Tdoc B49 "Functional Division between UTRAN and CN contribution" was presented by Alain Maupin of Ericsson. No detailed presentation was needed, because the main part of the document was already available in the previous meeting. Only changes compared to the previous version were presented.
The proposed text for Iu functions was agreed with the following changes:

- Editorial in 2.5.2 some missing letters: "i" from "includes" and "s" missing from "used".
- Notes removed in 2.8.1.2 and 2.8.4.2, because the current assumption is in line with GSM
- 2.8.1.3, the alternative text approved.

- 2.9.3, 2.9.5 and 2.9.6 removed because they are indicated in 2.9.1 (SMS point to point needs to be added in 2.9.1). In RANAP, a note is added with direct transfer that "SAPI or priority indication is FFS".
- 2.10.2 and 2.10.3 removed for now, contributions on definition invited.
- 2.10.1 modified to read:
  "The two CN domain architecture implies need for a page co-ordination, i.e. handling of page triggered by one CN node when UE has a signalling connection to the other CN node. The paging co-ordination is performed by UTRAN and/or optionally by CN. The Common ID is used for UTRAN co-ordination. The CN provides the UTRAN with the Common ID.
  The paging co-ordination is a UTRAN function. Optionally the Paging co-ordination may be performed in CN"
- An x is added to CN column for paging co-ordination in table 1.
- General note: MS replaced by UE globally (editor will check)
- Multimedia removed in table 1.
- In table 1, "UE position reporting" should be "location reporting"
- General note for table 1, the items related to removed sections are removed also from the table

It was also agreed that the existing text from section 5 is inserted in section 2.5.6 Buffer Management.

8.3 Other contributions

No other contributions related to this subject were received.

8.4 Review spec.

(Agree old working assumptions. Assessment of stability / completeness / version number of spec.)
Tdoc C99 "25.410 v1.0.1" was presented by the editor, Richard Townend of BT. The document contains the modifications agreed in this meeting. Some abbreviations related to the new parts added in this meeting are still missing, but the group trusts the editor to collect that information.
The document was approved with the understanding that the abbreviations list needs to be updated, and the location services is still unsolved. **It is recommended by the Iu SWG that R3 plenary recommends TSG RAN to raise the version to 3.0.0.**
We later returned to the location services issue (after the item had been discussed) and agreed that the existing text is supported, and the note can be removed.

9 Iu User-plane protocols (25.415) A85, --B48;

Tdoc A85 "Iu Interface CN-UTRAN User Plane Protocol UMTS 25.415 v1.0.1" was presented by the editor, Alain Maupin of Ericsson. The document was approved without questions or comments.
Tdoc B48 "Editors proposal for 25.415, Iu Interface CN-UTRAN User Plane Protocol UMTS 25.415 v1.0.1" was presented by the editor, Alain Maupin of Ericsson. Alain pointed out that the document contains also some technical changes which should be agreed. The document was agreed to be the basis for discussion in this meeting with the following modification:

- In section 7.3.3 table 2 the comments relating to 45 octets can be removed, because the corresponding limitation has been removed.

9.1 Contributions --B50, --B51, --B52, --B53, --B54

Tdoc B50 "IU Downlink Rate Control procedure description for 25.415 (Iu UP protocol)" was presented by Alain Maupin of Ericsson. This contribution provides detailed text for the rate control procedure that was agreed in principle in the previous meeting. The document is approved with the following modification:

- In section for Unsuccessful operation, words "shall repeat the rate control procedure with the same rate control information as initially" are replaced with "shall re-trigger a rate control procedure".

Tdoc B51 "Frame coding of PDU type 0 for Support Mode for predefined SDU size" was presented by Fredrik Åberg of Ericsson. It was agreed to present document **Tdoc B54** before making decisions based on this document. Document is approved. It was noted that the section 2.1.4 should read something from **Tdoc B54** and not the reference only
Tdoc B54 "Frame quality classification in Iu UP for Support Mode" was presented by Fredrik Åberg of Ericsson. The technology presented in the document is agreed in principle. There was no clear proposal on what text should be included in 25.415 and where, so the editor of 25.415 will propose text in the next version that is to be reviewed during this meeting.

Tdoc B52 "Frame coding of PDU type 15 for Support Mode for predefined SDU size" was presented by Fredrik Åberg of Ericsson. The document was agreed with the following considerations and modifications:
The need to reply back the whole control frame for acknowledgement and negative acknowledgement was discussed. It was agreed that it is not needed. Furthermore it was agreed that the nack and ack frames should only consist of:

- Ack: The octets from the header: frame number set to the same value as the request, Ack/nack set to ack, header CRC set to what it is, and PDU type 15 payload CRC set to not used
- nack: The octets from the header and one octet payload for a cause value: frame number set to the same value as the request, Ack/nack set to nack, header CRC set to what it is, PDU type 15 payload CRC set to what it is, and one octet for the cause value in the payload.

It was agreed that in section 2.1.2 the second paragraph is not applicable for PDU type 15 (was copied from PDU Type 0).
It was further agreed that the elements in the different PDU types are specified separately, i.e. the definition of frame number is different for PDU type 0 and 15.
It was also clarified that the error handling as well as the time alignment are yet to be specified.
Tdoc B53 "Protocol States for Iu User Plane" was presented by Alain Maupin of Ericsson. The document was discussed at length. The following was agreed:

- The state model should be specified in an informative annex
- There should be only one bi-directional symmetric model, because the protocol is bi-directional. Somehow the exception cases e.g. the CN never initiates initialisation procedure) need to be included in the single model.
- The 25.415 editor will try to modify the model according to the discussions, and include it to the next version to be discussed tomorrow.

The possibility to use SDL for the description of the functionality of the states was discussed. It was asked by Cheng Hoc NG of NEC whether that would be possible. It was clarified by the chairman that in principle the usage of descriptive SDL has been endorsed by the specification method AdHoc that was held between R2 and R3 in the early spring. However, the decision is up to the groups themselves. So far there hasn't been any input to Iu SWG in the form of SDL, so no decision has been made on their usage. It was also mentioned that maybe companies have been too busy to provide SDLs, and generally it seems difficult to have any meaningful SDL descriptions in the release 99 specifications.

9.2 Review spec.

(Agree old working assumptions. Assessment of stability / completeness / version number of spec.)
Tdoc D41 "25.415 Iu U-Plane protocol version 1.0.3" was presented by the editor Alain Maupin of Ericsson. It was agreed to remove the references to the protocol states that are only described in the informative annex.
It was agreed to put the **Support mode for variable SDU sizes** in the report for **study items for future releases**.
The other agreed changes are reported in the next version provided a little bit afterwards. That version is in **Tdoc D42** (see below).
Tdoc D42 "25.415 Iu U-Plane protocol version 1.0.4" was presented by the editor Alain Maupin of Ericsson. This version was approved with minor editorial corrections. Iu SWG agreed to recommend the version to be upgraded to 3.0.0

10 Iu signalling (RANAP) (25.413) A82, C20;

Tdoc A82 "UMTS 25.413: UTRAN Iu Interface RANAP Signalling, v.1.2.2" was presented by the editor Jyrki Jussila of Nokia. The document contains modifications agreed in the previous meeting. Jyrki reported that he had also included the most obvious changes discussed in the editors meeting during meeting #6. On the contrary the most difficult items left for the editor to propose during the Iu SWG meeting have not been included here, but are included in the editors proposal in **Tdoc C20**.
The document was agreed with the following changes

- 8.12.1. It was agreed to modify it to read: The Cipher Mode Control uses the connection oriented mode of the signalling bearer.
- 3.1 "UE UTRAN connection" changed to "UTRAN CN connection".

Tdoc C20 "Editors proposal for 25.413" was presented by the editor Jyrki Jussila of Nokia. The following changes were made:

- The bullets removed on load sharing from RAB Assignment (as proposed for Relocation Resource allocation already).
- In reference section, The "25.930" should be "23.930"
- Reference 6, the Iu U-Plane protocol should be in singular, not plural.
- It was agreed to move the release requests from class 1 EP to class 2. As a consequence:
  - Second bullet under Successful case removed.
  - EP column removed from Successful outcome in table for class 1 in section 8.1.
  - 8.3 last sentence removed.
- Global replace from "flow label" to "Tunnel End Point Identifier".
- It was further agreed that in the procedure descriptions we generally use Iu Transport Association, and only in Section 9.2 we define that it is either a Binding Id or Tunnel End Point Identifier.
- The new order of procedures introduced should apply to tables in section 7
- Throughout the document: The message names should be all uppercase, EP names should have 1st letter capitalised and in italics text.

With these changes the document was approved, as the basis for discussion, without the proposed IE definitions (see next discussion).

Parameter Definitions: **--B56, C20, C30;**

These documents were all presented together and discussion took place afterwards.

Tdoc C20 "Editors proposal for 25.413". Jyrki Jussila of Nokia presented the proposed IE definitions in sections 9.2.1.20 - 9.2.1.25.

It was noted that "Global Cell Id" should be "Cell Global Id" according to GSM 03.03.

It was agreed that the editor should try to create notation for the IEs names so that they can be identified in the text as IEs from regular words that are the same.

Tdoc C30 "Clarifications to some RANAP IE definitions" was presented by Atte Länsisalmi of Nokia. Due to other similar contributions, the presentation/proposal was limited to sections 9.2.5, 9.2.6, and 9.2.9.

The proposal was clarified so that in 9.2.5 the word "up-link" is removed, in 9.2.6 the first "PS" should be "PS" and "flow label" should be "Tunnel End Point Identifier".

Tdoc B56 "RANAP Information elements definitions" was presented by Anders Molander of Ericsson.

Decisions on --B56, C20, C30:

The group went through the list of definitions according to **Tdoc B56**, and the following was decided:

- RAB Id: The first sentence agreed as proposed. The second sentence removed. The third sentence agreed but appended from the end with: "in one Iu connection". A new sentence added: "The RAB Id shall remain the same for the duration of the RAB." The editor was asked to find a place for the last sentence rather in the procedure description part of the document.
- NAS Binding Information: approved from **Tdoc B56** as follows. First sentence combined with the second to read: This element contains...(continues to the end of second sentence)" Third sentence modified to start: "It serves as..". Last sentence modified to: "This element is transparent to the RNC.
- Transport Address: text agreed from **Tdoc C30** (without the word "uplink")
- Transport Association: approved from **Tdoc C30** (with the modifications stated above for **Tdoc C30**).
- Priority level and pre-emption indication: Approved from **Tdoc B56**, with modifications: The name was changed to "Priority level, queuing and pre-emption indication". The words "indicators", "levels" "functions" changed to singular form. A new statement added: This element also indicates whether queuing is allowed or not. RAB Assignment Request and Relocation Request messages have to be modified accordingly. In the second sentence "queuing" added before "pre-emption", and "retention" changed to "priority".
- RAB linking. It was agreed to include the first sentence from **Tdoc B56**.
- Proposal to remove Location Identifier and always to use Location Information was agreed. The editor will check the text for the usage accordingly.
- Permanent NAS Identity: Agreed from **Tdoc B56**. with the modification that "usage" is changed to "type" in the last sentence.
- CN domain indicator: skipped, that is, it remains as it is in the document now.
- IMSI: removed, and the note moved to Permanent NAS Identity. Also in paging, the Permanent NAS Identity should be used instead of IMSI.
- Temporary UE Id. No changes to existing test agreed.
- Paging Cause: Agreed as proposed by **Tdoc B56**.

- UE Identity: Agreed as proposed by **Tdoc B56**.
- OMC ID: Agreed as proposed by **Tdoc B56**.
- NAS Bit String: Agreed from **Tdoc B56**: words "system information" is changed to "broadcast information" in the text. Also the procedure needs to be updated. Nortel took an action point to clarify the text during this meeting (see **Tdoc D02**).
- Broadcast Area Categorisation Parameter agreed with the change "system information" is changed to "broadcast information"
- NAS PDU: Agreed as proposed by **Tdoc B56**, with the addition of SMS and SS.
- Proposal to remove "NAS layer 3 PDU" and always use "NAS PDU" was agreed. The editor will check the text for the usage accordingly.
- User Plane Mode: Agreed to included the first sentence from **Tdoc B56**, and last from **Tdoc C20**.
- Paging Area: Agreed to included the first sentence from **Tdoc B56**, and last from **Tdoc C20**.
- Source ID: Agreed from **Tdoc C20**.
- Target ID: Agreed from **Tdoc C20** (Global and Cell swapped).
- Source RNC to Target RNC Transparent Container: Agreed from **Tdoc C20**.
- Target RNC to Target RNC Transparent Container: Agreed from **Tdoc C20**.

