

Agenda Item: 3

Source: Secretary

Title: Draft Minutes of Meeting #3

Document for: Approval

3GPP TSG RAN WG3 Meeting #2 – Kawasaki, Japan

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. 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 20 for the discussion on these reports, and ratification of the SWG decisions).

1 Opening of the Meeting

The meeting was opened by the chairman, Per Willars (Ericsson).

The secretary (Richard Townend, BT) announced that as 3GPP support had been unable to allocate most of the tdoc numbers, the temporary numbers allocated by Fujitsu should be replaced as follows:
TD-xx → 3xx (for xx between 01 and 44)
NO1 → 348
NO19 → 355
NO20 → 356.

Any new documents were allocated numbers during the meeting. The complete document list is included in Annex E.

2 Approval of the Agenda

TSGR3#3(99)252 ‘Draft Agenda’ was presented by the chairman. The split of agenda items between SWGs and the plenary was altered, to allow plenary review and discussion of the transport layer specifications and the General Aspects and Principles specifications.

It was commented that many of the documents had been submitted after the deadline, and the chairman stated that if delegates could tell him which had been submitted on time, they would be given priority.

3 Approval of minutes from last meeting

TSGR3#3(99)252 ‘Draft Minutes of Meeting #2’ was presented by the secretary. He explained that he had received one comment by email, from Nokia, concerning Tdoc 186. Both the secretary and chairman confirmed that the minutes agreed with their notes and memories of the previous meeting. After some discussions about the technical correctness of the previous decision, Nokia agreed not to have their objections added to the previous minutes. Their principle concern had been how the DCH used to transport message 5 was set up. It was noted that further contributions would be needed to correct any error in the agreed procedure.

Alcatel agreed that the approved procedure is wrong. However, it was left in the document, awaiting correction.

The chairman reminded delegates that the primary purpose of the minutes is to report the decisions made by the group, rather than every comment made by each company.

The minutes of meeting #2 were approved.

4 Letters/Reports from other groups

4.1 Report from TSG RAN

The chairman reported from TSG RAN plenary. The main discussions in TSG RAN concerned the approval and handling of RAN specifications. It was decided that the specifications would be renumbered, instead of S3.xx we will use 25.4xx; there will be separate numbering for TRs and workplans. An updated specification structure showing these new numbers is included as Annex A.

The 3GPP version handling procedure was explained:

Version 0.x.y means that specification is unstable.
Version 1.0.0 50% stable, still handled at WG level.
Version 2.0.0 80% stable, presented to RAN plenary for approval.
Version 3.0.0 Approved. All changes done as change requests to TSG-RAN.

Our permanent documents had been presented to TSG RAN for “approval” (not to version to 3.0.0!). The version numbers as set by TSG RAN are shown in the specification structure in Annex A.

It was asked whether we should use dated references to external specifications – TSG RAN would prefer to use dated references (note that the draft TSG-RAN minutes are incorrect on this point, as they state that undated references should be used!).

We should decide whether I3.02 (Manifestations of Handover and SRNS Relocation) should be published or internal to 3GPP. TSG RAN had commented that all FFS should be removed and it should be sent to SA2 for comments (see tdoc 248 for further discussions on this document).

WG3 was instructed to finalise our transport layer specifications at this meeting as version 2.0.0. Then they will be posted to TSG-RAN mail reflector, and if no comments are made within 30 days, they will be approved as version 3.0.0. Otherwise, we must discuss the comments in WG3 and re-submit to the next TSG-RAN meeting. The importance of keeping to the timescales in the workplan was stressed.

After WG3 approval, the editors of the documents should send the documents to David Williams at 3GPP support (david.williams@etsi.fr). He will send them out on the RAN reflector.

Terminology – Editors must ensure that all definitions and abbreviations are included in the documents and are also submitted to the RAN vocabulary editor (Motorola – name to be confirmed).

MAC for Paging channel has moved to CRNC (from Node B), so there is no need for paging in NBAP.

4.2 Report from TSG SA WG2

None was presented, but a liaison statement on the Iu signalling bearer had been received (tdoc 295, see below).

4.3 Others

TSGR3#3(99)301 ‘LS on Hybrid ARQ Type II and III’ from R2 was presented by Achim Brandt (Siemens). It asked for comments from WG3 on the Iub and Iur impacts of Hybrid ARQ types II/III on the uplink DCH and USCH. Ericsson asked for background on Type II/III – Siemens will provide a

document as soon as it is available. Alcatel asked what impacts had already been identified for Iub/r in WG2 – Siemens stated that it was to do with RLC PDU numbers, but needed to clarify the details. Siemens also believed that the implications on Iub and Iur are very minor. Further discussion on the subject was delegated to the Iub/r SWG.

TSGR3#3(99)254 ‘Response to the Iub O&M Work Item’ from S5 was presented by Andrew De La Torre (Vodafone). The liaison supported the position agreed at the last WG3 meeting. *The document was noted.*

TSGR3#3(99)295 ‘Agreed signalling bearer architecture for Iu’ from S2 was presented by Mick Wilson (Fujitsu). The LS reported that RANAP would be carried on White Book SCCP. In the CS-domain, SCCP would be carried on MTP3b over SAAL-NNI. For the PS-domain, two options will be standardised, SCCP on MTP3b over SAAL-NNI, or SCCP on CTP over IP. No UMTS specific changes would be made to CTP. *This decision should be reflected in our 25.412 specification; this was delegated to the Iu SWG and the editor. The correct references for CTP cannot be added at this stage, as the specifications do not currently exist (a note should be added to state that unless CTP is available for reference by September, we will have to re-evaluate whether CTP can be included in Release 99).* Motorola commented that the re-evaluation should be done in S2; the chairman stated that we would consult with S2 if necessary, but that he hoped that it would not be needed.

TSGR3#3(99)353 ‘LS on Principles for the continued work with Terminal Capabilities’ from T2 was presented by Richard Townend (BT). The chairman asked whether any of this might be related to the Node B as well? No delegates expressed an opinion. *The document was noted, as we have no direct involvement in terminal capabilities.*

TSGR3#3(99)354 ‘LS on Need for inter operator Handover between UMTS and GSM’ was presented by Jean-Marie Calmel (Nortel). Motorola asked whether there were any implications on UTRAN of whether a handover was inter-operator or not. Alcatel commented that Cell-ID would have to be unique. The chairman asked whether there was a requirement for UMTS-UMTS inter-operator handover. NEC commented that there may be issues with transferring UE capability information. We should respond that we have not yet studied the matter in any depth, but would like to know whether there is a requirement for UMTS-UMTS inter-operator handover. Wolfgang Hultsch (Siemens) will draft a response (Tdoc 366).

TSGR3#3(99)351 ‘Reply to LS on Common Channel Abbreviation’ from R2 was presented by Håkan Palm (Ericsson). The recommendation is that WG3 should not use any abbreviation for the set of common transport channels (other than RACH, FACH, USCH and DSCH to refer to individual common transport channels). It was commented by Nokia that we should always be specific which transport channels are referred to. *CCH should be changed to Common Transport Channels throughout our documentation, unless there is a good reason to change it to RACH, FACH and DSCH).*

TSGR3#3(99)352 ‘Feasibility Study regarding two addressing mechanisms for MAC protocol’ from R2 was presented by Jean-Marie Calmel (Nortel). Nokia commented that as we have decided to use the UPLINK TRANSFER message to carry messages with s-RNTI and SRNC-ID as UE identifiers over Iur, which rules out the second bullet in option 1. Nortel do not agree that this is ruled out. Lucent mentioned that this had been discussed in S2, where option 1 had been preferred. This should be discussed further in the Iur/b SWG (under Agenda Item 13). Due to a lack of time in SWG, this was raised again in the plenary.

Further Plenary Discussion -

It was proposed to reply stating that we have not yet fully solved the common transport channels on Iur problems, and that solution number 1 relies on this. Proposal 2 means that it is enough to use the Uplink Transfer procedure in RNSAP. Nortel commented that the content of the UPLINK TRANSFER message was not assumed, and that it was also possible to use this message in proposal 1. It was suggested that we were reliant on having both the c-RNTI and s-RNTI in the cell update message. If the UE sends data linked to the cell update message, then RNSAP is being used as the transport bearer for common transport channels on Iur. It was then proposed to reply that WG3 does not have a problem with either proposal as long as the amount of data that can be carried in an implicit cell update message is limited. If we use common channels on Iur, then we do not need to limit the amount of data. Nortel

suggested that WG2 would be ensuring (for radio efficiency reasons) that the amount of data sent as an implicit cell update was limited in some way. A drafting group was asked to prepare a response (Kalle Ahmavaara, Nokia was responsible; Tdoc 403 contains the results of their drafting).

TSGR3#3(99)346 'LS on UE Physical Layer Capabilities' (R1 to T2, cc R3) was presented by Richard Townend (BT). *The document was noted.*

TSGR3#3(99)347 'A new SSN for RANAP' from S2 to N2 (cc R3) was presented by Mick Wilson (Fujitsu). This proposes that a GSM specific SSN should be allocated for RANAP. *The document was noted, as it was only copied to WG3 for information.*

TSGR3#3(99)350 'LS on DSCH on Iur and Iub' from R2 was presented by Jean-Marie Calmel (Nortel). The LS describes the DSCH model used in R2, and asks R3 to check that it does not contradict R3 assumptions. Ericsson asked whether there was always a DCH associated with DSCH – Nokia clarified that this is the case in the uplink. The LS only refers to the DCH/DCH+DSCH case. Siemens asked whether there could be more than one DSCH for a UE – Nokia commented that it would be possible to use MAC multiplexing. Mitsubishi stated that if QoS was required on DSCH, then you would need multiple TFIs. It was noted that there were some DCH messages missing from the procedure figure, but only those related to DSCH transmission have been shown. Ericsson asked where the DCCH is mapped – Lucent state that it is generally possible to map DCCH onto DSCH using MAC multiplexing. The detailed discussion was delegated to the Iur/b SWG. The SWG deferred discussion back to the plenary, due to lack of time.

Further Plenary Discussion -

The chairman suggested that the TFI handling should not be a big problem, but we have not concluded on the concept of DSCH on Iur. Mitsubishi asked about the second bullet in section 3 (allocation of TFCI address space). Nortel answered that in the 1st approach the TFCI is split into two independent fields, which restricts the number of DCH combinations. It was discussed how the TFCI was split (in particular whether it was flexible or dynamic) – Nokia thought that the 16 bit TFCI was split into two 8 bit codewords. The macrodiversity benefits were questioned by Nokia, as their delegates could not see the advantage of receiving the TFCI but not the data. Nortel suggested that it was more important to receive the TFCI than the data. It was agreed that the further refinement added considerable potential complexity to the Iur, as it would lead to scheduling information being required to be fed back to MAC-d from MAC-sh (along with other issues). Less problems were seen for Iub. It was discussed whether to ask WG2 to consider how necessary the refinement was for R99, as it will be difficult to specify. It is hard to comment on the basic solution, except the TFCI handling, as we have not studied DSCH over Iur. We would like more information from WG2 on their solution for DSCH, in particular whether one of the two options have been adopted. Nokia comment that if WG2 really need the further refinement, we could avoid the Iur complexity by performing SRNS relocation, but Nortel reminded the group that DSCH was paired with DCH. Fabio Longoni (Nokia) agreed to draft a response (tdoc 405). *It was agreed to include the following text in the LS:*

"WG3 foresees increased complexity on Iur for this feature, and asks WG2 to consider whether this is really necessary for R99"

TSGR3#3(99)317 'report of O&M Ad Hoc' was made available for information. It was not presented.

5 Organisation of Work

5.1 Workplan

TSGR3#3(99)249 'Workplan' was presented by Björn Ehrstedt (Ericsson). He commented that the new template had now been applied to the milestones section. Ericsson commented that S3.31 should have April as its date for approval. It was noted that the plan is to have the complete set of functions in the signalling specifications by July.

TSGR3#3(99)318 ‘Amendment to I3.01 for Iub O&M Work Item’ was presented by Andrew De La Torre (Vodafone). It proposes milestones and dates for the O&M work. *The proposed changes were agreed.*

TSGR3#3(99)401 ‘UTRAN Implementation Specific O&M Transport’ was presented by Stephan Recker (Mannesmann Mobilfunk). The document proposes a structure for a new specification to cover the Transport for Implementation Specific O&M. *It was agreed to create this specification, which will be numbered 25.442* (this was originally 25.441, but corrected later in the meeting!). Stephan volunteered to be the editor. Ericsson asked whether it was agreed that the Node B-management platform direct routing option should be allowed. However, as it was only in an editor’s note, the comment was not sustained. *The editor’s proposed outline was approved.* This will be included in the agenda for the next meeting.

5.2 Appointment of Representatives

No candidates presented themselves for the rapporteurship of the Iur/b SWG. Per Willars (Ericsson) will chair it for this meeting.

Editor for Layer 1 specifications – Achim Brandt (Siemens) volunteered to be an interim editor for the duration of this meeting (and to incorporate decisions from this meeting). At the end of the meeting, Achim agreed to continue as editor for the three specifications (25.4x1).