10.1 Study Items report and decision:

Bearer renegotiation and partial relocation for UMTS/GSM handover (Richard)
There was no written report for this Study Item. Richard presented the status verbally. No discussions had been held. Richard stated that the partial relocation is in relation to what kind of mechanisms will be available for RAB Assignment.
It was agreed to keep the study item alive.

SRNS relocation transparent field (Jörgen): **B98**
It was agreed to discuss all contributions related to transparent field in this agenda item.
Transparent field: **B70 (some parameters), B73 (coding format), B97 (some explicit RANAP parameters), C23 (principle that R2 defines this PDU);**
These documents were all presented together and discussion took place afterwards.
Tdoc B70 "Content in the Source RNC to Target RNC Transparent Container" was presented by Cheng Hock NG of NEC. It was clarified that the proposal is only for UMTS to UMTS case. The bearer information is radio bearer information, and not RAB information. It was clarified that during hard HO it may be possible to change the ciphering algorithm but not the key.
Tdoc B73 "Transparent container in Relocation Required and Relocation Request" was presented by Jörgen Van Parys of Alcatel. It was clarified that in SRNS Relocation d-RNTI is proposed to be used because the Common Id is not available in the DRNC. It was discussed that Common Id could be used for co-ordinating the possible two Ius, and d-RNTI is used to associate to the radio related parts.
Tdoc B97 "Proposals/Comments to RANAP V.1.2.2 ([25.413])" was presented by Alexander Vesely of Siemens/Italtel. Only the related parts to transparent container were presented.
Tdoc C23 "Principles for including the Uu interface related information to RANAP messages used for relocation of SRNS" was presented by Kalle Ahmavaara of Nokia. This is also proposed by Nokia in R2 (**Tdoc R2-99B18**).
Discussions and decisions on B70, B73, B97 and C23:
The alternatives in **Tdoc C23** were discussed. There was no support for alternative 1 but some support for alternatives 2 and 3. It was commented that in either case R2 would need to be involved since we don't have the knowledge in this group to provide the information.
It was agreed to **send a liaison to R2** and ask their opinion. Kalle Ahmavaara of Nokia will draft this to be reviewed by tomorrow morning, so that it can be sent immediately to the ongoing R2 meeting.
Co-ordination of the possible two Iu Instances: It was agreed that Common Id is used for this purpose. There was no agreement on how it will be transported to the target RNC.
It was agreed that a **LS is sent to S1 and S2** to inform that it is not possible to do relocation with IMSI not being available (i.e. only IMEI is used) when there are two active CN nodes. This case is applicable to emergency call only, since other calls are not allowed without IMSI. Alain Maupin of Ericsson will draft this.
It was agreed that dRNTI is used to associate the new Iu to be established and the existing RRC context. This information is placed in the transparent container.
It was also agreed to **send a LS to S2 and N2** on the usage of BSSMAP message in the MAP E-interface for GSM to UMTS HO. The group sees problems in that and would like to point out that RANAP message would be used.
It was also agreed to keep the study Item open under the supervision of Jörgen Van Parys of Alcatel

Interaction between RANAP and RNSAP for SRNS Relocation (Kalle)
It was agreed to handle two groups of contributions in this agenda item.
RANAP Interaction with itself and RNSAP: **B98, C26, B40, C29**
Interaction between RANAP procedures:
Tdocs **B98** and **C26** were presented together and discussion took place afterwards.
Tdoc B98 "Comments to Study Item ARC/16 (interaction between RANAP and RNSAP for SRNS Relocation" was presented by Alexander Vesely of Siemens/Italtel. It was clarified that the proposed mechanism does not take into account the crossing of Relocation and Direct Transfer messages.
Tdoc C26 "Interaction of Relocation and other RANAP Procedures" was presented by Kalle Ahmavaara of Nokia.
Discussions and decisions on B98 and C26:
The principles in **Tdoc C26** were discussed one by one. The decisions are:
1) Agreed
2) Agreed
3) Agreed with the addition to the end: "except those RANAP procedures that can override other RANAP procedures"
4) Deleted
5) Agreed
6) Agreed with the modification refer to Cancel of relocation and proceed with the RANAP procedure or to cancel the RANAP procedure and continue with relocation.
7) Note was agreed indicating that if Common Id IE is included in the transparent field, then Common Id needs to be changed to class 1 procedure.
8) Agreed
9) Agreed in the context of this contribution, but there no need to include it in the 25.413.
10) Agreed with a note that it is FFS how the forwarding is done in Inter system or inter PLMN HO when Iur is not available.
The proposals for RANAP were agreed with the changes that the second statement in brackets is modified to read: "except Direct Transfer which is handled normally" and a third bullet is added: "Execute the RANAP procedures. This applies to those procedures that override other RANAP procedures." It was also agreed to include in the last paragraph "except those RANAP procedures that can override other RANAP procedures" after "RANAP messages". It was also agreed to include the modified text into a subsection called "Interactions with other RANAP procedures"
Furthermore it was agreed to include the note in principle 7 (If Common Id IE is included in the transparent field, then Common Id needs to be changed to class 1 procedure) with the Common Id procedure description.
The interaction of RANAP and RNSAP:
Tdocs **B40** and **C29** were presented together and discussion took place afterwards.
Tdoc B40 "Proposed Parameters to SRNS RELOCATION COMMIT Message" was presented by Akinori Shimamura of Fujitsu.
Tdoc C29 "Modifications to the RNSAP Relocation Commit Procedure" was presented by Kalle Ahmavaara of Nokia. Only the related parts were presented.
Discussions and decisions on B40 and C29:
One idea that is same in both contributions is that the Direct Transfer is forwarded over the Iur. This was agreed by the group, and the proposed text from **Tdoc C29** is approved (paragraph under the bullet list) to RNSAP specification.
The following message contents were agreed for the RNSAP Relocation Commit message:

- Forwarded DL NAS Information xn
  - NAS PDU
  - CN Domain Identity

There was a long discussion on the paging information, but since there was no clear understanding on the functionality, it was agreed to leave the proposed parameters outside the message for now.
A recommendation is made to Iur/Iub SWG to apply the above mentioned modifications to RNSAP.
Requirements on RNSAP Commit: **From agenda items 16.2 and 16.3: C29, C61**
These documents were all presented together and discussion took place afterwards.
Tdoc C29 "Modifications to the RNSAP Relocation Commit Procedure" was not presented and the originator, Kalle Ahmavaara of Nokia said that Nokia supports the Alcatel contribution.
Tdoc C61 "Changes to RNSAP specification " was presented by Nicolas Drevon of Alcatel. The proposals were agreed with the modifications in the first proposed paragraph: words "that require lossless relocation" and the statement in parenthesis are removed.
A recommendation is made to Iur/Iub SWG to apply the above mentioned modifications to RNSAP.

Ericsson pointed out that the current solutions for loss less relocation rely on availability of Iur. It should also be considered whether we need to support loss less relocation when the Iur is not available. Nortel commented that maybe the case should be elaborated with S2. It was agreed to discuss this issue while discussing LS form S2 in **Tdoc B26**.

10.2 Actions

contribution on RANAP Error handling (Lucent): ---C55

Tdoc C55 "RANAP protocol principles and error handling" was presented by Michael Roberts of Lucent. Michael explained that this is more a discussion paper for getting some of the principles agreed before detailed error and version handling can be decided.

It was understood that the R3 plenary had asked this group to consider the principles in this area and if possible make recommendations that would be useful also to Iur and Iub interfaces. It was however agreed that the group will discuss these in the scope of Iu interface first, and the agreements made only apply to Iu.

It was agreed that the forwards and backwards compatibility mechanism in the protocol should be built without the need to version the protocol. Instead these mechanisms shall utilise the comprehension required principle (see definition for comprehension required principle in Iu below).

In the context of Iu, the comprehension required principle was understood to mean that for each IE (in this discussion also message type is regarded as an IE) the sender can indicate three alternative actions the receiver shall take if the IE is not understood/comprehended:

- reject the IE (this means comprehension required),
- ignore the IE and continue (that means comprehension is not required),
- ignore the IE, notify sender and continue (that means comprehension is not required).

If an IE is rejected the receiver continues decoding other IEs, and when all IEs are decoded the receiver rejects the operation and reports the diagnostics (e.g. rejected or ignored IEs). Therefore the requirement for the protocol syntax is that the receiver shall be able to decode the whole message, which means that it knows when it has reached the end of the message. The cases where the end of the message is not reached are considered error cases, for which handling is to be described separately.

The possibility to evolve the EPs from one class to another was not viewed important, and we shall not be a design guideline at this time.

The following considerations were taken for how this could be accomplished were taken (no formal agreement on these was pursued):

- For class 1 and 3 EPs where comprehension is required, if any IE is not comprehended, the outcome can be reported with the normal reject message for that EP.
- For class 1 and 3 EPs where indication is required, if any IE is not comprehended, the outcome can not be reported with the normal reject message for that EP, but perhaps a general Error Indication message could be used to report the outcome (currently it is only connection less, but could be changed to connection oriented).
- For class 2 EPs where either comprehension or indication is required, if any IE is not comprehended, the currently defined error indication could be used to report the outcome.

The group also agreed (more as company positions without detail expertise on Iur and Iub), to **recommend that these principles are used for the Iur and Iub** interfaces as well.

It was agreed that a study item is created for the remaining issues in error handling. Michael Roberts from Lucent will moderate an e-mail discussion in this study item.

RAB Attributes/definitions (Ericsson (S2 QoS AdHoc?))

THere was no written input for this item. It was agreed to treat LS in **Tdoc B26** and see there if the action item is kept alive.

ADDED ITEM: - General: C21, C22

Tdoc C21 "RANAP Services" was presented by Atte Länsisalmi of Nokia.

It was agreed that the RANAP services should be organised according to the dedicated, global and notification SAPs in 23.110 sections 6.1.1-6.1.3. It was agreed to modify the text during offline discussions. There was no time to return to this item, and Nokia takes action to return to the issue in the next meeting.

Tdoc C22 "SCCP Services" was presented by Kalle Ahmavaara of Nokia. The different classes of SCCP were discussed. There was not enough understanding on what the used SCCP classes should be. It was agreed to defer this discussion to the next meeting. The document was not approved.

ADDED ITEM: - Timers: B71

Tdoc B71 "Timer for RANAP" was presented by Chen Hock Ng of NEC. The generic proposed principle is to specify the timers for request - response pair. The principle is agreeable to at least the

more complicated procedures. The principle of having counters in the protocol in general is not agreed, and the need for counters need to assessed case by case.
It was pointed out by Ericsson that they have already defined the timers for RAB assignment procedure very carefully, and a similar contribution is sent for this meeting on relocation procedures (**Tdoc C07**).
It was agreed that the timers can only be agreed with detailed case by case reasoning, and instructions on how to apply the changes to the document. The document was not approved.

10.3 Procedure specifications (freezing the list of procedures), B31, --B55, --C07, C23, C24, C25, C26, C27, C28, -C48;

Some grouping of contributions was applied in this agenda item.
Loss less Relocation: ***B97, C24, C60, ---C62 (form Agenda Item 23), C63 (form Agenda Item 23), C64 (form Agenda Item 23);***
It was agreed to discuss the first three first Tdocs together:
Tdoc B97 "Proposals/Comments to RANAP V.1.2.2 ([25.413])" was presented by Alexander Vesely. Proposal for section 8.2.3.1 is applicable for this agenda item.
Tdoc C24 "Modifications to RANAP specifications due to the lossless Relocation requirement" was presented by Kalle Ahmavaara of Nokia.
Tdoc C60 "Changes to RANAP Specifications for the support of lossless relocation" was presented by Nicolas Drevon. Nicolas commented that this is very similar contribution to **Tdoc C24** but there are some differences. The idea is anyway exactly the same as in **Tdoc C24**.
Discussions and decisions on B97, C24 and C60:
It was clarified in that the decision in S2 is that there is only one tunnel in UMTS to UMTS Relocation for forwarding the packets from Source RNC to Target RNC. In intersystem HO there is one tunnel in the 2G side (between SGSNs), and one tunnel in the 3G side (SGSN to RNC), because RNC can not be connected to 2G SGSN.
It was decided to first discuss the UMTS - UMTS SRNS Relocation and then Intersystem HO.
UMTS - UMTS SRNS Relocation:
Relocation Preparation successful operation was discussed based on **C24** (section 2.1) and the following was agreed:

- In the first paragraph "CN nodes" changed to "CN domains". Should also be applied generally.
- First new paragraph: agreed when words "non acknowledged" are removed, and words "corresponding to the Target RNC" added after "Iu transport address".
- Second new paragraph agreed with modifications: the words "for the case of unsuccessful relocation" were added to the end of second to the last sentence. "It is FFS how we classify services for which the RNC keeps copy of the forwarded packets". Also it was decided to say "RNC may stop" instead of "RNC stops", and "should start" instead of "starts" and "may be stored" instead of "shall be stored".

  Alcatel raised a concern about this being in contradiction with 23.121 v.3.0.0, where data forwarding is always assumed to be mandatory.
- The changes for relocation command in section 2.2 of **Tdoc C24** were agreed with the understanding that the forwarding parameters are optional even for PS domain.

Iu release procedure modifications were discussed based on **Tdoc C24** section 2.4 (only second paragraph applies UMTS -UMTS case):

- Agreed with modification that: "GTP-PDU" is replaced "RABs subject for data" The first paragraph only applies to intersystem HO.

Intersystem (UMTS - GPRS) HO:
The new SRNS Context Transfer RANAP elementary procedure from section 2.3 of **Tdoc C24** was discussed and agreed with the following modifications:

- A fourth bullet needs to be added to the bullet list reading: "The sequence number of the DL RLC PDU which carried the last segment of the last N-PDU to the UE".
- The editor needs to draw and add the missing signalling flow figure.

Message contents for SRNS context request messages from **Tdoc C24** sections 2.5 and 2.6 was discussed and agreed with the following modifications:

- DL RLC PDU needs to be added to the message contents of SRNS CONTEXT RESPONSE (section 2.6.)
- The definition of DL RLC PDU was agreed to be: "This IE indicates the sequence number of the DL RLC PDU which carried the last segment of the last N-PDU to the UE.

Iu release procedure modifications were discussed based on **Tdoc C24** section 2.4 (only first paragraph applies intersystem HO case):

- The words "to GPRS" are added after the words "Intersystem forward handover"

  Alcatel raised the concern that to say "UTRAN should initialise the GTP-PDU forwarding" is in contradiction with 23.121 v.3.0.0, where data forwarding is always assumed to be mandatory.

Message contents for Iu release request message from **Tdoc C24** section 2.7 was discussed and agreed without modification.

Discussions and decisions on C62, C63 and C64:

The remaining contributions in this group **Tdocs C62-C64** relate to 25.931 (Examples of Signalling procedures), and it was decided to give them a lower priority, and to handle them in the end of the meeting if time allows.

There was no time to return to this issue.

Volume Based Charging: ***C25, -C48;***

Tdoc C25 "RANAP support for volume based charging" was presented by Kalle Ahmavaara of Nokia. The principle to report either full amount that has been successfully sent to the UE or to report the unsuccessful data was discussed.

It was understood that S2 had taken the assumption that only unsuccessful data is reported without thorough study on the issue. **Tdoc C25** describes that in case of relocation when data forwarding is applied, the reporting of only unsuccessful data may result in problems and wrong calculation. Therefore it is proposed that the full amount of successfully sent data is reported, and these problems do not apply.

It was agreed that the principle where amount of data that has been successfully sent should be reported, and not the amount of unsuccessful data.

It was agreed that Kalle Ahmavaara of Nokia will draft **a LS to S2** to report about this decision and the reasons behind that. It can also be reported that the new and modified RANAP procedures have already been designed and included to 25.413.

It was clarified that this only applies to DL, because for UL the SGSN can reliably count the amount of actual data regardless of retransmission on the radio interface.

The proposed RANAP procedures were discussed, and the proposals were agreed with the modifications that:

- A note is added that this only applies to PS domain.
- In section 3.3 Data Volume Reporting Indication: Instead of "RNC has to" say "RNC shall"

Tdoc C48 "Charging Related Procedure for RANAP" was handled shortly while discussing **Tdoc C25**. Hidenori Asaba of DoCoMo reported that the contribution was based on the S2 assumption that was now challenged, and since the intention of DoCoMo is to specify a procedure that works in all conditions, DoCoMo agrees to the principle presented in **Tdoc C25**. Furthermore, since the parameters in proposed RANAP messages are almost same in both contributions, it is agreeable to base discussion on **Tdoc C25**.

Remaining Contributions in 10.3

Tdoc B55 "Security Mode Control Procedure for RANAP" was presented by Anders Molander of Ericsson. This contribution proposes to include the control for Integrity functionality to existing cipher mode procedures, and to rename them to "security mode".

It was clarified that the ciphering information received from each domain applies to RABs for that domain, and for the signalling connection, the ciphering information from the last command (regardless of domain) is applied.

Section 4.3 is not applicable because of principles agreed for the interaction of relocation with other EPs, and it can therefore be removed.

It was clarified that the classmark to be relied back to the UE is not interpreted by the RNC and it is only used by the UE to check that it is the same as in the request.

It was clarified that the integrity checking is mandatory feature, but ciphering is optional. That is also reflected in the message parameters.

The proposed procedures were agreed with the modification that section 4.3 is not included.

A LS to R2, S3 and N1 will be drafted by Anders Molander. In the LS we should inform them about the decisions that we have made and that we believe they are in line with S3 requirements. In addition we want to clarify with them that it is correct to include the classmark in the request message. The LS should assume that the UE classmark is available in the CN, and it should not mention how it will get there.

Tdoc B31 "Call Trace" was presented by Dennis Behrens of Motorola. The document had already been presented in the opening plenary, and only part of it relating to RANAP was presented and reviewed again.
The proposal for the existing procedure was approved, because it is aligning the text and the parameters.
It was realised that our group probably does not have the needed expertise to discuss the different cases of trace. Therefore it was agreed to write a **LS to S5** asking them if they agree on the use of the procedure and parameters as defined now in RANAP, and furthermore about the coding of the parameters. Also the need for turning off the trace (proposed in **Tdoc B31**) will be asked from S5. Dennis Behrens of Motorola will draft this LS.
Tdoc C07 "Abnormal Conditions and Unsuccessful Outcome of RANAP procedures" was presented by Anders Molander of Ericsson. The presentation and the discussion for the document was split into smaller pieces as follows:
Abnormal conditions:

- Relocation of SRNS:
  - 2.1.1: Approved with modification that just "CN" is used instead of "CN node" (this is a global replacement for other points)
  - 2.1.2: Approved with the following modifications: Instead of term "relocation procedure" the "relocation of SRNS" is used, points 4, 5 and 6 are removed because they are redundant, and the "(FFS)"is removed. In second paragraph "shall" is changed to "should".
  - 2.1.3 Only the first paragraph was agreed to be included in RANAP spec.
  - 2.1.4 Not included
- RAB Assignment; Agreed with the modifications: the cause value "relocation necessary" was understood to be the same as "relocation triggered" agreed earlier, and text should be modified accordingly, also words "unsuccessfully" and "successfully" and bullet 6 are removed.
- Iu release; The following text was approved: "If the Iu release procedure is not initiated towards the source RNC from the CN before expiry of timer $T_{relocoverall}$ the Source RNC shall initiate the Iu Release Request procedure towards the CN with the cause value $T_{relocoverall}$ expired.

Unsuccessful operation:

- 2.2.1 The following text was approved: "If there is no response from the CN to the RELOCATION REQUIRED message before timer $T_{relocprep}$ expires in the Source RNC, the source RNC should cancel the Relocation preparation procedure by initiating the relocation cancel procedure. Cause value $T_{relocprep}$ expired is used"
- 2.2.2, The following text was agreed (copied here as a whole, because the discussion was based in an unnumbered working document, and changes to **Tdoc C07** were too much to report):
  If the relocation of SRNS terminates (unsuccessfully) in CN before the relocation resource allocation is completed:The CN should stop timer $T_{RELOCalloc}$.
  The CN shall release the Iu connection towards the target RNC that may already have been established and towards the source RNC by initiating the Iu Release procedure with a cause 'Relocation cancelled'.

  If the CN receives the RELOCATION FAILURE message from the target RNC indicating that the Relocation procedure has failed:

  1. *The CN should stop timer $T_{RELOCalloc}$.*
  2. *The CN should inform the source RNC that the Relocation procedure has been rejected by sending the RELOCATION PREPARATION FAILURE message with a cause 'Relocation failure in Target RNC'.*
  3. *The CN should release the Iu connection towards the target RNC that may already have been established by initiating the Iu Release procedure with a cause 'Relocation*

  If the timer $T_{RELOCalloc}$ expires in the CN:

  1. *The CN should inform the source RNC that the Relocation preparation procedure has failed by sending the RELOCATION PREPARATION FAILURE message with a cause ' $T_{RELOCalloc}$ expiry'.*
  2. *CN should release the Iu connection towards the target RNC by initiating the Iu Release procedure with a cause 'Relocation cancelled'.*

- section 2.2.3 was approved with the following text (copied here as a whole, because the discussion was based in an unnumbered document, and changes to **Tdoc C07** were too much to report):
  If the CN receives the RELOCATION FAILURE message from the target RNC indicating that the Relocation procedure has failed:

  1. *The CN should stop timer $T_{RELOCalloc}$.*
  2. *The CN should inform the source RNC that the Relocation procedure has been rejected by sending the RELOCATION PREPARATION FAILURE message with a cause 'Relocation failure in Target RNC'.*
  3. *The CN should release the Iu connection towards the target RNC that may already have been established by initiating the Iu Release procedure with a cause 'Relocation*

  If the timer $T_{RELOCalloc}$ expires in the CN:

  1. *The CN should inform the source RNC that the Relocation preparation procedure has failed by sending the RELOCATION PREPARATION FAILURE message with a cause ' $T_{RELOCalloc}$ expiry'.*
  2. *CN should release the Iu connection towards the target RNC by initiating the Iu Release procedure with a cause 'Relocation cancelled'.*

  If timer $T_{RELOCcomplete}$ expires:

  - *The CN should initiate release of Iu connections towards the source and the target RNC by initiating the Iu Release procedure with a cause '$T_{RELOCcomplete}$ expiry'.*

  If the relocation of SRNS terminates (unsuccessfully) in CN before the relocation resource allocation is completed::

  1. *The CN should stop timer $T_{RELOCcomplete}$.*
  2. *The CN should initiate release of Iu connection towards the target RNC by initiating the Iu Release procedure with a cause 'Relocation cancelled before completion'.*

It was also agreed to include the timers to a specific section in RANAP as proposed.
Tdoc C28 "Reset Resource RANAP Procedure" was presented by Kalle Ahmavaara of Nokia. It was clarified that the proposed messages are connection less. It was pointed out that the Common Id can not be used if the UE has engaged another signalling connection before this procedure was applied. The contribution was not accepted.
Tdoc C27 "Location Information in RANAP messages" was presented by Kalle Ahmavaara of Nokia. The principle in section 2.1.1 of including the LAI and RAI in every uplink Direct Transfer Message was clarified. It was clarified that LA or RA update may be applied during active connection, and it is expected by the CN that the UTRAN always includes the LAI or RAC with the message. Since RNC is not required to analyse the NAS information it can not know that it is LA or RA update, and it will use the Direct Transfer procedure to carry the MM message. Furthermore it would be required to include the LAI and/or RAC in this message, but since the RNC does not know the type of the NAS message, it is required to include the information to all UL Direct Transfer messages.
It was felt by the group that this principle needs more analyse, and it was not agreed now.
The other principle level proposal was clarified that the proposal is that the two concepts: location information for the system (LAI and RAI), and the location information to be used e.g. for emergency call routing, charging, and location based services are separated from each other.
Yet another principle level proposal is that the location information to be used e.g. for emergency call routing, charging, and location based services, is removed from other RANAP procedures than the Location Report, and the location reporting functionality is used by the CN always when that information is required.
After discussing the proposed principles it was agreed to take a look at the actual modifications that would be required for RANAP. The following was decided:

- Proposals in sections 3.1, 3.3, 3.4 and 3.5 were agreed with the following modifications: "UMTS Cell Id" is globally replaced by "Area Identity code", and a note is added stating that "Area identity code takes the value of UMTS Cell Id which is to be defined".
- Section 3.2 was skipped because it relates to the Direct Transfer Procedure that was not approved.

Tdoc D02 "Proposed changes on "CN information broadcast" RANAP procedure" was presented by Pierre Lescyier of Nortel Networks.
The proposed modifications were agreed with the note relating to GSM 03.32 removed.