5.3 Future Meetings & Hosting

1-4 June	Lucent/Motorola	Warwick, UK
5-9 July	Nokia	Helsinki, Finland
23-27 August	ETSI	Sofia Antipolis, France
20-24 September	<i>Host needed</i>	
25-29 October	NEC	Abiko, Japan
6-10 December	<i>Host needed</i>	

N.B. The June meeting runs for 4 days, from Tuesday to Friday, not all week as originally planned. This is due to difficulties with securing a venue for the Monday (a bank holiday in the UK).

5.4 Editor for Study Items for Future Releases

Björn Ehrstedt (Ericsson) and Nicolas Drevon (Alcatel) both volunteered, but Nicolas was appointed after Björn withdrew.

6 General UTRAN Architecture

6.1 UTRAN Architecture

TSGR3#3(99)309 ‘UTRAN Overall Description v0.1.1’ was presented by Jean-Marie Calmel. It is an editor’s proposal in co-ordination with the editors of S3.10, S3.20 and S3.30.

The chairman suggested that it would be better if the transport layer chapter was moved as follows (unless the material is already present in the chosen destination):

- 12.1.1 → 25.412
- 12.1.2 → 25.414
- 12.1.3 → 25.414
- 12.2.1 → 25.422 (with removal of numbered parts 1&2, and their introduction)
- 12.2.1.1 → 25.420
- 12.2.2 → 25.424
- 12.2.3 → 25.426 (updated to read DCH data streams, not soft handover data streams)
- 12.3.3 → 25.426 (12.3.1 and 12.3.2 are empty).

It was commented that the concept of transport network user plane is not used elsewhere in our documentation. However, it is included for completeness. The chairman clarified for the meeting that the transport network control plane is only used to control the data bearers and not the signalling bearers.

It was noticed that in 6.1.2.2, "SAID" should read "AAL2 Path Id + CID".

The document was reviewed for stability:

5 is stable

6 is stable but not complete (missing URA ID and Cell ID).

7 may need some restructuring and some more functions (e.g. Cell/URA update, channel type switching etc); also still some FFS.

8 is old, and needs checking.

9 has some options and some FFS – needs more work.

10 is fairly stable.

11.1 is stable.

11.2 needs to have the MAC-lc entity removed.

12 is very incomplete.

With the changes noted above, the proposal was accepted.

The editors proposals for S3.10, 3.20 and 3.30 were all presented at the same time (see agenda items 9, 13.2 & 13.3).

TSGR3#3(99)262 'Terminology and Clarity of Specifications' was presented by Richard Townend (BT). *SRNS Relocation was decided as the official terminology – the editors were asked to check their documents for this. The rest of the contribution was also agreed.* Finally it was noticed that in section 8 of RNSAP specification, there was still a reference to YY.02 – *the editor was instructed to update this.*

TSGR3#3(99)275 'Transport layer address handling in UTRAN' was presented by Göran Rune (Ericsson). Alcatel asked about whether we need to specify the NSAP formats as they are already stated in Q.AAL2 – Ericsson stated that it was to limit the possible formats. Motorola expressed a wish not to restrict the formats of the addressing fields. Ericsson wanted to simplify the protocols without being restrictive. Motorola stated that they wished to be able to use IP addressing. Ericsson stated that as the transport layer addresses were for AAL2, there is no need to carry IP, as we only use it for CS-domain traffic. Nokia note that IP addressing is not mentioned in Q.AAL2 specification; Alcatel comment that they think that you can encapsulate an IP address in AESA, but are not sure! Motorola repeated that unless there was a good reason to restrict the allowable schemes. BT asked what addressing schemes were precluded by this proposal – Nokia and Ericsson said that it was only Native E.164 that was precluded.

The chairman asked whether RNSAP had to know the format – Ericsson replied that the signalling protocol offered a container for the address and so should not need to understand the format.

Alcatel asked why Ericsson did not want to use Native E.164 - Ericsson prefer to use NSAP addressing as that is the future of transport addressing. They pointed out that NSAP can carry E.164 in embedded format.

Decision:

Proposal 1 – Agreed.

Proposal 2 – Agreed.

Proposal 3 – Nortel asked for the first bullet to be changed so that it does not specifically refer to AAL2 or IP address, using instead, "regarding the transport layer address...". Agreed.

TSGR3#3(99)279 'WCDMA – Allow for several carriers in a cell' was presented by Göran Rune (Ericsson). Nokia asked about the situation in WG1 with regard to whether it is possible to have a carrier without a BCCH – Ericsson responded that they thought so, but could not be sure. Nokia were

concerned about the Layer 1 aspects. It was noted that the arguments were almost all radio specific, and so were out of scope for this group. The chairman noted that the cell identifier was within scope for this group, but Nokia stated that the length of this field should reflect the number of cells, rather than the other way around. It was proposed to send a LS to WG1 & WG2 as we need to know whether it is possible to support more than one carrier in a cell. Italtel were concerned about the co-location aspects, but the chairman pointed out this issue that this was not about co-location, but rather about control channel structure, paging channel structure, idle mode selection etc. Primarily, this is a WG2 issue. Göran Rune will draft the LS (Tdoc 393).

6.2 Study Items report and decision

It was commented that there was no formal report on the ASN.1 (etc) study item. The companies who were reluctant to use ASN.1 have put documents into this meeting.

TSGR3#3(99)348 ‘Usage of ASN.1 for Application Part message definitions’ was presented by Atte Lansisalmi (Nokia). The document proposes an abstract syntax and a transfer syntax. It was noted that the transfer syntax decision could be taken later, if needed. Lucent asked for the rationale for using a *subset* of ASN.1 – Nokia responded that ASN.1 has options, and we must decide which to use. Lucent commented that constructs like “constrained by” (as used in the example) were not well supported by commercial tools. Nokia was surprised, but stated that other conventions could be used instead.

TSGR3#3(99)367 ‘Encoding Rules and their suitability for the Iu, Iub and Iur protocols’ was presented by Kiran Thakare (Telecom Modus). Alcatel wished to add GSM-UMTS handover to the table, to allow the transparency of messages to work. After much discussion, the chairman noted that we will not redefine GSM messages, but will have to use some GSM encoding and encapsulation.

TSGR3#3(99)314 ‘Specification Methods in UMTS’ was presented by Wolfgang Hutsch (Siemens).

TSGR3#3(99)323 ‘Coding Method to be used for protocols inside the RNS and on the radio path’ was presented by Nicolas Drevon (Alcatel).

It was noted that for HO from GSM to UMTS, the RNC must be able to create the HO message such that the UE can understand it. The HO command is sent transparently from the target BSC/RNC to the UE via the source BSC. It was commented that it is possible (clumsily) to force the ASN.1 encoding to be identical to the GSM tabular format. Lucent suggested that interworking would be necessary, unless 04.08 was changed.

Siemens commented that the interworking was made difficult by having different encoding rules, Ericsson disagreed as they think that mapping one bit string to another is simple compared to functional interactions.

For RNSAP and NBAP it is agreed to use ASN.1.

Siemens proposed delaying the decision for RANAP. Lucent asked whether Siemens and Alcatel propose using the encoding methods as 08.08 or using the messages from 08.08.

Siemens object to using ASN.1 on RANAP. Lucent clarified that as we are only deciding the abstract syntax, the exact coding is FFS anyway. *It is then agreed without objection that ASN.1 will be used for the description of message contents.*

It is agreed to split section 9.2 of the xxxAP specifications as proposed, but with “(informative)” and “(normative)” added to the first two headings, and with section 9.4 left empty (just a title). Nothing will be put into section 9.3.

The chairman said that TSG RAN had agreed that we should not get into too much detail on ARC/3 (Delay Budget within the Access Stratum), as it is a huge job. It would be better to get some rough estimates.

TSGR3#3(99)305 ‘ARC/3 Overall Delay Budget within the Access Stratum’ was presented by Massimo Del’Acqua (Italtel). Nortel commented that the remark about the single satellite link was

misleading. What the statement should say is that any communication should not cross more than one satellite link. It was agreed to clarify the sentence. Siemens asked whether one satellite link introduced too large a delay – Italtel stated that in GSM it was allowed to have a satellite hop, even if the delay budget was exceeded. Nokia noted that GSM may not be a good example, as it was not clear that W-CDMA would work with such long delays. The satellite issue was left for off-line discussion. It was proposed by BT that the diagram from the previous Siemens/Italtel contribution might aid the clarity of the delay budget template – *this suggestion was agreed*. The study item was left open for further email discussion.

TSGR3#3(99)313 ‘Transmission delay considerations’ was presented by Sami Kekki (Nokia). The contribution proposed a number of factors that should be considered when constructing the delay budget. Italtel asked about assymmetric delays – Nokia responded that there is certain transmission equipment where the delay is not the same in both directions; the difference is small, but would accumulate. Italtel asked about the topologies that should be used in the delay evaluation – Nokia responded that their transmission experts had provided the scenario in Annex 1 of the contribution as being possible. The chairman asked about the priority of the study item, and whether it could be done by email. A status report was requested at the next meeting. Massimo will continue as responsible person for the study item.

6.3 Terminology

TSGR3#3(99)321 ‘On Definitions’ was presented by Magnus Alden (Telia). The chairman commented that where it is written “one UTRAN”, it should be changed to “UTRAN”. Nokia and Nortel stated that the radio link definition should not mention macrodiversity (as it is confusing when there is none); it was noted that the original definition was consistent with the RAN vocabulary document. Telia asked whether there was a definition of UTRAN Access Point. Ericsson noted that the existing concept of radio link is vague and includes all the various channel types – in WG3, it is only used for DCH. It was agreed to use the definition from the RAN vocabulary document. Telia repeated their question – France Telecom read out the definition. *It was agreed to add the (modified) Uu definition to 25.401, also the UTRAN Access Point (from the RAN vocabulary document). It was also agreed to modify the RNS definition according to the proposal in Tdoc 321.*

TSGR3#3(99)322 ‘On O&M Requirements’ was presented by Magnus Alden (Telia). Vodafone commented that they were concerned about the proposed new naming of implementation specific O&M and logical O&M, partly because they have been agreed by all the O&M Ad Hoc companies, but also because of the connotations regarding the scope. In particular, because the name “resource management” may prove to be too restrictive. Mannesman supported Vodafone, and expressed concern over the removal of the transmission option; however, they did feel that the current specification concerning transmission between RNC and management centre was out of scope of this group. Nortel asked whether we should add a section on RNC O&M. Ericsson suggested that it was out of scope for WG3. France Telecom asked what reason there was for removing the RNC as relay for O&M signalling. Telia responded that they wanted to remove the dependence on the RNC. The chairman reminded the group that the RNC as relay did not involve the logical RNC, but merely was routed through the same physical equipment as the RNC. The RNC is a logical entity that only exists at the radio network layer.

Mannesmann proposed the following text for section 10.1.1:

“This transport can be performed by a common transport mechanism, possibly IP. The transport might be potentially across the RNC but not necessarily. Between the RNC and Node B, dedicated PVCs or SVCs should be used.”

The meaning of the word common was debated at length, in particular the protocol layer at which it applied. The consensus was that it was at ATM level. Nortel were concerned that by removing the layer 3 relay function we were forcing the management platform to have an ATM interface.

It was agreed to remove the word common from the sentence above. Nortel pointed out that insisting on dedicated PVCs and SVCs restricted implementations. Mannesmann explained that they were merely trying to ensure that O&M traffic would not interfere with user traffic. The proposed text was changed such that “should” was changed to “could”. With the two changes, the text was agreed.

*Proposal (1) to rename OA&M to O&M throughout UTRAN documents was agreed.
Proposal (2) was not accepted.
Proposal (3) is discussed above.
Proposal (4) was not accepted as it was felt to be out of the scope for the group.*

6.4 Synchronisation

No discussion.

6.5 Manifestations of Handover and SRNS Relocation

TSGR3#3(99)248 ‘Manifestations of Handover and SRNS Relocation’ was reviewed.

TSG RAN had commented that all For Further Study marks should be removed and that the scenario numbering should be re-considered (especially as it refers to an old version of 23.10).

*It was decided that the document should be a 3GPP internal report, rather than a published report.
The document was numbered 25.832.*

The following changes were agreed:

Intro – Editor’s note removed; “attempts to map” → “describes”; “handover in UMTS...onto the proposed UTRAN...” → “handover to be supported by the UTRAN...”; the last sentence is deleted; A sentence is added to state that “the mapping of the scenarios onto public/private domains is out of scope for the document”. Also, a statement that unless otherwise stated, the scenarios are applicable to release ‘99.

Section 4 – CCH → common transport channels; FFS on symmetry is deleted; “inter-operator” → “inter-PLMN”; both editor’s notes are deleted.

Section 5 – all scenario numbers removed; scenario 2b, FFS removed and editor’s note removed; 2c editor’s note removed; 3&4 removed; 5 “This scenario is FFS...Phase 1” → “This scenario is not supported for Release ‘99’”; 6 “inter-operator” → “inter-PLMN” and editor’s note removed; 7 as 5 (also reference to SMG12 is removed); 8&10 are removed; 11 renamed to include GPRS

Section 6 – “scenarios 1 to 6 above” → “relevant scenarios above”; 6.2 removed.

It was agreed to send it to S2 as a liaison statement (cc R2) for comments before approval. The editor was mandated to send it to S2, also to the WG3 reflector as v.2.0.1

7 Layer 1 Specifications

TSGR3#3(99)379 ‘25.411 UTRAN Iu Interface Layer 1’ was presented by Achim Brandt (Siemens). The document was the first editor’s proposal for the specification. Discussion follows Tdoc 381.

TSGR3#3(99)380 ‘25.421 UTRAN Iur Interface Layer 1’ was presented by Achim Brandt (Siemens). The document was the first editor’s proposal for the specification. Discussion follows Tdoc 381.

TSGR3#3(99)381 ‘25.431 UTRAN Iub Interface Layer 1’ was presented by Achim Brandt (Siemens). The document was the first editor’s proposal for the specification. *The sentence concerning the clock extraction from Iu was removed.*

It was asked by BT why there were no lower transmission rate PDMs for Iu and Iur. Ericsson stated that they had seen no reason for that. Vodafone stated that the operators would like the chance to specify this, and that a note should be added that the list is not exhaustive, and further standards could be added. Nortel commented that transmission sharing between the Iub, Iur and Iu was currently precluded as there was no common PDM standard. It was proposed that E1, E2 and E3 should be included for all three interfaces. Nortel commented that they thought that any list should be the same for all three interfaces; they also questioned whether the list should stop at 155Mbit/s. Italtel asked whether having many possible interfaces could lead to delay in the O&M specification group. The

chairman stated that there was little or no impact on this. It was agreed that the list of standards would be the union of the three lists contained so far, other options are to be provided to the editor. *It should be made clear that this is a list of options for the physical layer. This list will be included in 25.411, with a reference included in 25.412 and 25.413.*

Michael Schopp (Siemens) distributed a full list of ITU specifications, to help the editors.

The revised documents were later reviewed – see section 25.1.

8 UTRAN Functions, signalling procedures

TSGR3#3(99)247 ‘UTRAN Functions, Examples on Signalling Procedures’ was not presented as it was the same as the version approved at TSG RAN.

It was proposed to remove the Q.AAL2 signalling from 9.6.2, replacing it with the normal ALCAP notation. It was further proposed to include a new chapter in 6.4 showing the ALCAP signalling where Q.AAL2 signalling is used as ALCAP. Nokia commented that this should be shown for each interface (Iu, Iub and Iur), to show the correct message direction for each case. *This was agreed.*

The review comments, by section were as follows:

6 – the protocol architecture in section 6 should be updated to reflect WG2 decisions (i.e. no MAC in Node B). The protocol architecture at the start of section 6 was moved to a sub-section, in alignment with the drafting rules.

6.1 was annotated with a note to say that the contents needed alignment with the protocol documents.

6.6 was removed, as it contains only WG2 issues.

6.7 was removed, as it contains only WG2 issues.

8.1 – a number of repeated RRC messages were added, and the note and FFS markings were removed.

8.2 (Cell Broadcast) is not stable; also the heading format is missing.

9.1 – stable, dependent on PCH termination

9.2.1 – stable

9.2.2 – not stable

9.3.1 – RLC Link Establishment, and ACK were removed (throughout doc), then stable.

9.3.2 – CCH → RACH/FACH – all content removed, replaced with a reference to R2 documentation.

9.4.1 – one AAL Release is still present – this is removed, and replaced with an ALCAP box. Alcatel commented that there is no ALCAP towards IP domain, so a note is added in 6.4 to state that it applies to CS-domain on Iu.

9.4.2 – stable, except name change to Common Transport Channel Release

9.5 – no content yet.

9.6.1 – stable

9.6.2 – stable

9.6.3 – CCH → RACH/FACH, Bearer setup → RAB setup, then stable

9.6.4 – CCH-CCH → RACH/FACH-RACH/FACH, stable

9.7.1 – stable

9.7.2 – stable

9.7.3 – not stable

9.7.4 – CCH-CCH → RACH/FACH-RACH/FACH, stable

9.8 – unstable

9.9 – unstable

9.10 – no content

9.11.1 – note to show this example is for when SRNS decides to do SRNS relocation immediately after channel type switching.

9.11.2 – remove contents and refer to WG2 document

9.11.3 – stable

9.11.4 – not stable, same note added as 9.11.1 – Nortel proposed adding a section for the case where the SRNS Relocation is not done – this was agreed. Nortel also commented that the RNSAP release should be done as part of the relocation. Contributions were invited.

9.12 – stable

9.13 – according to WG2, cell update is a type of hard handover; Nortel were concerned because the UE is in control of cell update, rather than the network (as in handover). It was noted that Manifestations of Handover and Streamlining already referred to cell update as hard handover. It was decided to change the section titles to include “(DCH state)” for the current 9.13, and to include 9.14. A comment should be added to the introduction to state that the section applies to both dedicated and common channel states.

9.13 – the inter/intra RNS distinction is removed.

9.13.1.1 remains, renamed as Hard Handover, DCH state – it is stable.

9.13.2.1 is renamed as Hard Handover via Iur, DSCH/DCH state – it is marked as FFS.

9.13.2.2.1 – renamed to state that it is for the DCH state. (one heading level can be removed, as the one CN node case does not need to be shown.). Ericsson commented that WG2 have not ruled out using network initiated handover on common transport channels in some situations – this is not precluded by our current structure, but we do not currently have examples for it.

9.14 – a note is added to 9.13 to say that it refers to the network initiated backward handover. 9.14 has a note added to state that it is for mobile initiated forward handover. (it is also moved into section 9.13, as stated above).

9.14.1 message 2 should be uplink transfer, unstable.

9.14.2 it should be specified in the title that there is no SRNS relocation (and in the previous case, that there is SRNS relocation). Unstable.

9.15.1 – renamed Inter-RNS URA Update with SRNS relocation – unstable

9.15.2 – renamed Inter-RNS URA Update without SRNS relocation – unstable

9.16.1 – removed, as there are no examples with single CN node. (heading level removed as well).

9.16.2 – Message names need aligning with RANAP specification. Also, should always be SRNS relocation. It was discussed whether the resource release should be shown (it was not thought to be necessary). The procedure is unstable, but the FFS note is removed.

9.17 – the chairman suggested that for UTRAN Handover using IWF and MAP/E were equivalent. Telia asked for subsections on UTRAN-GPRS (both directions) – this was agreed. Contributions were invited.

9.17.1 is removed

9.17.2 heading no longer states “via MAP/E”. A general note to state that procedures between CN and MSC, and between MSC and BSC are out of scope for WG3, and are only included for clarity.

9.17.3 is removed

9.17.4 is stable, and needs a similar note to 9.17.2

9.18 empty

9.19 empty

9.20.1 is stable, (9.20 FFS note is removed). Contribution is needed for text for this (and other places where text is missing).

9.20.2 a note to state that it is FFS (as it should show the case of support on Iur).

9.20.3 This is same as channel type switching from the UTRAN perspective, but it is left, as it is different on the RRC protocol. Stable.

9.20.4 unstable, as box needs filling in. Needs a note to state that it is an example with combined SRNS relocation.

9.21 unstable

9.22 NTT DoCoMo comment that message 1 is not needed. The chairman notes that there is much filling out required (a note is added, and a contribution/proposal is needed). The example is renamed DL code reconfiguration.

9.23 stable, but needs text.

9.24 the note is removed. Stable.

9.25 this has been agreed to be an inband mechanism, so the example is not needed.

It was noted that a list of stable/unstable sections (and with invitations for contributions etc) should be added as an annex. *This is agreed for each of the documents.*

TSGR3#3(99)355 ‘Cell update in DRNC without SRNC relocation’ was presented by Kalle Ahmavaara (Nokia). During the presentation, it was made clear that Nokia would not object to leaving message 4 as uplink transfer. It was clarified that the case where UTRAN selects a different RACH/FACH to that chosen by the user was not precluded by this example, but was not shown. Discussion was postponed until after tdoc 341.

TSGR3#3(99)341 ‘RNSAP elementary procedures to support RACH/FACH across Iur interface’ was presented by Kalle Ahmavaara (Nokia). Ericsson asked in what cases CTCH transfer would be used without a message for the user – Nokia could not provide an example, so agreed to remove the “(if any)”. Ericsson also asked what the use of the cell-ID in the response message was – Nokia responded that it was to identify which cell the enclosed RRC message should be delivered in, this provides a safeguard against rapid successive cell updates in different cells. It is clarified that the Data Indication and Data Response are separate procedures. Nortel asked whether there was a response for the C-RNTI release – Nokia confirmed that it was their intention that there should not be one, as the SRNC would not do anything with the message and SCCP provides an assured mode. It is assumed that the connectionless mode of SCCP is used. NTT DoCoMo asked why not use Connection Oriented SCCP – Nokia asked why they should! Alcatel proposed renaming the messages Uplink Signalling Transfer and Downlink Signalling Transfer. Siemens remarked that this should be updated in our LS to WG2 on cell update issues (tdoc 403); *it was agreed that this could be done*. Channel type switching was debated – one model is to have a separate UE context in the DRNC for DCH and RACH/FACH states, so that a new context is built when the channel type switch happens. It was clarified that the messages would be used in RACH/PCH state as well as RACH/FACH state. Ericsson asked when the c-RNTI release indication would be used – the answer was that it would indicate whether the c-RNTI should be released immediately, e.g. on URA update.

It was agreed to include the messages and procedures, with the change of names to Uplink Signalling Transfer and Downlink Signalling Transfer, with the contents left for discussion after tdoc 360.

Document 355 was accepted, with the message names changed according to the decision above.

TSGR3#3(99)360 ‘Parameters for RNSAP Uplink Transfer’ was presented by Cheng Hock Ng (NEC). Nokia commented that the difference from their proposal was the signalling addresses, which were dependent on the S2 response to our liaison. BT and Alcatel were confused about the SGSN address. Ericsson asked the purpose of the CRNC signalling address. It was related to the SRNS Relocation; it was commented that SCCP contains a parameter for the address of the user. *It was agreed that our RANAP and RNSAP specifications should state that the sender of a message shall include pass the source address via the signalling bearer*. Nortel asked whether this inclusion meant that RxxAP would then know this or understand it? Siemens stated that this was part of the SAP definition. *This means that the C-RNC address is not included in the message.*

It was agreed to include the CTCH message (renamed as Uu Signalling Message), and the other parameters from Tdoc 341.

It was then agreed to add the SGSN address paramater with a note to state that its existence is for further study and depends on the addressing proposals from S2.

TSGR3#3(99)310 was introduced by Patrick Johnson (Nortel). It was not discussed due to lack of time. Nortel encouraged email discussion under the Common Transport Channel study item.

9 Iu General Aspects

TSGR3#3(99)344 ‘editor’s proposal for changes to S3.10’ was presented by Richard Townend (BT).

It was noted that chapter 7 had already been treated (as it is the old chapter 12.1 from S3.01) and so is no longer proposed to be in this document.

Ericsson asked whether RANAP should now be limited to SCCP addressing schemes for the signalling bearer (given the S2 decision). Motorola think that the current independence statement must stand as RANAP is meant to be independent of the underlying layers. Nokia commented that RANAP shouldn’t use the addressing anyway, (except to carry it in the user plane), but that we should support SCCP addressing in R99. Motorola stated that we should not fix the layers together. It was clarified that if we later change SCCP for something else, we must change the addressing scheme supported by RANAP.

Motorola wanted to make the addressing in RANAP sufficiently generic that the signalling bearer can be easily changed in the future. This discussion must be continued in the Iu SWG.

Q.AAL2 is now Q2630.1, Q.sbcmtip is now Q.2150.1.

The chairman commented that GTP and UDP should be shown in figure 2 (the exact position was later discussed). It was also commented that the Iu Data Streams protocol(s) would need a name (delegated to the Iu SWG). With the changes above, the proposal was agreed.

10 Iu Signalling (RANAP)

10.1 Study Items Report

{Iu SWG}

10.2 New Contributions

{Iu SWG}

11 Iu User Plane + Transport network control plane

11.1 ISDN/PSTN domain radio network layer

{Iu SWG}

11.2 ISDN/PSTN domain transport layer

{Iu SWG}

11.3 IP domain radio network layer

{Iu SWG}

11.4 IP domain transport layer

{Iu SWG}

12 Iu signalling transport

No discussion, except on the S2 LS.

13 Iur/b General Aspects

13.1 Study Items report and decision

{Iur SWG}

13.2 General Aspects and Principles of Iur

TSGR3#3(99)320 'Editor's proposal for S3.20' was presented by Kevin Hegerty (Lucent).

Alcatel commented that it should state that Iur connects SRNC and DRNC. *It was then decided that the scope should not mention Serving and Drift RNCs, but should say that Iur connects two RNCs.*

In Section 4.2.1 the editor should replace "UTRANs" with "RNSs" in the paragraph about common transport channels.