28.1 10.4 Message contents and parameter range --B56, B68, B69, B70, B72, B73, B97, C30, C43, -C48

Tdoc B72 "Location Information in Iu release Complete" was presented by Cheng Hock Ng of NEC. It was agreed that the following principle should be applied to fulfil the requirement presented in the document: For UEs engaged in emergency call, the CN should request the UTRAN to report the location of the UE every time it changes. Therefore the last known location of the UE can be known to the CN without addition of the Location Information element to Iu Release Request.
Tdoc B68 "Contents of the Paging Message" was presented by Cheng Hock Ng of NEC.
The proposed description for paging procedure was agreed as follows: "If a "non search indication" parameter is present, the RNC need not search the Common Id."
Also the Non Search Indication parameter was agreed to be included to RANAP paging message (the change from IMSI to permanent NAS UE Identity already agreed before).
Tdoc B69 "The contents of the Location Control and Location Report Message" was presented by Cheng Hock Ng of NEC. It was clarified that geographical co-ordinates are not proposed at this time (that proposal was withdrawn). It was agreed that in the request the request type can include the event, and in the report, the existing cause can be used to report the event. Therefore no change was needed to the document based on this contribution.
Tdoc B97 "Proposals/Comments to RANAP V.1.2.2 ([25.413])" was presented by Alexander Vesely of Siemens. The proposals related to CN domain indicator were discussed.
It was agreed to include CN domain indicator IE to the following RANAP messages: Initial UE Message, CN Information Broadcast Confirm and Reject, Error Indication and Reset Ack.
Tdoc B43 "Evaluation procedure" from NTT DoCoMo was discussed shortly. It was understood that this functionality is needed for all UTRAN terrestrial interfaces for it to work properly, and therefore it needs to be agreed at least in principle in the R3 plenary level. Therefore the document was deferred to the closing plenary.

10.5 Review spec. B57;

(Agree old working assumptions. Assessment of stability / completeness / version number of spec.),
This document was not discussed due to lack of time.

10.6 Other issues

There were no documents for this agenda item.

11 Iu Data Transport + Transport network control plane (25.414) C08, C75;

(Including requirements on GTP-U)
The following CRs on 25.414 were discussed:
***Untreated CR from last meeting:* C08**
Tdoc C08 "Reference to GTP-U protocol specification" was presented by David Comstock of Ericsson. It just presents a clarification to the reference to correct GTP-U specification. Approved without any questions or comments.
Tdoc C75 "Clarification on usage of Classical IP over ATM" was presented by David Comstock of Ericsson. Agreed as proposed.

12 Iu signalling transport (25.412) ;

There wa no input to this agenda item.

12.1 Evaluation of CTP (moved to plenary session (agenda item 6))

12.2 Others

Incoming Liaison Statements B06 (info), B08 (reply), B24 (reply), B29 (attachments), B26 (attachments, reply), C81 (info/requirements);

Tdoc B29 "SRNS Relocation and handover" from S2 to R2 and R3 was presented shortly by Kalle Ahmavaara. Only the questions addressed to this group and the proposed principles were presented. This group is in agreement with the proposed assumptions in the liaison statement.
It was understood that the questions in the document relate to release '00. To answer them, input from companies is required in the following meetings.
The concern raised earlier during discussion for **Tdoc C61** related to loss less relocation solutions relying on the availability of Iur and whether the possibility to have other solutions should be communicated with S2 was discussed further. It was decided to rely on company contributions to S2, and not to write a LS.
Tdoc B06 "Liaison statement on Support of Speech Service in RAN" from S4 was discussed. It was understood that we are already including the required control information to the protocol.
Tdoc B08 "On the format of the AMR speech data over the Iu frames" from S4 was discussed. Alain Maupin of Ericsson clarified what the mapping they refer to is all about. They are defining how the payload in the U-Plane protocol is structured. **Alain will draft an answer** acknowledging their plan to write the planned specification. Also the latest version of 25.415 will be included.
Tdoc C81 "Requirements on Iu User Plane for CS data" from S4 was presented by Alain Maupin. The document is noted. The information will be considered when the frame structure is discussed. The frame alignment mentioned in the document will be further clarified by DoCoMo
Tdoc B26 was presented. It was agreed to discuss this item with the RANAP parameters in the next meeting. QoS report is in **Tdoc C90**, but it was not reviewed

Outgoing Liaison Statements

Tdoc C97 "Draft LS on Uu protocol information for Relocation of SRNS" was presented by Kalle Ahmavaara of Nokia. It was agreed with the following modifications:
Reference should be made clearly throughout the document to R3 Iu SWG, and not R3 in general.

- The sentence above the two numbered cases was modified to read: "Among the possible approaches discussed in R3 Iu SWG the following two were preferred. The third option, definition of every required parameter in RANAP was already ruled out by R3 Iu SWG."
- The title of bullet 2 was modified to read: "A special PDU to be inserted to the RANAP transparent container is defined in each radio interface related protocol specification associated to each relocation type."
- Point 2: The first sentence in the second indented paragraph is removed and the following is added to the end of that paragraph: (R3 Iu SWG realises that this may justify R3 Iu SWG to define the usage of this information)
- Point 2: A sentence is added to the end reading: "this type of approach is illustrated in R2-99B18"
- Paragraph immediately following the 2 numbered points: Instead of "Uu protocol" say "Uu or other radio interface protocol", after first occurrence of R2 say: "for Uu and outside 3GPP for other radio interfaces", and replace the second occurrence "R2" by "R2 and other groups".
- In paragraph right above the last bullet list: Instead of "from RAN WG2 " say "from initially RAN WG2"

It was agreed that with the modifications the LS can be sent immediately via e-mail to the chair and vice chair of R2, because R2 meeting is ongoing at the same time (The final document that was sent to R2 is in **Tdoc D32**).

ANNEX A summary of action items and their current status.

#	Slogan	Deadline	Comments	Responsible Companies	Status
1	Iu Interface Characterstics	August	25.410 deadline: Sept.	Ericsson/BT	done
2	Iu Specification Objectives	August		BT	done
3	List of Functions over Iu	August		Nokia	done
4	Definition of Functions o. Iu	September		Nokia	done
5	Function Distribution o. Iu	September		Nokia	done
6	Relocation/Handover	September		All	Functionality complete
7	Protocol principles	September		Lucent	partially done
8	Error handling principles	September		Lucent	started
9	Use of SCCP	July		Ericsson	done
10	SCCP Addressing schemes	August		Ericsson	done
11	Freezing of Procedures list	July	25.413 deadline: Dec.	All	implicitly done
12	RANAP Error handling	August		Lucent	started
13	Timers, O&M param.	October		NEC	pending for some procedures
14	RAB attributes/def.	September		Ericsson	open
15	Restructuring of Iu UP	July	25.415 deadline: September	Ericsson	done
16	CS Data impacts	September		input coming from CN WG3	done
17	Iu UP procedures final.	September		All	done
18	RANAP ASN.1	Ad-hoc October		All/Nokia	open

TSG-RAN Working Group 3 meeting #7 ***TSGR3#3(99)D25***
Sophia Antipolis, France, 20-24 September 1999

Source: Iub/Iur SWG Chairman
Title: Summary Iur / Iub SWG

GENERAL

The Iur/Iub SWG meeting was held 21-23 September and chaired by Jean-Marie Calmel. The notes were taken by Per Willars. The conclusions are fully reported (except all editorial modifications agreed). Only limited discussion is reported.

CONCLUSIONS

The document numbers given below in bold were presented and discussed at the SWG meeting.

4 Letters / reports from other groups

A96 LS from R1 on power control. Treated in 15.1 below.
B21 LS on 25.442. Treated with 25.442 on item 20.1 below.

13 Iur / Iub General Aspects

13.1 General Aspects and principles of Iur interface (25.420)

A79 v0.1.7 including changes from last meeting. **Approved** with the note that the CTP/IP option below ALCAP should be added. New version 0.2.0.

C17 Clarification of SCCP establishment (Ericsson). **Approved.**

C36 UP compatibility (Nokia). Proposes FP version number negotiation on Iur. Discussion on if all RLs in macrodiversity need to support the same FP version. Discussion on FP version mediation in DRNC. Must a DRNS supporting v.X also need to support all previous versions? In the proposed text, Drfit Node B should be changed to DRNS. DRNC should probably not send FAILURE due to unsupported version. Similar principle should probably be used on Iur and Iub. Further discussions needed to conclude.

The following was **agreed:**

- Protocol version signalled in CP (not embedded in the FP)
- Ad hoc discussion for interested companies to formulate a consensus on FP version handling and other extension mechanisms for FPs.

B91 TDD revisions (Siemens/Italtel). **Approved.**

D34 v0.1.9, new decisions and editors proposals. **Agreed** and set to 0.2.0, with modifications:

- Reference numbering.
- Remove editors notes “The following text has been moved...” from sections 4.2 and 4.4.
- Use xxCH frame protocol instead of xxCH framing protocol, in section 6.3.
- 4.4, Iub/Iur DCH data streams: change sentence to “between SRNC and Node B (DRNS)
- 4.5.2.1: editorial correction needed.
- 6.3.2, 6.3.3, 6.3.4, 6.3.5: Remove statements that “The contents of the xxCH data streams are FFS”.
- Remove the two notes in the end of section 8.
- Add ITUN and UDP to protocol stack. Motorola will help the editor to include the correct protocol stack.
- Remove all but last sentence of 4.1. Also figure removed. Section 4.1 renamed to

"Introduction".

- Strike out sentence "Furthermore, the Iur interface provides capabilities tosynchronise cells belonging to different RNSs [TDD]" from 4.4.
- Section 4.4, bullet 5, and section 6.3.4: strike out "(for TDD and FDD)"
- sec 5.2.5: UL inner loop power control function (located in Node B [FDD]).
- remove editors note in 5.2.6
- remove note in 5.2.5.
- remove 5.2.8.
- 5.2.9: Change to "Iur supports the radio protocol functional splitting between SRNS and DRNS." Heading changed to "Radio protocol functional split".
- section 9.1: remove paragraph after second bullet.
- section 9.1: Paragraph "when a user sends its last FACH data frame..." is converted to a bullet.
- section 9.1 renamed to "Basic principles for FACH"
- Fill in one sentence per referenced specification in section 10.

Stability assessment:

- Add to open issues:
  - "Mapping of Frame protocols onto transport bearers"
  - "GT addressing format"
  - "Basic principle for DSCH over Iur"
  - "Number of priority classes for FACH data streams"

13.2 General Aspects and Principles of Iub interface (25.430)

A80 25.430 v 0.1.5 with revisions. **Approved** to v 0.2.0., with removal of editors notes.

B62 Multiplexing of communication control ports. (Ericsson). **Approved.**

B92 TDD revisions (Siemens/Italtel). **Approved** with modifications:

- "[TDD]" to the added to all TDD specific items (TA definition, USCH...).
- Remove "FFS" for DSCH and USCH in 5.1.
- Editor should propose additional function for FDD in bullet 8 of 5.1 (timing and sync).
- 5.2.4: remove"Soft" and have no FDD tag.

D35 25.430 v0.2.1. **Agreed** and set to v0.3.0 with modifications:

- section 4.1 aligned with 25.420, "Introduction". "A logical connection between RNC and NodeB is referred to as an Iub interface"
- Editor should correct reference [5] which is referred to in figure 4.
- Figure 4: Remove reference to FAUSCH FP.
- section 4.4.2, 4.4.3, 4.4.4, 4.4.5, 4.4.6, 4.4.7: keep only first sentence.
- Change physical channel parameters to resources in 5.2.6.
- Section 5.1, item 8: Remove indented sub-bullets under "Inter Node B synchronisation"
- Remove last sentence in 5.2.2.
- Section 5.2.6:
- Remove 5.2.12 (it does not describe the functional split)
- Section 7: change to: "There is one AAL2 connection per transport channel."

- 6.2.4: change to “The BCH is carried directly...” (PCCH is removed).

List of open issues (in annex):

- Sections 5 are not stable and need to be updated. Contributions invited.
- Logical model of Node B is not complete

13.3 Review specs. (Agree old working assumptions. Assessment of stability / completeness / version number of spec.)

Input to editor session:

- New editors proposals by wednesday afternoon. Will review also RL definitions.
- Sentence “A cell is a collection of RLs” is removed from 25.420 sec 7.2.2 and 25.430 sec 6.2.1.

14 Iur/Iub User-plane protocols

14.0 Study item reports

– SSDT (Kiran):

---B36, SSDT impacts on Iur and Iub (Telecom modus). Discussion:

- Requirement 4 is removed since it does not have any impact on proposed text.
- Requirement 3 clarified that SSDT makes sense only when there are multiple RLs. But no fundamental limitation.
- SSDT could be activated also in RL SETUP / ADDITION.
- Ad hoc tuesday night to clarify issues.

---B37, Text proposal for SSDT (Telecom modus/NEC). Discussed in SSDT ad hoc.

D14, SSDT adhoc report. Not treated.

D15, Revised SSDT text proposal (T MODUS). Not treated.