It was suggested that editors should read (and follow) the 3GPP drafting rules, especially with regard to hanging paragraphs (e.g, text between heading 4 and heading 4.1).

Siemens noted that CCH should be replaced with Common Transport Channel, in particular in the logical model. However, this can be included in the logical model updates.

With the changes above, the document was approved.

13.3 General Aspects and Principles of Iub

TSGR3#3(99)274 ‘Editor’s proposal for S3.30’ was presented by Mick Wilson (Fujitsu). There was some discussion about the removal of the sentence stating that ‘DCH Iub frames can be carried on pre-defined transmission links or switched connections’. The sentence will be kept until there is a concrete proposal to remove it.

The sixth bullet in 4.2 was reworded to state that “implementation specific O&M is not a part of the Iub standardisation” (all the rest was deleted, including the FFS). The paragraph at the bottom of section 4.3 was altered to include the words “implementation specific” in front of the first O&M. In section 5.1, “OA&M” is changed to “O&M”, and point 3 is changed to “Implementation Specific O&M Transport”. In section 7, the new names for Q.aal2 and Q.sbccop were inserted in the figure. The titles at 9.4 and 9.5 were altered to reflect the removal of CCH from the names of the specs.

With these changes, the document was approved.

14 Iur signalling (RNSAP)

{Iub/r SWG}

15 Iub Signalling (NBAP)

{Iub/r SWG}

16 Iur Signalling Transport

Most discussions were in the Iub/r SWG, however, there were some subsequent plenary discussions.

An indicative vote was held in plenary on the subject of the Iur signalling bearer. Three votes were held – one for CTP/IP only, one for SS7 only, and the third for the same compromise as on Iu. Only one delegate from each company was able to vote, but companies could vote for more than one proposal.

The results were as follows:

Proposal	For	Against
CTP/IP only	5	14
SS7 only	14	6
Iu compromise	14	5

It was decided to send a liaison to TSG RAN explaining that we had been unable to reach a decision. The chairman volunteered to draft it (tdoc 394).

17 Iub Signalling Transport

{Iub/r SWG}

18 Iur/b User Plane + Transport Network Control Plane

18.1 Iur/b DCH, radio network layer

{Iub/r SWG}

18.2 Iur/b DCH, transport layer

{Iub/r SWG}

18.3 Iub CCH, radio network layer

{Iub/r SWG}

18.4 Iub CCH, transport layer

{Iub/r SWG}

18.5 Iur CCH, radio network layer

{Iub/r SWG}

18.6 Iur CCH, transport layer

{Iub/r SWG}

19 Node B, O&M Functional descriptions

Not treated due to lack of time.

20 Reporting from SWGs

20.1 Iu SWG

TSGR3#3(99)385 'Iu SWG Summary Report' was presented by the acting Rapporteur (Kalle Ahmavaara, Nokia), who had been substituting for Atte Lansisalmi (Nokia). The document is included (as presented) in Annex B of this report.

It was noted that there was an editorial error in 385 - SRNS Relocation Request message – the Transport Address parameter should be for each bearer separately.

Siemens commented that, in their contribution 315, in the DL, the CN node indicator can come from CN... (not shall). They also commented that in the sentence referring to the setup of the SCCP connection, it should instead read "in RANAP messages..."

NTT DoCoMo stated that they felt that S2 does not preclude paging co-ordination in CN, and questioned whether the conclusion of the SWG was line with the S2. The SWG Chairman stated that his report correctly reflects the agreement at the meeting.

NEC commented that on page 7, the conclusion for document 378 should read:

"based on this clarification it was agreed that the assumption in SA WG2 is clearly that the paging co-ordination in the case of with Gs interface was not described."

Lucent commented that it should be made explicitly clear that under 328 that there may be impacts on Iur interface. The acting SWG chairman stated that the possible impacts on UTRAN interfaces was already mentioned. Lucent also asked about a missing action point, referring to RRC RNTI exchange before the handover complete – it was clarified that the action was a general one, for delegates to talk to R2 delegates to check the mechanism for this.

Alcatel asked for more time to consider the merging of SRNS relocation and Handover procedures, as they have concerns for the GPRS case.

Telia asked whether AAL5 was really called ATM Adaptation Layer 5 (rather than Type 5). It was confirmed that Type 5 is the correct terminology, *so the decision on this issue reported in the SWG report is overturned.*

Ericsson noted that the second discussion item should be based on the tdocs 281 and 368 (not 276 and 368).

The Chairman recommended that the SRNS relocation terminology should be updated (no more SRNC relocation).

The acting SWG chairman noted that under tdoc 357 it should read 23.20 not 23.10.

France Telecom asked what the conclusion about mandatoryness or optionality of the Relocation Detect message meant. It was made clear that the discussion had not been held.

The chairman raised the issue of whether GTP-U should be in the transport or radio network layer. He felt that the GTP-U should be transport layer. Ericsson pointed out that their main logic for proposing that it should be radio network layer was that the timescales stated that the transport specifications should be ready in April.

France Telecom commented that Iu transport link/transmission link should be AAL2 connection. This was agreed.

It was agreed to send a LS to S2 asking for guidance concerning the addressing of nodes in application protocols, in accordance with the proposal from the SWG.

All agreements were ratified (with the changes noted above) except:

Tdoc 339 – Alcatel would like more time. Nortel would like to see some mechanism included in the contents of the procedures that will enable nodes to differentiate between the two reasons. The SWG chairman was happy to do this, Ericsson supported this view. Alcatel clarified that the problem was for GPRS to UMTS handover, if you have exactly the same procedure; in particular, you need additional message(s) to guarantee data integrity. Nortel commented that GPRS-UMTS handover would have to be cell update, as GPRS has no handover procedure. Nokia could not see how the merging affects this. Ericsson commented that if you have a field to indicate the type of relocation, the change becomes cosmetic. *It is agreed that the procedures are merged as a working assumption with a note to say that the impact of handover from GPRS should be studied. Also it was agreed to include a reason for the initiation of the procedure in some way (to be further studied).*

Tdoc 276 – there are 2 issues – is GTP-U in radio network or transport layer, and should we be specifying it. It was the view of the chairman, that GTP-U should be transport layer, as this provides the maximum commonality for RANAP. *However, after much discussion it was agreed that GTP-U would be considered to be in the Radio Network Layer.*

One conclusion of this is that we need to consider moving some parts from 25.415 to 25.414 (and possibly some other specifications).

BT asked what was happening to the SWG proposals with respect to the GTP-U header. Wolfgang Hultsch will draft a LS to S2 on this. The chairman proposed that we should assume in our documents that we refer to a CN defined GTP-U, with a note to state that this is an assumption. *It was later agreed to include this header in 25.415, as an annex (see agenda item 23 below)*

20.2 Iub/r SWG

TSGR3#3(99)392 ‘Iub/Iur SWG Summary Report’ was presented by the interim chairman, Per Willars (Ericsson). It was noted that it contains the decisions, rather than all of the discussion; The editorial changes were not included. It is included (as presented) as Annex C of this report.

Motorola commented that their proposal for an alternative ALCAP bearer for Iub was not accepted, when the decision to use SAAL-UNI was taken (TSGR3#3(99)265). This is in accordance with the SWG report, but not explicitly stated.

Alcatel asked about the removal of the working assumption in S3.32. The secretary confirmed that this had been agreed (without objections) in the plenary. Motorola and Nortel stated an objection to the decision. The chairman protested that late objections after decisions made the work very difficult. Alcatel and Nortel stated that it needed to be made clearer when important decisions are being taken, and that more time should be allowed to decide. Alcatel added their objection to that of Motorola. The chairman noted that we had been mandated to prepare the specification for approval at TSG RAN.

The chairman asked whether we can re-approve the decision – there were objections. Nokia stated that our two instructions from TSG RAN (consensus and timeplan) are contradictory.

Ericsson stated that the WA had been in place since the Chicago meeting (October 1998), and that a lot of time had passed since then with the assumption unchallenged.

The chairman decided that we should send the document to TSG RAN with the working assumption reinstated. He will report that a decision had been taken, with objections received later.

It was agreed to include the all of the principles agreed for RACH/FACH on Iur into 25.420 (including the ones from the Ad Hoc).

The other decisions were approved.

21 Decisions by Voting (if needed)

21.1 Iur Signalling Bearer

Voting not required, after the S2 decision.

21.2 Iur Signalling Bearer

Voting was not used, as the decision was deferred to TSG RAN. Some plenary discussions are reported in section 16.

22 Approval of documents with voting (if needed)

It should be noted that voting was not needed for any of the document approvals.

TSGR3#3(99)410 ‘TS 25.424 v.0.1.1 Iur interface Data Transport and Transport Signalling for Common Transport Channel Data Streams’ was presented by Nicolas Drevon (Alcatel).

Nokia asked whether the decision reflected in chapter 4.2 (concerning the choice of AAL) had been agreed in WG3 – it was clarified that this was a proposal. Alcatel commented that there had only been one proposal for AAL5 (from Nortel Networks) and that offline discussions had led to an agreement on AAL2. France Telecom commented that we had stated in a LS to WG2 that it had not been decided between AAL2 and AAL5. Nokia commented that one difference between Iub and Iur was the tight time constraint on Iub. The chairman asked for a decision between AAL2 and AAL5. Ericsson commented that there had been no contribution proposing AAL2, and that Ericsson would support AAL2 but would like it as a working assumption to be converted to a decision at the next meeting. Nokia noted that we cannot include working assumptions in the document, and are not sure whether they would prefer AAL2 or AAL5. The chairman concurred that if we keep a working assumption on this, the specification cannot be approved by TSG-RAN. France Telecom said that they felt that AAL2 can be agreed at this meeting. Nokia stated that they are not trying to delay progress; they are surprised that proponents of common transport channels on Iur have not brought contributions on this sooner. Nokia also stated that they will concur with the will of the meeting if AAL2 is chosen. BT pointed out that the risk of agreeing this is far less than that for the Layer 1 specifications; Siemens commented that this was not quite comparable. Alcatel reminded delegates that companies could comment on the reflector within 30 days, but the chairman discouraged this from companies who had participated in this meeting. Nokia proposed making a decision at the next meeting. Lucent could not see the point in delaying and supported AAL2. Telia questioned whether we would have time at the next meeting, which was supported by the chairman.

It was clarified that we have not discussed user data multiplexing for DSCH. For the RACH/FACH we will multiplex user data streams on one transport connection.

The chairman proposed that we agree to use AAL2 for common transport channel data streams on the Iur interface. Delegates were reminded that the Change Request procedure can be used. Siemens,

Nokia, Telecom Modus and CSELT all expressed concern about the way the decision was taken (but no made no objection to the decision). It was noted by the chairman that maybe insufficient technical argument had taken place. Ericsson stated that if they found any problems with the solution they would challenge it at the next meeting.

It was agreed to use AAL2 for RACH, FACH and DSCH data streams on Iur.

The document was then reviewed:

- 1 – description → specification, RNS-RNS → RNC-RNC, “as agreed...3” is removed.
- 2 – removed
- 3 – include DSCH, and sort alphabetically
- 4 – AAL2 Type 2 → AAL type 2, “at the standard” → “as the standard”, second paragraph is removed (and not moved to Iur General Aspects & Principles, as this information has already been included there).

It is proposed that the reference to semi-permanent connections be removed, after concern from Ericsson and Nokia. Lucent expressed some concern about removing it. Nortel proposed a compromise solution which made Q.AAL2 a minimum requirement.

Ericsson reminded delegates that as this was an editor’s proposal, we were not actually removing the option of semi-permanent connections, but rather deciding not to include it!

It was then proposed that we adopt the sentence “These AAL2 connections are established via the transport signalling protocol described in chapter 5”. This was agreed. There were some objections to including the words semi-permanent.

Figure 1 was modified to show the SAP at the top of the transport layer. Q.2630 is changed to Q.2630.1. Chapter 6 was emptied except for a reference to the corresponding chapter of the DCH document (25.426 chapter 7). Refs 6-13 are removed as they are unused. In chapter 4.2, “of for MAC-d PDUs carrying” is removed. *With these changes, the document is approved at version 2.0.0.* It will be sent to David Williams at 3GPP support, and to the WG3 reflector.

All editors were urged to check the reference to the CTP specification, as an incorrect version (missing the authors name) is still being copied in some specifications.

TSGR3#3(99)406 ‘25.414 v.1.0.3 Iu interface Data Transport and Transport Signalling’ was presented by David Comstock (Ericsson). The reference numbers are removed from the headings and moved into the body text. *With this change the document was approved at version 2.0.0,* and will be sent to 3GPP support and the WG3 email reflector.

23 Outgoing documents and liaisons

TSGR3#3(99)395 ‘Draft LS to RAN2, Common Channel Management over Iur’ was presented by Jean-Marie Calmel (Nortel). It was noted that there was a typo in the second bullet where “so time” should be replaced with “some time”. Alcatel commented that the last sentence should refer to multiplexing of services for one UE. Nokia commented that MAC-d always does multiplexing for services, and also felt that the last sentence should ask about shared channels. They wanted to be sure that it was clear that the handling could be different for MAC-c and MAC-sh. Interdigital commented that the relationship between MAC-c/MAC-d and MAC-sh/MAC-d existed even when there was no Iur to be considered – this was generally felt to be within the work of WG2 (or even outside the scope of specification). Nokia stated that the first sentence should refer to RACH/FACH rather than Common Transport Channels, this was agreed. In bullet 2, they proposed adding a second justification based on the delay of the setup phase of the RACH/FACH on Iur – Alcatel were worried by this mixing of call establishment with call proceeding. It was also noted that in the second bullet of point 2 the words delay and transmission were reversed. It was also agreed to add a point 6, to minimise the delay of establishing the relation between MAC-c and MAC-d over Iur. Nokia proposed removing the “as much as possible” from the fourth bullet.

The LS was agreed with these modifications. It should be sent to WG2 and the WG3 email reflector.

TSGR3#3(99)404 ‘LS on Node Identification over Iur’ (to S2) was presented by Alain Maupin (Ericsson). *The document was approved (the “draft” marking should be removed). It should be sent to S2 and the WG3 reflector.*

TSGR3#3(99)394 ‘Draft LS regarding RNSAP signalling bearer on Iur’ (to RAN Plenary) was presented by the Chairman. It was commented that the decision might have an impact on the signalling bearer for ALCAP, and that this should be included in the LS. *It was agreed to add the following sentence to the end of the LS:*

“Depending on the decision, a signalling bearer based on CTP/IP may be considered for the ALCAP protocol over Iur.”

Nokia asked whether we should make it clear that this does not imply the ALCAP bearer specification would be delayed. Nothing was added. They also asked whether we should point out to TSG RAN that this is a political issue – the chairman encouraged delegates to brief their TSG RAN delegates so that they are aware of the issues.

France Telecom asked whether it would make more sense to present only the last two alternatives as the indicative voting had shown them to have more support. Some concerns were voiced, so all three alternatives remain.

With the change above, the document was agreed, and will be sent to TSG RAN plenary and to the WG3 reflector.

TSGR3#3(99)396 ‘CN architectures to be supported in R99’ (to S2) was presented by Wolfgang Hultsch (Siemens). S3.01 was changed to 25.401, and SCCP Signalling Point Code was changed to Signalling Point Code. “Irrespective of the CN architecture” was removed. A question mark was added to the question! *With these changes, the document was approved, and should be sent to S2, and copied to the WG3 mail reflector.*

TSGR3#3(99)393 ‘LS to R2 on the possibility of having Multi-carrier cells’ (to R2, cc R1) was presented by Göran Rune (Ericsson). Nokia asked whether there was any impact of the second bullet on WG3 – Ericsson suggested that there might be impacts on the NBAP logical resource management procedures. The source was corrected to WG3 (not WG2) and “on carrier” was corrected to “one carrier”. *With these changes, the LS was approved, and should be sent to R1 and R2, also to the WG3 reflector.*

TSGR3#3(99)316 ‘Proposed LS on Ciphering Algorithm Selection’ (to S3) was presented by Brendan McWilliams (Vodafone). The meaning of UEA was questioned – Vodafone think that it is “UMTS Encryption Algorithm”; it was agreed to change this to “ciphering algorithm”. It was noted that S2 might also have an interest and it was agreed to copy it to them. The first sentence was changed to “...working assumption that UTRAN will, taking into account the UE capability information, select the ciphering algorithm from the CN provided list.”. *The document was agreed with these changes, and should be sent to S3 and S2 and copied to the WG3 reflector.*

TSGR3#3(99)343 ‘Proposal for amendment of TSG-RAN terms of reference’ was presented by Andrew De La Torre (Vodafone). *It was agreed to send a LS to TSG RAN as proposed, and Andrew volunteered to write it (tdoc 412).*

TSGR3#3(99)412 ‘Draft LS to TSG-RAN’ was presented by Andrew De La Torre (Vodafone). *The document was approved and shall be submitted to TSG RAN.*

TSGR3#3(99)366 ‘Requirements for inter-operator handover’ (to S1) was presented by Wolfgang Hultsch (Siemens). Nokia asked what is Phase 1 of Release 99, Siemens stated that they had copied the statement from the S1 LS. Nortel stated that “between UMTS and GSM” should be included in the title – this had deliberately been left out so as to include the UMTS-UMTS case. It was decided to add

“both between UMTS/GSM and UMTS/UMTS” into the last sentence. *With these changes, the document was approved, should be sent to S1 and copied to the WG3 reflector.*

TSGR3#3(99)391 ‘Draft Reply to R2 LS on Hybrid ARQ Type II/III’ (to R2) was presented by Steve Terry (Interdigital). A number of proposed changes were announced in the presentation, but are not relevant to the later discussion. Nokia asked whether the assumptions on H-ARQ are based on WG2 documentation or hypothesis. Interdigital responded that they had based the response on the WG2 options. The chairman asked why the FACH was involved – it was explained that the outband solutions use the FACH for frame numbering, this would not be the case for any (as yet unproposed) inband solutions. The chairman then raised the issue of the split of channel coding and RLC termination for the uplink case; it was proposed that we should ask about the signalling requirements for this. The chairman said that we should ask R2 whether H-ARQ was necessary for R99. Nokia proposed that we should only reply that we have not studied this and ask for more information on the signalling requirements. Alcatel suggested that more co-ordination was needed within companies between R2 and R3 delegates; they suggested that we should mention our concerns in the downlink direction. Nokia were concerned that our problems in the DL were not applicable to all cases as the concerns assumed the FACH solution.

The form of reply that WG3 could give was discussed at great length. Tdoc 414 contains the result of an offline discussion on this.

TSGR3#3(99)414 ‘Reply to R2 LS on Hybrid ARQ Type II/III’ was presented by Steve Terry (Interdigital). It is based on Tdoc 391. It was agreed to start the annex on a new page, and add a sentence at the end of the first section to say that some additional considerations are included in an Annex. *With these changes, the document was approved, and should be sent to R2 and WG3 reflector.*

TSGR3#3(99)405 ‘Proposed answer to LS from WG2 on support of DSCH on Iur and Iub’ (to WG2) was presented by Fabio Longoni (Nokia). Ericsson commented that we should state that the further refinement is not feasible for R99. The final paragraph was modified to read:

“About the further refinement solution reported in section 3 of the LS, WG3 sees increased complexity, and asks WG2 if it is really necessary to include this feature for R99.”

With this change the document was approved, it shall be sent to WG2, cc WG1 as well as to the WG3 reflector.

TSGR3#3(99)409 ‘Answer for LS regarding the feasibility study...for the MAC protocol (DRAFT)’ was presented by Kalle Ahmavaara (Nokia). Alcatel asked about the increased protocol complexity from a lot of interactions between U-plane data and C-plane signalling, and asked for the sentence to be clarified. Nokia gave the example of acknowledged mode RLC in the case of cell update failure. The following text was added to the sentence:

“e.g. interactions between RNSAP entity and RLC/MAC-d entity within SRNC.”

Alcatel asked about the RLC termination – Nokia responded that it was a WG2 issue, but that is in SRNC. The chairman commented that there was no mention of the fact that the DCCH solution differed from the CCCH solution in whether there is an RLC instance. Nokia responded that this is a WG2 issue.

In the second sentence of fourth paragraph “a some” was changed to “some”.

With these changes, the document as approved; it will be sent to WG2, as well as to the WG3 reflector.

TSGR3#3(99)408 ‘LS to S2 – Specification of GTP-U’ was presented by Wolfgang Hultsch. Core Network working group is replaced with TSG-CN. *With this change, the document was approved, and should be sent to S2 and the WG3 reflector.*

The working assumption about whether we do or do not specify GTP-U in this group was discussed at length. Also, it was felt that the GTP header agreement should not be lost, *so it was agreed to place it in an annex of 25.415.* For the next meeting, it is not planned to put GTP-U on the agenda.

24 Next Meeting (Agenda etc)

Next meeting is 4 days. Initial plan is to have Weds and Thurs SWG, but this may be shortened depending on contributions. There may be an O&M Ad Hoc one evening (depending on contributions).

The functional contents of the signalling specifications should be frozen at the next meeting.

The editors of non-approved documents are asked to keep a status chapter in the documents, proposing one if it was not done at this meeting. Editors should actively request input, e.g. on mail reflector, where this is required.

The following email discussions should take place before the next meeting (numbers are for the tdocs that the discussions should initially be based on) –

RANAP parameters
Iu CS UP time alignment
Iu CS UP Data Streams
Iub/r DCH frame protocol - 307 & 305
UTRAN Functions – 303, 256&255, 304, 302
Common Transport Channels on Iur –
SSDT – 264
O&M – 251, 319

The chairman agreed to check the change control procedure, in case alterations are required to any approved (v.3.0.0) specifications.

25 Any Other Business

25.1 Review Transport Specifications

TSGR3#3(99)234 ‘S3.12 – Iu Interface Signalling Transport’ was reviewed. The following comments were made:

- 4.2 – split into CS and PS
- 4.2 – editor’s note to be removed
- 4.2 – Protocol stack for future releases → I3.04
- 4.2 – Protocol stack for PS domain should reflect the S2 LS.

SB → signalling bearer throughout
update version number to 1.0.1

TSGR3#3(99)234 ‘S3.22 – Iur signalling transport’ was reviewed.

The chairman asked whether we could use the signalling bearer for the Iur as is used for the Iu PS domain. Nokia objected, and Nortel stated that the main reason for SCCP on Iu was to harmonise with the CS domain. Iub/r SWG will discuss (see also section 16 above).

The references will need updating.

TSGR3#3(99)235 ‘S3.32 – Iub signalling transport’ was reviewed.

The document currently states two options and a working assumption. *The chairman proposed turning the working assumption into agreed text. There were no objections.* The references need updating.

TSGR3#3(99)239 ‘S3.14 – Iu Data Transport and Transport Signalling’ was reviewed. It should be mentioned that there is no ALCAP towards the IP domain. Nokia commented that ITU refer to

signalling bearer converters as signalling transport converter, and suggested that we should use the same terminology (no objections). 5.2 title should not be ALCAP, just 5.2.1 is ALCAP. 5.2 is renamed Transport Network Control Plane. There should also be some reference to the lower layers (below the STC). Nokia asked about the layer management shown – the editor agreed to remove it, although it is implicit in the use of AAL2. The sentence about the termination of the GTP tunnel should be removed (although S2 have decided that it will be the SGSN).

The terminology for domain names was discussed – it was decided to use the names PS domain and CS domain, pending clarification from the S2 chairman. It was suggested that the third paragraph on page 8 should be redrafted in specification text (i.e. without reasons).

TSGR3#3(99)245 ‘S3.26 – Iur/b Interface Data Transport and Transport signalling for DCH’ Title changed to UTRAN.... Chapter 4.2 is all removed except for the sentence starting “ATM and AAL2...”. In section 5.2, the working assumption designation is removed. Text is required for 6.1. Chapter 6 heading could be changed (editor’s decision) to replace Transport Signalling with ALCAP. It was noted by Nokia and Nortel that we have not decided which services of AAL2 are used to transport DCHs. We should decide whether we need to use SAR on the Iub/r. *It was decided to include it.* It was proposed that the working assumption designation in 6.2 is also removed – Alcatel objected, so it was left for the rest of the meeting; by the end of the meeting, a decision must have been made.

TSGR3#3(99)241 ‘Iub transport and transport signalling for common channel data streams’. The working assumption designation in section 5.2 was removed.

TSGR3#3(99)407 ‘TS 25.426 UTRAN Iur and Iub Interface Data Transport and Transport Signalling for DCH Data Streams’ was presented by Sammi Kekki (Nokia). It was commented that the version number should be 1.0.2. It was agreed that ALCAP was the abbreviations for Access Link Control Application Part. It was agreed to add ALCAP to the definition section, using the definition from 25.401. Also, to remove the first two sentences of 5.1. It was asked whether the words Common Part appear in the AAL5 specification, and it was changed such that AAL5 CP part reads AAL5 CPCS (CPCS should be added to the abbreviations); the editor will check whether the SAR function is included in CPCS and update the figure accordingly. Similarly in 7.2. Also, the editorship statement should refer to 25.426 not S3.26. Finally, the abbreviations should be arranged alphabetically. *With these changes the document was approved on WG3 level, the new version should be version 2.0.0 with no revision marks.* It should be sent to D.Williams at ETSI, for RAN approval. Also to the WG3 reflector.

TSGR3#3(99)397 ‘TS 25.411 v.0.0.2 UTRAN Iu Interface Layer 1’ was presented by Achim Brandt (Siemens). STM-4 had been added as well as the merging of the lists. Discussion follows tdoc 399.

TSGR3#3(99)398 ‘TS 25.421 v.0.0.2 UTRAN Iur Interface Layer 1’ was presented by Achim Brandt (Siemens).

TSGR3#3(99)399 ‘TS 25.431 v.0.0.2 UTRAN Iub Interface Layer 1’ was presented by Achim Brandt (Siemens).