– RL failure / loss of UL synch (Ishikawa):

--C40, Report from out-of-sync study item. **Conclusion:**

- Use NBAP/RNSAP RL FAILURE procedure for loss of sync and a new RL RESTORE procedure for recovery of sync.
- Algorithm to trigger these sync indication is left for implementation and operator configuration.
- After a RL reconfiguration/addition, the RL is assumed is to be in sync, regardless of the state before the reconfiguration procedure.
- Fabio drafts text proposal for NBAP/RNSAP.

– TDD parameters (Massimo) :

C04 Study item report, TDD frame protocols (Siemens/Italtel). RACH proposal discussed at agenda item 14.2. DSCH and USCH proposals **agreed** with modifications:

- FNcell should be changed to CFN.
- DSCH: Create two different frames for TDD and FDD. Transmission power level is present only for the TDD mode.
- USCH: Rx timing deviation should be in the header. Details of the frame structure will be aligned with the RACH frame structure.

– Iur FACH and DSCH flow control (Michael):

B95 Iur flow control for FACH and DSCH traffic.

- No conclusion from study item. Come back on agenda item 14.3.

14.1 Iur/Iub DCH data streams (25.427),

A88 v 0.4.1, with revisions from last meeting. **Approved** with modification:

- RNC changed to SRNC in 7.2.6 and 7.2.7.
- Group UL messages together and DL messages together

C37 v 0.4.2, editors proposal. Proposed changes were **agreed** with modifications:

- 8.4: add “for example”.
- 6.2: offline clarification of the 1.16s requirement on max delay variation before agreeing 6.2.
- 6.2: remove last sentence regarding 100 msec from editors note
- 7.2: control frame header discussed later with C12.
- 7.3.1.1.1 will be discussed with C12.
- 7.3.1.2.3: remove text “...last TB that can beshorter”. To be checked with R2.
- 7.3.2.2.1: Length of name field t.b.d after C12 discussion.
- 7.3.2.2.2: Length for Eb/N0 setpoint is set “FFS”.
- 7.3.2.2.3, ToA: Range changed to –1280,+1270msec. Length is FFS.
- 7.3.2.2.6/7/8 T1,T2,T3: Change to 24 bits length.

C12 FP header: **Agreed**.

C96 (replaces section 4 of **B96**) TDD timing advance (Siemens/Italtel): **Agreed.** The related procedure shall be included in section 8 (Editor’s proposal).

C41 Revival of normal UL mode (DoCoMo). **Approved.** To clarify silent mode, contributions are invited. Also send a LS to R1 to ask for possibility to detect correct decoding of TFCI based on quality estimate.

D23 25.427 v0.5.1. **Agreed** and set to 0.6.0 with modifications:

- 7.5: Change “DL/UL synchronisation control frame” to “DL/UL node
- 7.5: Figure: strike out “DCH”. Rename to SRNC.
- 7.6: Change “once” to “if”, change “unequal” to “not”. Remove editors note.
- Figures should be numbered.
- 8.1.1: coding rule: unsigned values are binary coded, signed values are 2-complement coded.
- 8.2.3.1: clarify “to and including bit 0 of...”
- 8.2.3.5: Editor will include proposal on range and granularity based on Ericsson contribution.
- 8.3: Remove sentence ”The length of the payload....”.
- 8.3.1.3: change NAME to Control Frame Type.
- Reorder payload decsriptions to have UL+DL messages of the same procedure in adjacent sections.
- 8.3.3.1.1: change to 8 bits. range 0....25.5 dB, stepsize 0.5 dB.
- 8.3.2.1.2: change “chips” to “msec” in table.
- Add section 9, “Handling of Unknown protocol elements”. Add statement “Frames with unknown parameter values shall be ignored.”
- List of open issues (move to annex):

- Mapping of physical channel BER onto Quality Estimate (if editors proposal is not agreed)
- Compatibility handling
- TFCI error in combination with UL silent mode.If this is solved, the use of UL normal mode shall be reconsidered.

14.2 Iub CCH data streams (25.435),

A87; v0.4.1 with revisions from last meeting. **Approved** with modifications:

- separation of FACH and PCH to be corrected
- the use of CFN should be corrected (Cell SFN not used)
- (ch. 5.1.1) more than one TB in a TBS should be shown, including padding in the end of the TB
- Node sync to be in a separate sub-chapter (6.x) from the other synchronisation procedures.
- Description of UL Node Sync frame (5.2.5) to be corrected (description of t1, t2, and t3)
- The order of chapters 5 and 6 is swapped, i.e. first the procedures and then the Data frames (with coding) and finally Control frames (with coding). **Applies to 25.435, 25.427, and 25.425.**
- Chapter 6.4 (flow control) is deleted.

C11 Commonality w DCH (Ericsson): **Agreed**. (The editor was assigned to reflect the agreement in the appropriate place.)

B64 RACH prop delay (Ericsson): **Agreed** with the modifications:

-"Round-trip delay" should be "One way delay" in the description of the parameter.

-Separate frame structure from TDD.

C04 Study item report, TDD frame protocols AND **B96** TDD timing advance (Siemens/Italtel) [RACH proposal]: RACH frame structure **agreed** with modifications:

- RX Timing Deviation changed to *Mandatory*. Range 0-1023. Granularity 4 chips.
- Separate frame structure from FDD.
- The same structure applies to USCH.

B66 PCH, long sleep mode (Ericsson): **Agreed**.

B67 PCH, Coding of paging indication (Ericsson): **Agreed**.

B65 CCPCH power (Ericsson): **Agreed.**

D26 25.435 v0.4.2. **Agreed** and set to 0.5.0 with modifications:

- General comments made to 25.427 shall also be applied to this document.
- 3.3: add definition of USCH
- 5.1.2: change "secondary CCPCH" to "secondary-CCPCH[FDD] /
- 5.1.5: copy from 5.1.1, change RACH to USCH.
- 5.3: merge to one DL channel synchronisation procedure
- 6.2.6.10: Add range 0....25.5 dB, granularity 0.1dB. Add:"The indicated value is the offset relative to the maximum secondary-CCPCH[FDD] / CCPCH[TDD] power configured on the secondary-CCPCH[FDD] / CCPCH[TDD]."
- 6.3.2.1.2: Field length: 16 bits.
- 6.2.3: Padding of CFN changed to "not used". Transmitter set to 0, receiver

ignores.

- Coding of padded bits is not specified.
- Add CRCI bits to USCH data frame as for the RACH data frame.
- Use generally “Granularity: ...” for resolution.
- Add chapter on unknown protocol element handling as for 25.427.

List of open issues:

- 1, 3, 4, 5: removed
- Remaining issues: Backward compatibility...., CPCH.

Stability:

- 1-0 for sending it for approval to TSG RAN.

14.3 Iur CCH data streams (25.425),

A86; v0.2.2. Revisions **approved,** new version is 0.3.0.

C51. Editors proposal. Not treated since not generally available. To be used as input to the editing ad hoc session.

C14 FACH flow control (Ericsson). **Agreed** with modifications:

- Strike out sentence in 2.1 stating that this is a TCP-like scheme.
- It shall be possible for the DRNC to indicate “unlimited windowsize” to the SRNC.
- Add parameter for SRNC buffer size with contents marked FFS to the FACH data frame.
- RNSAP proposals treated under agenda item 16.

D27 25.425 v0.2.4. **Agreed** and set to v0.2.5 with modifications:

- Editor should propose alignment of document, dataframe and controlframe structures with 25.435 and 25.427.
- 5.1.1.2: User buffer size and sequence number to be added. Rename priority indicator to common transport channel priority indicator.
- 5.2: remove RACH and DSCH from frame type description.
- Introduce Propagation delay into RACH data frames.
- 5.1.2.1: Frame type should be “Control frame”
- 5.1.2.1: move procedure text to procedure section
- Agreed to have SRNTI / DRNTI in the header.
- 5.1.2.1: SRNTI is missing.
- Parameters that are the same as in 25.435 should be coded identically on Iur.
- Detailed review on the aligned proposal.
- Hyphen introduced in S-RNTI and D-RNTI

Open issues:

- Error handling
- Extension mechanism/compatibility principles
- Mapping between DSCH and USCH and transport bearers
- DSCH and USCH data frames
- Range and coding of elements
- Procedure text FACH flow control

- FACH power control
- DSCH flow control
- Format of user data blocks and indication of format over Iur

14.4 Review specs. (Agree old working assumptions. Assessment of stability / completeness / version number of spec.)

14.5 Other general

C10 CRC Lengths (Ericsson) **Agreed** with modifications:

- the CRC for the payload is optional. The presence is decided at set-up of a transport channel (DCH parameter at RL Set-up and RL Reconfiguration).
- there shall be an "Payload CRC Present" indicator (DCH parameter) in the RNSAP and NBAP specifications in the RL Setup and RL Reconfiguration (DCHs to add) messages.

C13 CRC Indicator position (Ericsson): **Agreed**.

C09 Bit order (Ericsson): **Agreed**.

15 Iub signalling (NBAP) (25.433)

A84, v1.2.0, revisions from last meeting. See C44.

B75, v1.2.1. further revisions. See C44.
C44 Revisions including editors proposal. **Agreed** as new version 1.3.0 with modifications:

- sec 9.2.3.11+12: One TDD parameter for scrambling code (common in UL and DL). Strike out 9.2.3.12 and rename 9.2.3.11.
- ToAWE and ToAWS need to be added by editorial session.
- sec 9.1.33: there should be always both Transport layer adress and Binding Id per transport channel. Editor will group them together.
- sec 9.2.1.17: add reference to 25.426 (regarding adresses for transport layer)
- 9.1.32.1, FACH/PCH parameter: Change one of the "Transport Format Set" to TFCS.
- Further detailed editorial corrections should be forwarded to the editorial session.

15.1 Study item reports

- System Info (Kiran; Ericsson action)

  B63 System information over Iub (Ericsson): **Conclusion**:

  - Scheduling of system information is done in the CRNC
  - B63 agreed with an additional note: The need for Node B to insert information, and if needed, the exact solution for this is FFS.
  - A LS is sent to R2 to ask regarding the need for Node B to insert information (Gert-Jan).

- DL power control (Gert-Jan)

  C18, Study item report (Ericsson). Proposal **agreed** with clarification:

  - Initial DL TX power and DL Reference Power are absolute values on both Iub and Iur.

  B46, Method utilizing DL reference power to avoid power drifting (NEC, T-Modus):
  Conclusion:

  - We will send an LS to R1 to ask whether they see a benefit of the proposed

adjustment algorithm.

- B46 is not included at this point. We wait for the response from R1.
- If it needs to be specified, it shall be specified in Iub and Iur specifications (not L1 specifications), since it puts a requirement on the Node B as seen from Iub.

A96 LS from R1 on power control. Kevan drafts an answers. Concluded answers:
Question 1: The limit applies only to DL power control.
Question 4: State that slow power control is currently not supported in R3 specifications. Ask for comments. (May need reconsideration based on outcome of B87.)
Question 8: DL direction is an R2 issue. UL outer loop power control: The Node B is given an absolute Eb/N0 target. Therefore no problems related to rate change is foreseen.
Question 9: Compressed mode is not considered yet by R3. We ask R1 to keep us informed if there is a need for a separate Eb/N0 target value to be used during compressed mode.
Other questions: No comment from R3.
All answers are for FDD only, TDD need further study.

- TDD parameters (Flavio)

B89 Report from study item. **Agreed** with modifications:

- Remove Node B communication context and Communication control port ID from RL SETUP FAILURE
- Add CCTrCH id to RL RECONFIGURATION COMMIT
- Add Supporting CCTrCH id to "DCHs to add" in RL RECONFIGURATION REQUEST
- Remove DCH Allocation/Retention priority where present (not used on NBAP)

- NBAP leftovers from last meeting (Andrew)

B79 Study item report (Vodafone). **Noted.**

15.2 contributions on general sections

C32 Error handling (Nokia). **Agreed** as **working assumptions**:

- Proposed procedure agreed for syntactic errors and procedural error (exact definition to be defined).
- Included in both directions of NBAP and RNSAP in chapter 10 of the specifications. Editor of RNSAP to check C34 for adaptation to RNSAP spec.
- Need to align with principles for RANAP.
- Message contents left for FFS.

15.3 Text, message and parameter proposals for NBAP procedures:

Radio resource management/restart/block:

B58 Replacement of Restart procedures (Ericsson). **Agreed** with following modifications:

- Not agreed to remove current RESTART procedures. The Audit procedure is added in addition to the current restart procedures.
- Clarified that the RNC cannot initiate another procedure towards a cell during the Audit procedure for that cell.
- The principle of the Audit procedure is agreed.
- Rename Audit Indication to Audit Required.
- The proposed text is taken as an initial step. The details of the Configuration generation identifier needs further refinement.
- It could be considered whether the Audit procedure may be extended to be

performed on other objects than cells.