Discussion – *Nortel asked for SONET 622Mbits/s to be added (this was agreed). It was agreed to remove T2 from the list.* It was decided that the text at the start of 4.2 was modified to read “the PDM shall comply with at least one of the following standards”. Vodafone commented that they would still like to see a note stating that the list is non-exhaustive. This was not accepted, but it was agreed that it would always be possible to add standards, using the CR mechanism, and such requests could be discussed in WG3. *Lucent asked why the Unbalanced 75WE1 had been left out. It was added.* Nortel asked why IMA was restricted to Iub only – *it was agreed to move the sections on both IMA and fractional use (with N=1:30 removed) from Iub to the Iu specification.* A pointer would be added in both Iub and Iur to this. It was discussed whether dated references should be used for the specifications. *It was agreed that while proper references should be provided, dates should not be added at this stage.* The chairman would bring this to the attention of the RAN TSG for comment. *The Iu specification was approved with these modifications at version 2.0.0 (no revision marks).* A copy should be sent to 3GPP support (D.Williams) and WG3 reflector.

The Iur specification was modified to remove all sub-headings of chapter 4, and just to leave a single reference to the Iu specification. *The reference should read "The Iur layer 1 shall comply with the requirements of chapter 4 of [1]."* This document was approved as v2.0.0, and should be sent to David Williams (3GPP support) and WG3 reflector.

The Iub specification was modified in the same way (change Iur to Iub in the reference). The sentence about O&M from 4.5 was removed, as it was felt that it was not really a Layer 1 issue. *This document was approved as v2.0.0, and should be sent to David Williams (3GPP support) and WG3 reflector.*

Achim Brandt (Siemens) agreed to continue as editor for the three documents after the meeting.

TSGR3#3(99)386 '25.412 v1.0.2' was presented by Kiran Thakare (Telecom Modus). Section 4.4 was modified to state that the primitives could be found in the SCCP references. The SCCP references were changed to include all SCCP specifications. Reference 9 was changed to draft-rytina-sigtran-generic... Circuit/Packet Switch → Circuit/Packet Switched.

SAAL-NNI should have no "-to-" in the expansion. It was proposed to remove the first two sentences (section 4.1) – Telia objected to this. It was suggested that all of section 4.1 might be moved to Iu General Aspects and principles. *It was agreed to remove the first sentence of section 4.1. The second sentence is moved to the Iu GAP document. The first sentence under the main heading of section 4 was moved to 4.1, the second sentence was deleted.* In section 4.3, AAL5 is missing. There was some discussion about whether RFC 1483 should also be shown – it was concluded that this should be presented in a contribution. *The document was agreed with these changes, and should be updated to v2.0.0 and sent to David Williams (3GPP support at ETSI) and to the WG3 reflector.*

TSGR3#3(99)382 '25.422 v1.0.2' was updated in a similar way to 386. The full set of SCCP references was added. Abbreviations were put into alphabetical order. 4.3 was modified to align with 25.412. Section 4.2.3 should refer to figure 3 not figure 2. Telia asked for a sentence on the options so as to align with the Iu specification (this was agreed). Also the reference numbers for CTP and IP should be included. Sentence 1 of section 4 is moved to 4.1, sentence 2 is removed. Sentence 1 of 4.1 is removed. *With these changes the document is approved as v2.0.0, and should be sent to David Williams at ETSI and to the WG3 reflector.*

TSGR3#3(99)383 '25.432 v1.0.1' was presented by Mick Wilson (Fujitsu). Section 5 is removed. The introduction is removed. The Chairman will clarify with 3GPP support whether the Foreword needs changing (as the explanation of version numbering does not align with current practice). *The document was approved at v2.0.0 (with these changes), and should be sent to 3GPP support and to the WG3 exploder.*

TSGR3#3(99)373 '25.414 v1.0.2' was presented by David Comstock (Ericsson). It was noted that the ALCAP definition should be included. The reference to GTP-U was discussed (as it is currently unavailable), but it was considered that this could be added by Change Request. It was commented that the text on PS-domain load sharing should be in this document – this will be discussed with 25.415 (see section 22). There were a couple of other changes mentioned verbally in the presentation, but these can be seen in tdoc 406 (see earlier section).

TSGR3#3(99)400 '25.434 v1.0.2' was presented by Magnus Alden (Telia). Introduction and bibliography are removed. The scope is changed from description to specification. The note is removed in section 4.2. AAL5 common part is aligned to match 25.426 (with respect to CPCS and SAR). It was agreed that the stack shown in 4.2 applies also to DSCH, and should be aligned with 25.426. The paragraph above is moved to the Iub General Aspects and Principles, but with the part up to the colon removed. *With these changes, the document was approved at version 2.0.0, and should be sent to 3GPP support and to the WG3 reflector.*

TSGR3#3(99)240 'S3.24 v.0.1.0' was discussed. The editor offered to align section 6 with 25.426 – it was discussed whether Q.AAL2 was agreed; it was commented that it only made sense to use Q.AAL2 if AAL2 was selected. A note was added to state that Q.AAL2 was only applicable if AAL2 was selected.

The document was not approved at v2.0.0 at this time, but a revised version was approved later in the meeting (see tdoc 410, section 22)

25.2 Hybrid ARQ

Only discussed under the LS statement agenda items (incoming/outgoing).

25.3 Transport of Implementation Specific O&M

Not discussed due to lack of time. (But see section 5.1 for some discussions on this topic).

26 Closing

The chairman closed the meeting at 17:00, thanking Fujitsu for their hosting and the editors, especially those for the transport specifications.

Annex A – TSG RAN WG3 Specification Structure & Editors.

Iu	Iur	Iub	
25.410 <i>UTRAN Iu Interface: General Aspects and Principles</i> Richard Townend (BT) v.0.1.0	25.420 <i>UTRAN Iur Interface: General Aspects and Principles</i> Richard Townend (BT) v.0.1.0	25.430 <i>UTRAN Iub Interface: General Aspects and Principles</i> Richard Townend (BT) v.0.1.0	-
25.411 <i>UTRAN Iu Interface: Layer 1</i> Achim Brandt (Siemens) -	25.421 <i>UTRAN Iur Interface: Layer 1</i> Achim Brandt (Siemens) -	25.431 <i>UTRAN Iub Interface: Layer 1</i> Achim Brandt (Siemens) -	-
25.412 <i>UTRAN Iu Interface: Signalling Transport</i> Kiran Thakare (Telecom Modus) v.1.0.0	25.422 <i>UTRAN Iur Interface: Signalling Transport</i> Kiran Thakare (Telecom Modus) v.1.0.0	25.432 <i>UTRAN Iub Interface: Signalling Transport</i> Mick Wilson (Fujitsu) v.1.0.0	25.442 <i>UTRAN Iu Interface: Signalling Transport</i> Stephan Recker (Mannesmann) -
25.413 <i>UTRAN Iu Interface: RANAP Signalling</i> Jyrki Jussila (Nokia) v.1.0.0	25.423 <i>UTRAN Iur Interface: RNSAP Signalling</i> Björn Ehrstedt (Ericsson) v.1.0.0	25.433 <i>UTRAN Iub Interface: NBAP Signalling</i> Nobutaka Ishikawa (NTT DoCoMo) v.1.0.0	-
25.414 <i>UTRAN Iu Interface: Data Transport and Transport Signalling</i> David Comstock (Ericsson) v.1.0.0	25.424 <i>UTRAN Iur Interface: Data Transport and Transport Signalling for Common Transport Channel Data Streams</i> Nicolas Drevon (Alcatel) v.0.1.0	25.434 <i>UTRAN Iub Interface: Data Transport and Transport Signalling</i> Magnus Alden (Telia) v.1.0.0	-
25.415 <i>UTRAN Iu Interface: User Plane Protocols</i> Alain Maupin (Ericsson) v.0.1.0	25.425 <i>UTRAN Iur Interface: User Plane Protocols for Common Transport Channel Data Streams</i> Nicolas Drevon (Alcatel) v.0.1.0	25.435 <i>UTRAN Iub Interface: User Plane Protocols for Common Transport Channel Data Streams</i> Jean-Marie Calmel (Nortel) v.0.1.0	-
-	25.426 <i>UTRAN Iub & Iur Interfaces: Data Transport and Transport Signalling</i> Sami Kekki (Nokia) v.1.0.0		-
-	25.427 <i>UTRAN Iub & Iur Interfaces: User Plane Protocols for DCH Data Streams</i> Sami Kekki (Nokia) v.0.1.0		-
25.401 <i>UTRAN Overall Description</i> Jean-Marie Calmel (Nortel) v.1.0.0			

25.931 <i>UTRAN Functions: Examples on Signalling Procedures</i> Enrico Scarrone (CSELT) v.1.0.0
25.832 <i>Manifestations of Handover and SRNS Relocation</i> Richard Townend (BT) v.2.0.0
30.531 <i>WG3 Workplan & Study Items</i> Björn Ehrstedt (Ericsson) -
25.831 <i>WG3 Study Items for Future Releases</i> Nicolas Drevon (Alcatel) -
I3.05 Node B O&M Functional Descriptions Andrew DeLaTorre (Vodafone) -

NOTE – The version numbers included in this table are those that were allocated at the end of the last RAN Plenary meeting. They are not the latest WG3 numbers.

Annex B – Iu SWG report

TSG-RAN Working Group 3 meeting #3
Kawasaki, Japan, April 1999

TSGR3#3(99)385

Agenda Item: 20
Source: IU SWG Rapporteur
Title: **Report from the Iu SWG #1**
Document for: Approval

1. INTRODUCTION

This document is the report from the first Iu SWG meeting held in RAN WG3#3 meeting in Kawasaki, Japan, 27-28.4.1999. The report is organised according to the agenda items allocated for the Iu SWG, not according to the chronological order of the discussion.

2. Iu SWG #1 REport

9 Iu General Aspects (S3.10)

DOC 344, S3.10 EDITORS PROPOSAL FOR THE IU INTERFACE GENERAL PRICIPLES

This contribution is the editor proposal for the document S3.10, which was already reviewed at WG3 plenary. In IU SWG some references to specific chapters in S23.30 were modified. Editor makes a new version which will be presenetd in the WG3 plenary.

10 Iu Signalling (RANAP) (S3.13)

DOC236, EDITOR (NOKIA), RANAP SPECIFICATION

No specific modifications exist. The results of the agreed study items were included. E.g. word Bearer was replaced 'Radio Access Bearer' in RANAP message and procedure names.

Lucent commented that there is a lot of radio dependencies present in the S3.13. These should be removed.

It was concluded that Lucent will propose these editorial type of changes in mail reflector after the WG3 meeting.

10.1 Study Item Report and decision: Iu/5

DOC 377, NEC, STUDY ITEM IU/5 SEPARATE OR COMBINED SETUP, MODIFY AND RELEASE OF RAB

This contribution summarises the email discussion in WG3 reflector regarding this study item. There was only one mail sent by Alcatel, which supported the procedures proposed by TTC/ARIB.

Nortel commented that the dynamics of the bearer allocation/deallocation should be controlled by the UTRAN.

Conclusion:

It was agreed that there is no relationship between the bearers to be added, bearers to be modified and bearers to be deleted independently whether a combined procedure or separated procedure shall be used.

Nortel and Motorola were supporting the combined procedure, and thus the study item - narrowed with above agreement - was left open.

10.2 New Contributions

DOC315, SIEMENS, CN DISTRIBUTION FUNCTION

Proposes to use the CN node indicator also in the CN nodes, to be able to support integrated CN node. I.e

-In UL the RNC shouldn't remove the CN indicator from Direct Transfer messages but RNC should forward it to CN node.

-In DL the CN node indicator shall come from CN node itself.

It was clarified that the assumption has been that the SCCP connection shall be used to differentiate the RANAP signalling connections towards different CN nodes.

Siemens argued that in case of an integrated CN architecture, the Signalling address of the two domains might be the same and therefore at least in the setup of the SCCP connection the discriminator is needed.

It was questioned that whether there is a requirement to be able to utilise the same signalling address for the SGSN and MSC.

Conclusion: Proposal is rejected. A liaison statement shall be sent to 3GPP SA WG2, in which WG3 asks whether the usage of common signalling connection or/and signalling address shall be possible or not. Siemens volunteered to draft that liaison statement.

DOC 357, NEC, Paging Procedure

Based on assumption that the GS interface could be used for paging coordination this contribution proposes to introduce an other RANAP paging message, which could be transmitted via the existing signalling connection to UE. This message would be sent from the already active CN node when the other not active CN node desires to page the UE.

Siemens stated that this alternative method adds some complexity to CN without any benefit.

Lucent noted that this is more like a system architecture issue, which was agreed.

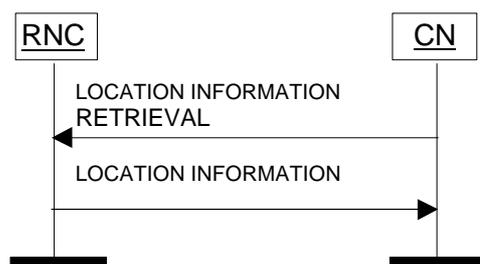
It was recalled that currently in S2 document 23.10 it is stated that it is the UTRAN which is responsible for the paging coordination.