B34, Resource status indication update... (Motorola). **Not agreed.**

B76 Block resource request (GSM assoc, Mannesman, T-Mobil, Vodafone). **Agreed** with modifications:

- Priority class “Immediate” removed (handled by Resource Status Indication procedure).
- List of objects: Currently only a list of cells can be included.
- Shutdown timer is applied only to the “Normal” priority class.

B77 Block resource request (GSM assoc, Mannesman, T-Mobil, Vodafone). **Agreed** that for each BLOCK RESOURCE REQUEST there is, in successful case, one BLOCK RESOURCE RESPONSE indicating the complete success of blocking all resources. Contents are only message discriminator, message type and transaction id.

B78 Block resource failure (GSM assoc, Mannesman, T-Mobil, Vodafone). **Agreed** that for each BLOCK RESOURCE REQUEST there is, in unsuccessful case, one BLOCK RESOURCE FAILURE indicating the failure of blocking all requested resources. Contents are only message discriminator, message type and transaction id.

Cell configuration:

B59 Cell reconfiguration (Ericsson). **Agreed** with modifications:

- Add list of values that failed to be reconfigured to the Cell reconfiguration failure message, with one Cause value per failed value.
- The proposed message is FDD only. Contribution on TDD message invited.

Resource event management:

B60 Merging of messages (Ericsson). **Agreed** with modifications:

- The bullet-listed reasons in section 2.1 are movedto I3.05.
- The information elements currently included in Node B Resource notification are moved into the Resource Status Indication message.

C69 Addition of objects (Nortel). **Partly agreed.** The following is agreed:

- There can be a list of cell ids. The operational state can be indicated for the cell.
- There may be a list of transport channels per cell ID given.
- There is only one Node B control port per Node B. 25.430 to be updated (FFS in logical model deleted.)

Not agreed to include Node B ID, Node B control port id, traffic termination point ID. (The latter to be discussed with C71.)

C70 Availability status (Nortel). Conclusion: see B99.

B99 Availability status (Siemens/Italtel).

Conclusion C70,B99:

- Availability status agreed to be included as optional parameter. Full set as included, any restrictions will be discussed in the future.
- Service impact level removed.

C00 Proposed changes to Node B Resource Notification (Siemens/Italtel). **Partly agreed.**

- Agreed: Remove operational state as proposed (and related service impact level).
- Not agreed: Inclusion of FDD/TDD mode parameter.

Node B capacity mgmnt:

C71 Node B capacity mgmnt (Nortel). **Agreed:**

- Decision on mandatory vs optional is FFS.
- Agreed that there is a need to model Node B resources to the RNC.
- Maximum DL power capability per cell
- Minimum spreading factor per cell.
- The baseband modelling is not agreed. Further contributions invited, especially to clarify to what object the credits are related.

Common Measurements:

C65 Measurement termination response (GSM assoc, Mannesman, T-Mobil, Vodafone): **Not agreed.**

C66 Measurement initiation request (GSM assoc, Mannesman, T-Mobil, Vodafone).

B61 Measurements in Node B. Discussed with C66.

C03 Eventtriggered reporting (Siemens / Italtel).

Agreements on C66, C03, B61 for both NBAP and RNSAP, and for both dedicated and common measurements:

- Measurement types:
  - to include the three measurement types RSSI, Total Tx power, Not received RA messages as proposed in B61 for common measurements on Iub.
  - to include the three measurement types SIR, Transmitted code power and SIR error as proposed in B61 for dedicated measurements on Iub and Iur.
- Measurement characteristics:
  - agreed to have only Measurement frequency and Averaging duration, taken from C66.
- Report characteristics:
  - Refinements of on-demand report as in B61
  - Periodic report as from B61 with added sentence from C66 that the A periodic report shall be sent until the RNC issues a MEASUREMENT TERMINATION REQUEST or until the Node B issues a MEASUREMENT FAILURE INDICATION.
  - Event-triggered reporting: Include types A-D from B61 and add two new types E and F as proposed in C03. Offline discussion will provide an editors proposal for detailed text proposal.
- Cause values for MEASUREMENT FAILURE INDICATION as proposed in C66 agreed with modifications:
  - change “abnormal” to “unspecified”
  - do not include “measurement not initiated by network management platform...” and “O&M intervention”

C67 Measurement termination request (GSM assoc, Mannesman, T-Mobil, Vodafone). **Agreed** with modifications:

- Include only the cause values Processor overload, Hardware failure, Unspecified failure, O&M intervention.
- In message layout, the different cause values should not be listed.

C68 Measurement report (T-Mobil). **Withdrawn.**

C02 Measurements for TDD (Siemens/Italtel). **Agreed.**

Common channel mgmnt:

B33, -C73 Not treated.

Div new common procedures:

C39 (Health check), Not treated.

C43(Evaluation), Not treated.

C01(state alignment) Not treated.

RL setup/addition…:

C52 Not treated.

DSCH:

C58 Not treated.

Dedicated Measurements:

C56 Not treated.

C79 Not treated.

Hard handover:

C33 Not treated.

Compressed mode:

-C38 Not treated.

Additional DCH parameters:

C35 Not treated.

New functions:

B47 (slow TPC). Not treated.

15.4 General parameter proposals

B80, Cause values. Not treated.

C42, Events. Not treated.

15.5 Review spec. (Agree old working assumptions. Assessment of stability / completeness / version number of spec.)

15.6 Other issues

B94: TDD revisions. Already captured and treated by C44.

16 Iur signalling (RNSAP) (25.423)

A83 v1.3.1 including revisions since last meeting. **Agreed** and set to v1.4.0 with modifications:

- DCH priority parameters for TDD shall be of same type as for FDD (i.e. not FFS)
- Remove note in the end of section 8.2.4 “A mechanism for synchronising the switch from the old ....”. Same note removed from NBAP.
- Parameters Diversity control field and Diversity indication shall be moved to FDD specific parameters.
- Remove text in beginning of 9.2 before 9.2.1.
- Text from Helsinki regarding DSCH for FDD is converted from working assumption to agreed text.
- Remove references to encoding of CAUSE parameter in 9.2.1. Keep list of possible cause values as FFS.

16.1 Study item reports

B88, TDD parameters study item report (Italtel). Not treated.

16.2 Contributions on the general sections

C34, Error handling: See discussion on C32 above on 15.3.

C15, Parallell procedures: Not treated.

C16, C72, URAs on RNC borders: Not treated.

16.3 Text, message and parameter proposals for RNSAP procedures

C29, C61, -B40: Relates to SRNS Relocation. Not treated. Deferred to the Iu SWG.

- DCH procedures

C54, RL reconfiguration: Not treated.

B85, RL setup etc: Not treated.

-C38, Compressed mode: Not treated.

- Common transport channel procedures

B84, Not treated.

- Global procedures

C57, Cell load: Not treated.

16.4General parameter proposals

16.5 Review spec. (Agree old working assumptions. Assessment of stability / completeness / version number of spec.)

16.6 Other issues

B93 TDD revisions. Not treated.

17 Iur Signalling transport (25.422) ;

17. 1Evaluation of CTP

17.2 Others

18 Iub Signalling transport (25.432) ;

C74 Not treated.

19 Iur/Iub Data transport + Transport network control plane

19.1 Iur/Iub DCH, transport layer (25.426). ;

C06 Not treated.

---C59 Not treated.

19.2 Iub CCH, transport layer (25.434) ;

19.3 Iur CCH, transport layer (25.424), ;

19.4 Review specs. (Agree old working assumptions. Assessment of stability / completeness / version number of spec.)

20 Implementation specific O&M Transport (25.442)

A81, v0.1.2, with revisions. **Approved** as 0.2.0.

20.1 Contributions

C49 Routing of implementation specific O&M (Telia). **Partly agreed.** Text in section 4.1 agreed. Similarly, clarify Scope in 25.442 that this specification only applies when Implementation specific O&M is sharing the same transport as the Iub. Editor shall remove any references in 25.442 to other options than routing via the RNC.

B21 LS from SA5 on routing to colocated equipment. **Conclusions:**

- No requirements are to be added due to this LS.

20.2 Review spec. (Agree old working assumptions. Assessment of stability / completeness / version number of spec.)

D21 25.442 v0.2.1. **Agreed** and set to v.0.3.0 with minor modifications:

- Change reference [1] to 25.431.
- Reintroduce the list of open issues in an Annex. IP over ATM is one open issue, unless solved.
- Remove 4.1, “Introduction”.
- Copy protocol references from 25.412 for handling of IP over ATM.

Stability:

- Not stable enough if not IP over ATM is solved. To be included in a new version for closing plenary.

Annex D – List of Registered Delegates

Name	Company	Phone	Email
Mr. Fredrik Aberg	ERICSSON L.M.	+358 50 3542977	fredrik.aberg@ericsson.fi
Mr. Kalle Ahmavaara	Nokia Japan	+81 3 5510 0803	kalle.ahmavaara@nokia.com
Mr. Magnus Alden	TELIA AB	+4687138108	magnus.x.alden@telia.se
Ms. Cécile Appert	France Telecom	+33 1 45 29 51 70	cecile.appert@cnet.francetelecom.fr
Mr. Hidenori Asaba	NTT DoCoMo	+81 468 40 3332	asaba@nw.yrp.nttdocomo.co.jp
Mrs. Monica Avattaneo	TELECOM ITALIA S.p.A.	+39 06 3900 9045	mavattaneo@tim.it
Mr. Dennis Behrens	MOTOROLA Ltd	+1 847 632 7076	QA3576@email.mot.com
Mr. Achim V. Brandt	SIEMENS AG	+49 89 722 41981	Achim.Brandt@icn.siemens.de
Mr. Jean-Marie Calmel	NORTEL NETWORKS (EUROPE)	+33 1 39 44 52 82	calmel@nortelnetworks.com
Mr. Josep Casals	Telecom Modus Ltd.	+441 372 804 827	josep.casals@t-modus.nec.co.uk
Mr. David Comstock	ERICSSON L.M.	+46 8 585 31226	david.comstock@era.ericsson.se
Mrs. Beena Connors	Motorola Inc.	+1 847 632 7866	connorsb@cig.mot.com
Mr. Andrew Delatorre	VODAFONE Group Plc	+44 1635 673128	andrew.delatorre@vf.vodafone.co.uk
Mr. Massimo Dell'Acqua	ITALTEL S.p.A.	+39 02 43886584	massimo.dellacqua@italtel.it
Mr. Nicolas Drevon	COMPAGNIE FINANCIERE ALCATEL	+33 1 30 77 09 16	nicolas.drevon@alcatel.fr
Mr. Bjorn Ehrstedt	ERICSSON L.M.	+358 9 299 2775	lmfbeh@lmf.ericsson.se
Mr. Hiroshi Furukawa	NEC Corporation	+81 44 856 2326	furuhiro@ccm.cl.nec.co.jp
Mr. Kevan Hobbis	MOTOROLA Ltd	+44 1793 565 163	hobbisk@ecid.cig.mot.com
Mr. Nobutaka Ishikawa	NTT DoCoMo	+81468403220	nobu@wsp.yrp.nttdocomo.co.jp
Mr. Patrick Johnson	Nortel Networks	+1 972 684 7376	pjohnson@nortelnetworks.com
Mr. Jyrki Jussila	NOKIA Corporation	+358 9 5113 8436	jyrki.jussila@nokia.com
Mr. Sami Kekki	NOKIA Corporation	+358 405702350	sami.kekki@nokia.com
Mr. Kethees Ketheesan	Motorola Inc.	+1 847 632 3585	kethees_ketheesan@email.mot.com
Mr. Dirk Kistowski	Deutsche Telekom MobilNet	+49 251 977 3931	dirk.kistowski@t-mobil.de
Ms. Claire Laloe	NORTEL NETWORKS (EUROPE)	+44 1628 43 4285	claloe@nortelnetworks.com
Mr. Atte Lansisalmi	NOKIA Corporation	+358 9 43761	atte.lansisalmi@nokia.com
Mr. Johannes Lenhart	SIEMENS AG	+49 89 722 63697	johannes.lenhart@icn.siemens.de
Mr. Pierre Lescuyer	NORTEL NETWORKS (EUROPE)	+33 1 39 44 44 86	lescuyer@nortelnetworks.com
Mr. Gert-Jan Lieshout	ERICSSON L.M.	+31 534 505 406	emngvli@emn.ericsson.se
Mr. Zhongrong Liu	Deutsche Telekom MobilNet	+49 228 936 1406	zhongrong.liu@t-mobil.de
Mr. Fabio Longoni	NOKIA Corporation	+358405689884	fabio.longoni@ntc.nokia.com
Mr. Peter Lundh	ERICSSON L.M.	+46 8 404 6974	peter.lundh@era.ericsson.se
Mr. Alain Maupin	ERICSSON L.M.	+46 8 404 4379	alain.maupin@era.ericsson.se
Mr. Brendan McWilliams	VODAFONE Group Plc	+44 1635 676264	brendan.mcwilliams@vf.vodafone.co.uk
Mr. Jim Miller	INTERDIGITAL COMMUNICATIONS	+1 516 622 4071	jim.miller@interdigital.com

Name	Company	Phone	Email
Mr. Anders Molander	ERICSSON L.M.	+46 13287480	ander.molander@era.ericsson.se
Mr. Josef Nacson	INTERDIGITAL COMMUNICATIONS	+1 516 622 4354	yosef.nacson@interdigital.com
Mr. Cheng Hock Ng	NEC Corporation	+81 471 85 7167	ngcheng@mcs.abk.nec.co.jp
Mr. Stawros Orkopoulos	MANNESMANN Mobilfunk GmbH	+49 211 533 3783	stawros.orkopoulos@d2privat.de
Miss Sophie Pautonnier	MITSUBISHI Electric	+33 2 99 84 26 36	pautonnier@tcp.ite.mee.com
Mr. Robert Petersen	ERICSSON L.M.	+46 13 28 46 01	robert.petersen@era.ericsson.se
Ms. Flavio Piolini	ITALTEL S.p.A.	+39 02 43886527	flavio.piolini@italtel.it
Mr. Stephan Recker	MANNESMANN Mobilfunk GmbH	+49 211 533 3973	stephan.recker@d2mannesmann.de
Mr. Michael Roberts	Lucent Technologies N. S. UK	+44 1793 883 220	mr85@lucent.com
Mr. Göran Rune	ERICSSON L.M.	+46 13 284 200	goran.rune@era.ericsson.se
Mr. Yasutaka Sasaki	NEC Corporation	+81 45 939 2092	sasakiy@nwk2.msc.yh.nec.co.jp
Mr. Michael Schopp	SIEMENS AG	+49 89 722 43039	michael.schopp@icn.siemens.de
Mr. Akinori Shimamura	Fujitsu Limited	+81 44 740 8152	shima@hcs.ts.fujjitsu.co.jp
Mrs. Astrid Solem	TELENOR AS	+47 63848325	astrid.solem@telenor.com
Mr. Elliot Stewart	MOTOROLA A/S	+1 847 632 7590	stewrtem@cig.mot.com
Ms. Kiran Thakare	Telecom Modus Ltd.	+44 1372 804 826	kiran.thakare@t-modus.co.uk
Mr. Richard Townend	BT	+44 1473 605 429	richard.townend@bt.com
Mr. Jorgen van Parys	ALCATEL BELL	+32 3450 3682	parijsj@mcd.alcatel.be
Mr. Alexander Vesely	SIEMENS AG	+43 1 1707 21318	alexander.vesely@siemens.at
Mr. Terhi Virtanen	NOKIA Corporation	+358 40 726 3048	terhi.virtanen@nokia.com
Mr. Per Willars	ERICSSON L.M.	+46 87573448	per.willars@era.ericsson.se
Mr. Mick Wilson	FUJITSU Europe Telecom R & D C	+44 181 606 4801	m.wilson@fujitsu.co.uk
Mr. Steve Winstanley	ROKE MANOR RESEARCH LTD.	+44 1794 833 106	steven.winstanley@roke.co.uk
Mr. Takayuki Yoshimura	Japan Telecom Co. Ltd	+81 3 3551 2807	yosi@japan-telecom.co.jp

Annex E – Document Register

Document	Title	Source
R3-99a77	25.401	Editor
R3-99a78	25.410	Editor
R3-99a79	25.420	Editor
R3-99a80	25.430	Editor
R3-99a81	25.442	Editor
R3-99a82	25.413	Editor
R3-99a83	25.423	Editor
R3-99a84	25.433	Editor
R3-99a85	25.415	Editor
R3-99a86	25.425	Editor
R3-99a87	25.435	Editor
R3-99a88	25.427	Editor
R3-99a89	25.931	Editor
R3-99a90	25.832	Editor
R3-99a91	30.531	Editor
R3-99a92	25.831	Editor
R3-99a93	I3.05	Editor
R3-99a94	Draft Agenda #7	Chairman
R3-99a95	Draft Minutes #6	Secretary
R3-99a96	Liaison statement to WG2, WG3 and WG4 on power control issues (Resubmission R3-99829)	TSG RAN1
R3-99a97	LS on Ciphering in case of multiple RABs (Resubmission R3-99a23)	TSG SA WG3
R3-99a98	LS on length of SFN (Resubmission R3-99a66)	TSG RAN2
R3-99a99	reply to LS on power control issues (Resubmission R3-99a67)	TSG RAN2
R3-99b00	LS on delay budget (Resubmission R3-99a68)	TSG RAN2
R3-99b01	response to LS on ciphering in case of multiple RABs (Resubmission R3-99a69)	TSG RAN2
R3-99b02	Liaison Statement to clarify transmission of variable-rate codec mode commands on the Iu -interface (Resubmission R3-99a70)	TSG RAN2
R3-99b03	LS to R3 on SMS-CB (Resubmission R3-99a71)	TSG RAN2
R3-99b04	LS to R3 on LCS status (Resubmission R3-99a72)	TSG RAN2
R3-99b05	LS on Timing advance for TDD (Resubmission R3-99a73)	TSG RAN2
R3-99b06	Liaison statement on Support of Speech Service in RAN	TSG SA WG4
R3-99b07	LS on Transmission of variable-rate codec mode commands on the Iu Interface	TSG SA WG4
R3-99b08	LS on the format of the AMR speech data over the Iu frames	TSG SA WG4
R3-99b09	LS on Uplink core network layer 3 message numbering	TSG CN1
R3-99b10	Response to Liaison Statements on MExE support of QoS negotiation and handover notifications	TSG CN1
R3-99b11	Liaison statement to R3 on UMTS 25.832 Manifestations of Handover and SRNS Relocation v.2.1.1	TSG CN2
R3-99b12	Liaison statement on L1 timing issues	TSG RAN WG1
R3-99b13	Liaison statement on outer loop power control	TSG RAN WG1
R3-99b14	Liaison statement on power control limits	TSG RAN WG1
R3-99b15	Liaison statement on Support of Speech Service in RAN	TSG RAN WG1
R3-99b16	Liaison statement on Support of Speech Service in RAN for FDD	TSG RAN WG1
R3-99b17	Answer to the LS about TDD synchronisation methods	TSG RAN WG1
R3-99b18	Response to the LS "MExE support of QoS negotiation"	TSG S2/SMG12
R3-99b19	LS on CBS Functionality and Responsibility	TSG T2
R3-99b20	Liaison Statement - Cover letter for TR21.904, Terminal Capabilities Report, interim version	TSG T2 SWG6
R3-99b21	Reply to Liaison on TS 25.442 UTRAN Implementation Specific O&M Transport	TSG-SA WG5

Document	Title	Source
R3-99b22	LS on "I3.05 - Node B O&M Functional Description"	TSG-SA WG5
R3-99b23	reserved	
R3-99b24	reserved	
R3-99b25	reserved	
R3-99b26	reserved	
R3-99b27	reserved	
R3-99b28	reserved	
R3-99b29	reserved	
R3-99b30	Node B Configuration and Initial Cell Configuration Procedures	Motorola
R3-99b31	Call Trace	Motorola
R3-99b32	Proposal of CR on 25.431	Motorola
R3-99b33	Common Transport Channel Reconfiguration Request - ToAWS, ToAWE	Motorola
R3-99b34	Resource Status Indication message contents update and Introduction of Shutdown Complete Indication message	Motorola
R3-99b35		Motorola
R3-99b36	SSDT	Telecom Modus
R3-99b37	SSDT	Telecom Modus
R3-99b38	SSDT	Telecom Modus
R3-99b39	Proposed editorial changes to 25.430 UTRAN Iub General Aspects and Principles V0.1.5	Editor (Fujitsu)
R3-99b40	Proposed Example Parameters of SRNC Relocation Commit	FUJITSU Limited
R3-99b41	"Proposed Example Procedure of Channel Type Switching from RACH/FACH to RACH/PCH	
"	FUJITSU Limited	
R3-99b42	Proposed Principle on the Support for RRC Connection	FUJITSU Limited
R3-99b43	SCTP Evaluation	Motorola
R3-99b44	CN Domain Indicator and TS 23.121 Requirements	Motorola
R3-99b45		Motorola
R3-99b46	A method utilizing DL reference power to avoid power drifting	Telecom Modus, NEC
R3-99b47	Procedures for slow transmit power control	Telecom Modus, NEC
R3-99b48	TS RAN 25.415 V1.0.2	Ericsson (Bjorn.Ehrstedt)
R3-99b49	Functional Division between UTRAN and CN contribution	Ericsson (Bjorn.Ehrstedt)
R3-99b50	IU Downlink Rate Control procedure description for 25.415 (Iu UP protocol)	Ericsson (Bjorn.Ehrstedt)
R3-99b51	Frame coding of PDU type 0 for Support Mode for predefined SDU size	Ericsson (Bjorn.Ehrstedt)
R3-99b52	Frame coding of PDU type 15 for Support Mode for predefined SDU size	Ericsson (Bjorn.Ehrstedt)
R3-99b53	Protocol states for Iu User Plane	Ericsson (Bjorn.Ehrstedt)
R3-99b54	Frame quality classification in Iu UP for Support Mode	Ericsson (Bjorn.Ehrstedt)
R3-99b55	Security Mode Control Procedure for RANAP	Ericsson (Bjorn.Ehrstedt)
R3-99b56	RANAP information elements definition	Ericsson (Bjorn.Ehrstedt)
R3-99b57	Comments to RANAP v.1.2.2	Ericsson (Bjorn.Ehrstedt)
R3-99b58	Replacement of NBAP Procedures for Radio Resource Management: Node B Restarted and RNC Restarted	Ericsson (Bjorn.Ehrstedt)
R3-99b59	Proposed NBAP Procedure for Cell Configuration Management: Cell Reconfiguration	Ericsson (Bjorn.Ehrstedt)

Document	Title	Source
R3-99b60	Merging of NBAP Procedures for Resource Event Management: Resource Status Indication and Resource Notification Indication	Ericsson (Bjorn.Ehrstedt)
R3-99b61	Measurements to be provided in Node B	Ericsson (Bjorn.Ehrstedt)
R3-99b62	Multiplexing Communication Control Ports	Ericsson (Bjorn.Ehrstedt)
R3-99b63	Transport of System information over Iub	Ericsson (Bjorn.Ehrstedt)
R3-99b64	Coding of propagation delay field in RACH FP	Ericsson (Bjorn.Ehrstedt)
R3-99b65	DL power level on the secondary-CCPCH	Ericsson (Bjorn.Ehrstedt)
R3-99b66	Iub user plane support for long UE sleep modes	Ericsson (Bjorn.Ehrstedt)
R3-99b67	Coding of Paging Indication information in the PCH Frame Protocol	Ericsson (Bjorn.Ehrstedt)
R3-99b68	Content in the Paging Message	NEC Corporation
R3-99b69	The contents of the Location Reporting Control and Location Report Message	NEC Corporation
R3-99b70	Content in the Source RNC to Target RNC Transparent Field	NEC Corporation
R3-99b71	Timer for RANAP	NEC Corporation
R3-99b72	Location Information in the Iu Release Complete	NEC
R3-99b73	Transparent field in Relocation Required and Relocation Request (Resubmission)	Alcatel
R3-99b74	Editor's Proposal for 25.410 v.1.0.x	Editor
R3-99b75	updated 25.433 NBAP specification V1.2.1	Editor
R3-99b76	NBAP : Block Resource Request Message	GSM Association VPT, Mannesmann Mobilfunk, T-Mobil, Vodafone
R3-99b77	NBAP : Block Resource Response	GSM Association VPT, Mannesmann Mobilfunk, T-Mobil, Vodafone
R3-99b78	NBAP : Block Resource Failure	GSM Association VPT, Mannesmann Mobilfunk, T-Mobil, Vodafone
R3-99b79	NBAP : NBAP Contribution Discussion Study Item Report	Vodafone
R3-99b80	NBAP : Proposed New Cause Values	Vodafone
R3-99b81	TDD Synchronisation on air	Siemens/Italtel
R3-99b82	TDD Synchronisation by a GPS receiver via the standardised Synchronisation Port	Siemens/Italtel
R3-99b83	Node B states during TDD Synchronisation procedure on air	Siemens/Italtel
R3-99b84	Parameters for the RNSAP Common Transport Channel Initialisation procedure	Siemens/Italtel
R3-99b85	TDD parameters in RNSAP FDD Radio Link Setup Response	Siemens/Italtel
R3-99b86	Radio Access Bearer Establishment: DSCH Establishment in RACH/FACH State	Siemens/Italtel
R3-99b87	Radio Access Bearer Establishment: USCH Establishment in RACH/FACH State	Siemens/Italtel
R3-99b88	Report of the NBAP & RNSAP TDD Parameters Study Item TDD parameters in RNSAP	Siemens/Italtel
R3-99b89	Report of the NBAP & RNSAP TDD Parameters Study Item: TDD parameters in NBAP	Siemens/Italtel
R3-99b90	Revision of TS 25.401 V1.3.1	Siemens/Italtel
R3-99b91	Revision of TS 25.420 V1.1.6	Siemens/Italtel