Concl: NEC shall check the wording in 23.10 and in other relevant S2 documents. If there is clear statement that the UTRAN makes the paging coordination, then WG3 shall stick to that. If there is no clear statement about this in S2 documentation, then we shall write an liaison statement for SA2, in which we ask that whether this alternative method for paging coordination shall be adopted for the UMTS system.

Decision based on DOC 378 (handled later in the Iu SWG) was that the proposal in DOC 357 is not approved.

DOC 358, NEC, INFORM UE LOCATION TO CN

Proposes to introduce a new procedure UE "Location Information retrieval" for the RANAP protocol.



BT asked that whether there a requirement for different kind of reporting scheme than the one to one relationship between report and request.

Ericsson: Currently there already exists two types of requests in 23.10.

Conclusion:

Two new elementary procedures included in RANAP specification, which are defined as follows:

Procedure Location Request.

(Contains one message from CN to RNC, called Location Request, Editor shall draw the figure)

"The Location Request message is sent from the CN to the RNC. It is used to retrieve the UE location information while the UE has its connection with the network."

Procedure Location Report

(Contains one message from RNC to CN, called Location Report, Editor shall draw the figure)

"The Location report is sent from the RNC to CN. It is used to provide the UE location information for CN while the UE has connection to the network. This message may be sent as a response to the received LOCATION REQUEST message. Other triggers for this message are ffs."

Other conclusions:

Proposed message contents are not included, only a place holder for the introduced messages are added. This was left for the editor.

About proposed changes to the Initial UE message: Editors note removed from the beginning of the chapter 8.13 in RANAP specification. The proposed new text is not added. Message contents table discussion is postponed to be held when corresponding Nokia contribution is handled.

DOC 326, NOKIA, Updated proposed new presentation for Iu RANAP procedure "Inter RNS Hard Handover"

Proposes that the current Iu Handover procedure is splitted to elementary procedures which affect only to one interface. The model for the elementary procedures is taken from corresponding GSM specifications.

Ericsson noted that maybe the proposed division to elementary procedures in Nokia contribution is not the most appropriate. Ericsson is preparing a contribution with slightly different division.

Conclusion: Contribution was accepted with following modification: Figure 7, the User plane setup is moved to be done after Handover Request.

DOC 325, NOKIA, Updated proposed new presentation for Iu RANAP procedure "Serving RNS relocation"

Proposes that the current SRNC Relocation procedure is splitted to elementary procedures which affect only to one interface. The model for the elementary procedures is taken from corresponding GSM specifications.

Conclusion: Contribution was accepted with following modifications:

-Delete from chapter 8.1.3 the 2 sentences related to RNSAP protocol. Editor shall make a better proposals to replace these with something that is not directly related to procedures in other interfaces.

DOC 340, NOKIA, SRNC RELOCATION DETECT MESSAGE FOR SRNC RELOCATION PROCEDURE

Proposes that a new message SRNC Relocation Detect is added for the SRNC relocation signalling procedure. That message would be transmitted to CN immediately when the SRNC operation is started (after having received the SRNC Relocation Commit).

Ericsson: Maybe the Detect and Complete shall be own elementary procedures.

It was noted that in GSM this Detect is optional message and whether it is sent or not, is decided by the GSM BSC. It was questioned whether it shall be optional also in UMTS.

Conclusion: SRNC Relocation Detect was added to the SRNC Relocation procedure. SRNC Relocation Detect and SRNC Relocation Complete are separate elementary procedures. No mentioning about the mandatoryness versus optionality of the new message is added.

Text for the SRNC Relocation Detect shall be drafted by the RANAP editor. It should follow similar principles than that of Handover Detect.

Text to note that the SRNC Relocation Complete message can be sent from RNC to CN only after the UE is using the UTRAN identifiers (s-RNTI and SRNC-ID) allocated by the target RNC (s-RNTI and SRNC-ID) shall be added to RANAP specification.

DOC 257, ALCATEL, LOAD SHARING ON Iu FOR IP DOMAIN USER PLANE

Proposes that RNC allocates the IP address within RNC for the Radio Access Bearers on Iu and the SGSN allocates the IP address within SGSN for Radio Access Bearers on Iu.

Conclusion:

Proposals were accepted with following changes:

Proposals 1 and 2:

-Replace the sentence explaining the reason for the IP address allocation by statement that this applies only for the Iu_PS interface.

-Applies also for the Handover procedure in RANAP specification, and same sentences as for RAB assignment and SRNC Relocation shall be added for Handover.

Proposal 3: Word 'it' shall be changed to CN and RNC depending on the direction. The "@" symbol shall be changed to word 'address'.

DOC 359, NEC, PARAMETERS WITH REGARD TO THE RANAP SRNS RELOCATION

Proposes the parameters for the messages belonging to the RANAP SRNS Relocation procedure.

Discussion postponed to be carried out together with DOC 328.

DOC 328, NOKIA, Message Contents for the RANAP Serving RNS Relocation and Inter RNS Hard Handover procedures.

Proposes the parameters for SRNC Relocation and Handover procedures.

Discussion on 359 and 328:

There was a lengthy discussion regarding the identification of UMTS nodes in the IU interface.

Conclusions:

The mechanisms and methods to define the target on IU interface are left for further study. It was recognised that some definition of target is in any case required and what mechanism is used for that is an architectural issue. This item shall be reported to the WG3 plenary and appropriate measures to clarify following issues shall be discussed in WG3 plenary:

How the UMTS nodes are addressed over the Iu interface (e.g. are they identified by their signalling address, by a logical ID, or by some other means?)

How the signalling addresses of other nodes are found at each node (e.g. should all SGSNs know the signalling address of other SGSNs, or should the signaling addresses be transferred over the UTRAN interfaces ?)

Iu SWG proposal is to draft a liaison statement for SA WG2, in which WG3 asks guidance for defining the addressing of UMTS nodes over the Iu interface and principles for handling the mapping between interface identifiers and node signalling addresses (if any).

Regarding the specific parameters, the following were agreed:

-The notation agreed in RAN WG3#2 for message contents shall be reused in Iu interface.

SRNS RELOCATION REQUIRED:

Message type

Target Identification

(A note shall be added that the usage and format of this parameters is ffs.. This note shall be added both to the corresponding message and to the parameter definition chapters.)

Source RNC to Target RNC Transparent field

(Description for the parameter shall be taken from DOC 328 from NOKIA.)

SRNS RELOCATION REQUEST:

- Message type

- Transport address

No description of this parameter shall be added, only a place holder for the parameter is added

For each bearer :

- Bearer ID
 - Iu Transport Association
- No description of this parameter shall be added, only a place holder for the parameter is added
- Priority level and pre-emption indication
- The definition for this parameter has to be aligned with other groups in 3GPP.
- Bearer linking
- Description for this parameter is taken from Nokia contribution DOC 327
- Source RNC to Target RNC Transparent field

SRNC RELOCATION PROCEEDING 1

- Message type
- For each bearer:
- Bearer ID
 - Transport address
 - Iu transport association.

SRNC RELOCATION PROCEEDING 2:

- Message type

SRNC RELOCATION DETECT :

- Message type

SRNC RELOCATION COMPLETE :

- Message type

SRNC RELOCATION FAILURE:

- Message type
- Cause value.

HANDOVER:

Exactly the same parameters as for SRNC Relocation procedure were agreed to be included. In addition to those, for Handover Request acknowledge and Handover Command messages following parameter was added:

- Target RNC to Source RNC Transparent field
- Description for the parameter shall be taken from DOC 328 from NOKIA.

DOC 339, NOKIA, MERGING OF SRNC RELOCATION AND HANDOVER RANAP PROCEDURES

Proposes that the two RANAP procedures SRNC Relocation and Handover are merged into new procedure, having the name RELOCATION.

The real time requirements for these procedures were discussed. It was concluded that in some cases the real time requirements for execution of the SRNC relocation are not as stringent as for handover,

however in some other cases no significant difference can be seen between SRNC relocation and Hard handover.

It was noted that if different execution requirements for different procedures would exist maybe a priority or urgency type of parameter would be more appropriate solution than two separate procedures.

Conclusion: It was agreed to merge the two RANAP procedures as proposed.

Following message names were agreed:

- RELOCATION REQUIRED
- RELOCATION REQUEST
- RELOCATION REQUEST ACKNOWLEDGE
- RELOCATION COMMAND
- RELOCATION DETECT
- RELOCATION COMPLETE
- RELOCATION FAILURE

Editor of S3.13 shall formulate and add a sentence stating that the merger of the two procedures does not necessary mean twthther a air interface HANDOVER or SRNC RELOCATION is being executed.

Other affected specifications were requested to be updated according to this decision.

After the unanimous decision was made, Nortel indicated that they are are not in favour of merging these two procedures. The already made decision was not however disputed.

DOC 376, SIEMENS, DRAFT LIAISON STATEMENT FOR SA2: CN Architectures to be supported in UMTS release 99.

This draft liaison statement was decided to be drafted based on the Siemens contribution 315, regarding CN discriminator and its existence in Iu interface. Liaison statement shall ask guidance from SA WG2 regarding this issue.

Based on the discussion it was agreed that the only question that shall be asked from SA2 can be formulated e.g. as in the following:

"The agreed UMTS CN architecture for release 99 assumes logically separated CN nodes, independently of the physical implementation. Does this assumption exclude that, independent of the CN architecture, the two logical CN nodes would share the CN node address (SPC) (in the case of a physically integrated 3G-MSC AND 3G-SGSN node."

Siemens modifies the draft liaison statement accordingly. New version of the liaison statement shall be approved in WG3 plenary.

DOC 378, NEC, GS INTERFACE AND PAGING COORDINATION DESCRIPTION IN UMTS 23.20

This contribution was made to clarify the situation of paging coordination in CN within the documentation approved in SA WG2. This clarification was requested to be made by the Iu SWG based on the NEC contribution DOC 357.

Conclusion:

Based on this clarification it was agreed that the assumption in SA WG2 is clearly that the pagings are coordinated only by UTRAN. Therefore proposed Iu paging solution, proposed in DOC 357, which requires the paging coordination in CN, is not included in RANAP specification. So the proposal in DOC 357 is not approved.

11 IU USER-PLANE + TRANSPORT NETWORK CONTROL PLANE

11.1 ISDN/PSTN DOMAIN RADIO NETWORK LAYER (S3.15)

DOC 242, EDITOR, S3.15: IU INTERFACE CN-UTRAN USER PLANE PROTOCOLS

This contribution is the RAN TSG noted version of the S3.15.

DOC 281, ERICSSON, IU USER PLANE PROTOCOL TOWARDS THE PSTN/ISDN DOMAIN

Contribution proposes the Iu – user plane protocol for the CS-domain. Discussion on this subject was postponed to be held together with DOC 368 from NORTEL.

DOC 368, NORTEL, Comments to "Iu user plane protocol towards the PSTN/ISDN Domain" of Ericsson from the multi-RAB perspective.

Indicates some changes required for the Ericsson contribution DOC 281, from the multi-RAB perspective.

Conclusions for DOCs 281 and 368:

It is possible to have one or several NAS data streams belonging to one NAS service within one Iu transmission link.

There is one Iu user plane protocol instance per one Iu transport link, which shall be able to handle one or several NAS data streams

QoS is defined separately for each NAS data stream.

These NAS data streams handled by the same Iu user plane protocol instance are coordinated in NAS.

The name of the IU user plane protocol for CS domain is Iu_CS UP Protocol.

It is assumed that the IU_CS UP protocol is common for all services originating from the CS domain

Chapter 3.1 from DOC 281 was added to S3.15 with some agreed editorial updates according to above decisions.

Chapter 3.2 from DOC 281 was added to S3.15 with some agreed editorial updates according to above decisions.

Chapter 3.3 from DOC 281 was added to S3.15 with some agreed updates according to above decisions. Specifically the RAB Format selection function and the Time Alignment functions were left FFS.

The Functional model figure was updated to indicate that there can be one or several NAS Data streams transmitted via the CS-RL-SAP and between the NAS Data stream handling function and Frame handler function.

The figure indicating the IU_CS UP Frame format with associated explanatory text is added to S3.15 ch 5.7.1 with some modifications.

Based on the discussion the parameter BEARER LINKING can be added to the appropriate messages in RANAP RELOCATION procedure.

11.2 ISDN/PSTN DOMAIN TRANSPORT LAYER (S3.14)

DOC 369, EDITOR, 25.414 UTRAN IU INTERFACE DATA TRANSPORT AND TRANSPORT SIGNALLING

The modifications that were proposed in WG3 plenary were added by the editor to the document 25.414.

The changes made by the editor and following further changes to the contribution were agreed .