		Siemens/Italtel
R3-99c06	Priority handling at AAL2 and ATM layer on the Iub/Iur interfaces	Alcatel France
R3-99c07	Abnormal Conditions and Unsuccessful Outcome of RANAP procedures	Ericsson (Bjorn.Ehrstedt)
R3-99c08	CR on 25.414 Reference to GTP-U protocol specification	Ericsson (Bjorn.Ehrstedt)
R3-99c09	Bit order in the user plane	Ericsson (Bjorn.Ehrstedt)
R3-99c10	CRC Lenghts in the frame protocol	Ericsson (Bjorn.Ehrstedt)
R3-99c11	Commonalities between dedicated and common User Plane Protocols	Ericsson (Bjorn.Ehrstedt)
R3-99c12	User plane frame protocol headers	Ericsson (Bjorn.Ehrstedt)
R3-99c13	Position of CRC-indicators in UL payloads	Ericsson (Bjorn.Ehrstedt)
R3-99c14	Flow control for FACH data streams o/Iur	Ericsson (Bjorn.Ehrstedt)
R3-99c15	Parallel RNSAP Procedures	Ericsson (Bjorn.Ehrstedt)
R3-99c16	RNSAP Support for URAs Extending over RNC Boarders	Ericsson (Bjorn.Ehrstedt)
R3-99c17	Clarification of SCCP Establishment on Iur	Ericsson (Bjorn.Ehrstedt)
R3-99c18	Study Item Report: DL Power Control	Ericsson (Bjorn.Ehrstedt)
R3-99c19		
R3-99c20	Editor's proposal for 25.413	Nokia (Editor)
R3-99c21	RANAP Services	Nokia
R3-99c22	SCCP Services	Nokia
R3-99c23	Principles for including the Uu interface related information to RANAP messages used for relocation of SRNS	Nokia
R3-99c24	Modifications to RANAP specifications due to the lossless Relocation requirement	Nokia
R3-99c25	RANAP support for volume based charging	Nokia
R3-99c26	Interaction of Relocation and Other RANAP Procedures	Nokia
R3-99c27	Location Information in RANAP Messages	Nokia
R3-99c28	Reset Resource RANAP Procedure	Nokia
R3-99c29	Modifications to the RNSAP Relocation Commit procedure	Nokia
R3-99c30	Clarifications to some RANAP IE definitions	Nokia

Document	Title	Source
R3-99c31	Transport Network delay issues, request for change	Nokia
R3-99c32	Error reporting procedure in NBAP	Nokia
R3-99c33	Hard handover at the Iub	Nokia
R3-99c34	Error reporting procedure in RNSAP	Nokia
R3-99c35	Additional physical channel parameters in RNSAP/NBAP dedicated channel procedures	Nokia
R3-99c36	Handling of Compatibility Information for the Iub/Iur DCH FP	Nokia
R3-99c37	UMTS 25.427: Iur/Iub User plane protocol for DCH data streams, v.0.4.2 - Editor's proposal	Nokia
R3-99c38	Support for Compressed Mode control in UTRAN interfaces	Nokia
R3-99c39	Health Check (Layer3)	NTT DoCoMo
R3-99c40	Report on out-of-sync detection study item	NTT DoCoMo
R3-99c41	Proposal of revival of "Normal mode" in UL Iur/Iub FP	NTT DoCoMo
R3-99c42	Association between UE and events in UTRAN nodes	NTT DoCoMo
R3-99c43	Evaluation procedure	NTT DoCoMo
R3-99c44	Editor's change proposal to 25.433 NBAP specification V1.2.1	NTT DoCoMo
R3-99c45		NTT DoCoMo
R3-99c46		NTT DoCoMo
R3-99c47		NTT DoCoMo
R3-99c48	Charging related Procedure for RANAP	NTT DoCoMo
R3-99c49	Routing Implementation Specific O&M outside RNC	Telia
R3-99c50	Proposal of the problem on DL Cannelisation codes	FUJITSU Limited
R3-99c51	TS 25.425 v0.2.3	Alcatel France
R3-99c52	Proposal for modification of parameters in the Radio Link Set Up Up Request and Radio Link Addition Request messages in TS 25.433	Alcatel France
R3-99c53	Use of CORBA for Iub Logical O&M	T-Mobil
R3-99c54	Proposal for additional parameters in RNSAP Radio Link Reconfiguration messages in TS 25.423	Alcatel France
R3-99c55	RANAP protocol principles and error handling	Lucent Technologies
R3-99c56	Proposal to add Transmission Power Measurement Reports per code in TS 25.433	Alcatel France
R3-99c57	RNSAP "Cell Load Information" procedure and message contents	Alcatel France
R3-99c58	Proposal for addition of DSCH parameters in the Radio Link Setup	Alcatel France
R3-99c59	Need for priority handling on Iur and Iub	Alcatel France
R3-99c60	Changes to RANAP specification for the support of lossless relocation	Alcatel France
R3-99c61	Changes to RNSAP specification for the support of lossless relocation	Alcatel France
R3-99c62	Sequence charts for SRNS relocation	Alcatel France
R3-99c63	Sequence charts for GPRS to UMTS cell reselection	Alcatel France
R3-99c64	Sequence charts for UMTS to GPRS cell reselection	Alcatel France
R3-99c65	Measurement Termination Response (Resubmission)	GSM Association VPT, Vodafone, Mannesmann Mobilfunk, T-Mobil
R3-99c66	Measurement Initiatian Request (Resubmission)	GSM Association VPT, Vodafone, Mannesmann Mobilfunk, T-Mobil
R3-99c67	Measurement Termination Request (Resubmission)	GSM Association VPT, Vodafone, Mannesmann Mobilfunk, T-Mobil
R3-99c68	Measurement Report (Resubmission)	T-Mobil

Document	Title	Source
R3-99c69	Addition of NodeB and NodeB Control Port objects in Resource Status Indication message	Nortel networks
R3-99c70	Resource Status Indication message content refinement for NodeB logical resources availability management	Nortel networks
R3-99c71	Node B Capacity management on Iub interface	Nortel networks
R3-99c72		Ericsson (Bjorn.Ehrstedt)
R3-99c73	Enhanced NBAP Procedure for Common Transport Channels Management: Common Transport Channel Setup	Ericsson (Bjorn.Ehrstedt)
R3-99c74	CR on 25.432 Iub NBAP Signalling Bearer	Ericsson (Bjorn.Ehrstedt)
R3-99c75	Clarification on usage of Classical IP over ATM	Ericsson (Bjorn.Ehrstedt)
R3-99c76	Node Synchronisation clarifications	Ericsson (Bjorn.Ehrstedt)
R3-99c77	Liaison to WG1: Using 8 lsb of SFN in each BCH radio frame	Ericsson (Bjorn.Ehrstedt)
R3-99c78	Radio synchronisation Timing diagram for 25.401	Ericsson (Bjorn.Ehrstedt)
R3-99c79	Dedicated NBAP Measurement Control and Reporting procedures	Nokia
R3-99c80	UMTS Delay Budget	Vodafone
R3-99c81	Requirements on Iu from CS Data	N3
R3-99c82	Draft Reply to R1 on Power Control Limits	Nokia
R3-99c83	Answer to overall delay budget within the AS	N2
R3-99c84	Draft LS to R2 on CN domain identifier	Motorola
R3-99c85	Draft LS to r2 and s3 on per-RAB ciphering	BT
R3-99c86	LS on CBS Functionality and Responsibility	N1
R3-99c87	LS on L3 Segmentation	N1
R3-99c88	LS on Location Area Concept	N1
R3-99c89	LS on Classmark Split	N1
R3-99c90	QoS Report (attachment to b26)	SA2
R3-99c91	LS on a common communication mechanism to be used by the cell broadcast service	SA2
R3-99c92	Liaison on the removal of superframe concept in layer 1	R1
R3-99c93	CR to 25.412	Motorola
R3-99c94	CR to 25.422	Motorola
R3-99c95	CR to 25.426	Motorola
R3-99c96	Timing Advance for TDD, effect on DCH control frame	Siemens/Italtel
R3-99c97	Draft LS on Uu protocol information for Relocation of SRNS	Nokia
R3-99c98	Draft LS on usage of E interface in 2G-3G interworking	Nokia
R3-99c99	Another Editor's Proposal for 25.410	Editor (BT)
R3-99d00	Proposed LS to S2, S3 & N1 on Common Identification for Relocation Co-ordination	Ericsson
R3-99d01	Draft LS on GTP-U	Ericsson
R3-99d02	Changes to the CN broadcast information procedure	Nortel networks
R3-99d03	CR to 25.414	Motorola
R3-99d04	CR to 25.412	Motorola
R3-99d05	CR to 25.426	Motorola
R3-99d06	CR to 25.422	Motorola
R3-99d07	CR to 25.424	Motorola
R3-99d08	CR to 25.434	Motorola
R3-99d09	CR to 25.432	Motorola
R3-99d10	Draft Reply to R1 on Power Control Issues	Motorola
R3-99d11	LS on RAB requirements for CS data	N3
R3-99d12	Editor's Proposal for 25.420	Telecom Modus
R3-99d13	LS on Adjustment Loop	Telecom Modus

Document	Title	Source
R3-99d14	Update on Text Proposal for SSDT	Telecom Modus
R3-99d15	Ad Hoc Report on SSDT	Telecom Modus
R3-99d16	LS on SSDT	Telecom Modus
R3-99d17	LS for DPDCH Structure	Telecom Modus
R3-99d18	Example of TDD Synchronisation Procedure	Siemens/Italtel
R3-99d19	Report of the Ad Hoc Meeting "Delay Budget within the Access Stratum"	Siemens/Italtel
R3-99d20	Final Editor's Proposal for 25.410	Editor (BT)
R3-99d21	Editor's Proposal for 25.433	Editor
R3-99d22	Editor's Proposal for 25.430	Editor
R3-99d23	Editor's Proposal for 25.427	Editor
R3-99d24	Iu SWG Report	SWG Chairman
R3-99d25	Iub/r SWG Report	SWG Chairman
R3-99d26	Editor's Proposal for 25.435	Editor
R3-99d27	25.425 v.0.2.4	Editor
R3-99d28	Eb/No parameters in RNSAP message	Alcatel
R3-99d29	Text proposal for RL failure and RL restore procedures	Nokia
R3-99d30	Proposed answer to LS from WG1 on power control limit	Nokia
R3-99d31	ls about decoding of the tfci values	Nokia
R3-99d32	LS on Uu protocol information for Relocation of SRNS	Nokia
R3-99d33	Draft LS on RANAP data volume reporting	Nokia
R3-99d34	Editor's Proposal for 25.420	Editor
R3-99d35	Editor's Proposal for 25.430	Editor
R3-99d36	Editor's Proposal for 25.422	Editor
R3-99d37	Editor's Proposal for 25.420	Editor
R3-99d38	Draft LS to R2 on System Information Broadcast	Ericsson
R3-99d39	Proposed LS to S5 Call Trace Message Contents and Call Trace De-activation	Motorola
R3-99d40	Editor's Proposal for 25.430	Editor
R3-99d41	25.415 v1.0.3	Editor
R3-99d42	25.415 v1.0.4	Editor
R3-99d43	25.415 v1.0.5	Editor
R3-99d44	25.435	Editor
R3-99d45	25.401	Editor
R3-99d46	25.425 v.0.2.5	Editor
R3-99d47	25.427	Editor
R3-99d48	draft LS	Ericsson
R3-99d49	draft LS	Ericsson
R3-99d50	draft LS	Ericsson
R3-99d51	draft LS to "LS on S3 Segmentation"	Nokia