Some text for chapter 5.1.1.1 and 5.1.1.2 shall be added (similarly as in other corresponding chapters)

An explicit indication that this is an Iu interface specification shall be added to the Scope chapter
A new subchapter 5.1.1 shall be added , in such a way that all chapters containing text are under the same heading level

Reference 3 should be "ATM Adaption layer 5" instead of "ATM Adaption layer type 5"

In chapter 6.1 the UDP and IP shall be separated to two sublayers.

There are some errors in chapter numbering

The document headers shall be checked.

Heading 5.2.2.1, should be "Signalling Transport bearer converter"

UDP, IP and GTP references are needed, however the GTP reference is not yet available

GTP(U) shall it be in transport network control plane or in radio network control plane? This shall be confirmed in the WG3 plenary.

Dated references have to be added

Conclusion: Editor updates the document according to agreed changes and makes a new version for the WG plenary for approval.

11.3 IP DOMAIN RADIO NETWORK LAYER (S3.15)

No contributions

11.4 IP DOMAIN TRANSPORT LAYER (S3.14)

The placement of the GTP-U protocol in protocol model was discussed. It was the common view in the Iu SWG that the GTP-U belong to the Radio Network Layer of the IU_PS user plane protocol stack.

DOC 276, ERICSSON, GTP-U PROTOCOL FOR IU UP TOWARDS THE IP DOMAIN

Contribution proposes the protocol for the GTP-U, which is used to support packet data across the UTRAN Iu_PS interface.

Usage of GTP version numbering and protocol discriminator was discussed. It was found unclear whether the separation of the UMTS GTP-U protocol from the GPRS GTP protocol should be made by only version numbering or by different protocol discriminators.

The usage of reserved fields within protocol messages was discussed. BT promised to clarify the principles for using the "reserved" fields within protocol messages.

Conclusions:

Chapter 2.4 "GTP-U Header Definition" was added to S3.14 with some modifications agreed in the Iu SWG. Especially following notes were added:

- Initialisation and synchronisation of sequence numbers shall be clarified
- GTP-U flow label is unique only within one IP address

It was also agreed that a new Parameter "Reordering information" was added to the RANAP protocol as one parameter belonging to the group "bearer parameters" This parameter is present only in the Iu_PS domain.

Chapter 2.3. " GPRS GTP Commonality" was added as an informative annex to the S3.14.

Discussion about inclusions from chapter 5 were postponed to be held after presentation of DOC 312 from NOKIA.

DOC312, NOKIA, Iu User data transport to IP domain

This contribution proposes that the sentence in S3.14 "IP on top of AAL5 is used as a bearer for the user plane" is replaced by following statement:

"IP on top of AAL5 and ATM is used as a bearer for the user plane as it has been specified in RFC1483 (Heinanen, J., "Multiprotocol Encapsulation over ATM Adaptation Layer 5", RFC 1483, July 1993.). The default protocol multiplexing option shall be the VC based multiplexing for routed protocols."

Conclusions from DOC 276 and DOC 312:

Chapter 2.5.1 from DOC 276 is included in S3.14 (GTP port replaced by GTP/UDP port). Chapters 2.5.2 and 2.5.3 from DOC 27 6 were added to the S3.14. Proposal in Nokia contribution DOC 312 was not accepted.

12 IU SIGNALLING TRANSPORT (S3.12)

DOC 349, LIAISON STATEMENT FROM SA2: AGREED SIGNALLING BEARER ARCHITECTURE FOR IU

This contribution presents the agreed signalling bearer for IU_PS interface.

DOC 371, EDITOR (TELECOM-MODUS), UTRAN IU INTERFACE SIGNALLING TRANSPORT

Editor presented the document S3.12, which was updated according to the discussion in WG3 plenary and SA2 liaison statement DOC 349..

Some additional editorial modification were added. Also it was noted that for MTP3-B the usage of multiple link sets is not precluded. Editor shall make an updated version based on the comments and the document shall be handled in WG3 plenary.

Other issues:

New e-mail discussion items agreed in Iu SWG #1.

Discussion item related to the RANAP parameters:

Nokia shall initiate parameter discussion on email reflector by sending a word document containing all proposed message contents that the Iu SWG did not have time to handle. Other delegates are encouraged to study the proposed parameters and to give comments on the email reflector, e.g. by making revisions to the document. Nokia should summarise the discussion and especially the possible conclusions in the Iu SWG #2 meeting.

Prefix that shall be used for this discussion item is: **Iu/RANAP Parameters**

Discussion item related to Time alignment handling within Iu-CS UP protocol.

Responsible: NORTEL NETWORKS. The material that exist in DOCs 276 and 368 shall be used as a basis for the discussion.

Prefix that shall be used for this discussion item is: **Iu/CS UP Time alignment**

Discussion related to handling of multiple NAS data streams in one Iu-CS UP protocol instance.

Responsible ERICSSON. The purpose of this discussion item is to solve how the multiple NAS data streams can be handled most efficiently within the IU_CS interface and hat kind of coordination for those data streams is required in NAS.

Prefix that shall be used for this discussion item is: **Iu/CS UP NAS Data Streams**

Annex C – Iub/r SWG report

TSG-RAN Working Group 3 meeting #3

TSGR3#3(99)392

Kawasaki, Japan, 26-30 April 1999

Source: Iub/lur SWG interim Chairman

Title: Summary Iur Iub SWG

1. GENERAL

The Iur/Iub SWG meeting was held 27-28 April and chaired by Per Willars. The meeting trusted the chairman to take correct notes. The conclusions are fully reported (except all editorial modifications agreed). Only some discussion is reported.

2. CONCLUSIONS

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

13 Iur / Iub General Aspects

13.1 Study items report and decision

Arc/1, Common transport channels on Iur:

345 (same as 286v2):

Nicolas will as part of study item Arc/1 provide a report on the technical issues both using and not using common transport channels on Iur. This will be used as a basis to decide on the support of common transport channels over Iur (optional or mandatory or possibly not supported at all).

280: Presented

Long discussion on common transport channels over Iur.

Conclusion for common transport channels over Iur:

First the principles for handling RACH and FACH over Iur shall be settled. This is then, together with the DCH mechanisms, a starting point for defining DSCH support over Iur.

The following basic principles were agreed:

QoS: For RACH/FACH over Iur only best effort with priority handling is considered, due to complexity reasons on the Iur interface.

In the case that UTRAN assigns RACH/FACH to the UE, the CRNC provides physical channel parameters.

An Ad Hoc group for “RACH/FACH on Iur” provided the following statements which were agreed:

Regarding the level of interaction between MAC-c and MAC-d, the following is agreed:

Need to minimise buffering in system

Need to minimise the initial delay of the transmission over Iur for the first PDU

Need to minimise signalling on Iur

Need to reduce conditions of CRNC overload.

No reservation mechanism is required for reservation of resources in the CRNC.

When the UE changes cell within the CRNC, logically a new connection between MAC-d and the new MAC-c instance is established. Any flow control or similar mechanism over Iur must be reinitialised. The same transport bearer can be used.

There is a frame protocol multiplexing of different UE on one transport bearer. One transport bearer can be used to connect multiple MAC-d instances in SRNC with multiple MAC-c instances in the CRNC. Whether to use one transport bearer per priority class, or a common, is FFS. Whether to use AAL2 or AAL5 is FFS.

Multiplexing of data streams for one UE is assumed to be done in MAC-d, but this needs WG2 confirmation. The relation to priority handling need to be clarified.

The above conclusions shall be sent to WG2 for comments. Also WG3 shall request WG2 for a more

detailed model of the split of MAC-d and MAC-c.

350: (LS from wg2 on DSCH on Iur & Iub) Not treated due to time constraints => treat in plenary.

352: (LS from wg2 on addressing) Not treated due to time constraints => treat in plenary.

Iur/1, Inband or outband power control:

282:

Agreed that UL outer loop power control is carried inband, i.e. the UL outer loop power control procedures shall be removed from NBAP and RNSAP specifications.

Agreed that DL power balancing is carried outband, i.e. the DL power control procedure as proposed by TTC ARIB are included without FFS marks in the NBAP and RNSAP specifications, but is not renamed as proposed.

13.2 General Aspects and principles of Iur interface (25.420)

13.3 General Aspects and Principles of Iub interface (25.430):

308: (Logical model of DSCH in Node B)

Long discussion. The proposal was agreed as a working assumption with a note stating that this is only valid for the case of a DSCH associated with a downlink DPCCH. This may be discussed again if other proposals are contributed.

14 Iur signalling (RNSAP) (25.423)

237: RNSAP specification

Reviewed, some editorial comments agreed. Also agreed:

Sec 5.1 should be modified to state that it is FFS whether Common Transport Channel Iur module is optional.

Sections 9.1.19-9.1.24 removed (as corresponding procedures have earlier been removed)

Text in sections 9.1.x removed (description only in chapter 8)

Annex B is removed (the parameters are now documented in section 9.1)

Regarding stability of the document:

1-Scope needs to be completed

5 is stable

6 needs to be filled in or removed

7: the RNSAP procedures should be listed here

8.1 is incomplete but what is included there is stable

8.2 the list of procedures is complete, but the specification is incomplete (some FFSs, error cases missing...)

8.3 is very incomplete

9 is less than 50% stable

Contributions related to common transport channels over Iur:

341 Not treated due to time constraints => treat in plenary.

360 Not treated due to time constraints => treat in plenary.

310 Not treated due to time constraints => treat in plenary.

Other contributions

362 and 363: Withdrawn

15 Iub signalling (NBAP) (25.433)

238, NBAP specification:

Quick review resulting in a number of editorial comments. Section 8.1 is considered not stable. Section 8.2 is more stable but 1 or 2 procedures may still be missing.

15.1 Study Items report and decision:

Iub/1

364

Agreed to wait with this study item (and keep it open) until the assumption in WG2 on termination of PCH is decided.

Iub/2

365: Presented

263: Presented

Conclusion Iub/2:

388: Compromise from offline discussions. Agreed to include points 2 + 3 (threshold for reporting and cause value) into 25.430 with statement that the cause value "UL interference threshold" is FFS. Point 4 (coordination between CRNCs) is included in 25.401.

15.2 New contributions.

277 Withdrawn.

278: Presented

338: Presented

Conclusion 278+338: NBAP messages and parameter description agreed according to 278 with some modifications:

Add note that which parameters that are also common to TDD is FFS, and also some TDD parameters may be missing.

Add message discriminator, TFCI used flags (FFS whether supported or not), DL power control parameters according to 338.

Remove UL channelisation code nr and Length of DL channelisation code

264 Not treated due to time constraints => treat in plenary.

361 Withdrawn.

16 Iur Signalling transport (25.422)

266, 324, 360, 259: Presented

Discussion:

Long discussion. Three alternatives identified (CTP/IP-only, SS7-only or a compromise). The chairman proposed the same compromise as for the Iu-PS signalling bearer, but this could not be agreed. Main issues were:

Is CTP ready on time for release 99?

Does a compromise with two options imply problems for multivendor?

There are some differences to the Iu-PS case (Iur shall give full connectivity between any pair of RNCs)

Indicative voting (each company could support several alternatives):

IP-only: support=4; Compromise: support=12, objections=5; SS7-only: 13, objections=4

(Later another indicative voting was taken in plenary.)

Conclusion, agenda item 16:

Describe both solutions in 25.422, i.e. the SCCP/CTP/IP solution (with the same note as for Iu-PS regarding reevaluation in September) and the SCCP/MTP3b solution, and note that whether to keep one, the other or both in the specification (release 99) is FFS.

Since TSG RAN asked WG3 to not take a vote, and since WG3 could not reach consensus, the decision is to be taken by TSG RAN.

372, 25.422 v 1.0.1: Some modifications agreed.

382, 25.422 v 1.0.2: To be treated in plenary.

17 Iub Signalling transport (25.432)

370, 25.432 v 1.0.x: Primarily editorial modifications agreed. Need to include explicit references.

383, 25.432 v 1.0.: To be treated in plenary.

18 Iur/Iub User-plane + Transport network control plane

18.1 Iur/Iub DCH, radio network layer (25.427),

246, 307, 335: Not treated due to time constraints => treat in plenary.

18.2 Iur/Iub DCH, transport layer (25.426),

258: It was decided to not remove Q.aal2 from Iub.

265: Motorola clarified that the proposal was to support the CTP/IP stack as an option in addition to the other stacks.

The signalling bearer for ALCAP on Iur: It was agreed that this has a relation to the decision on

RNSAP signalling bearer. It was decided to add a note to chapter 7.2 of 25.426:

“Note: Signalling bearer solution based on CTP/IP may be considered dependent on the outcome of TSG RAN on the signalling bearer for RNSAP.”

The signalling bearer for ALCAP on Iub: The current working assumption to use SAAL-UNI was agreed in order to avoid optionality.

374 25.426 v 0.1.1: Some editorial modifications agreed.

18.3 Iub CCH, radio network layer (25.435),

244, 336: Not treated due to time constraints => treat in plenary.

18.4 Iub CCH, transport layer (25.434),

334 (=311) : Agreed with minor modifications. Use one AAL2 connection per RACH and one per FACH physical channels. Agreed to include figure with SSSAR and statement explaining that only SSSAR is considered from I.366.1.

375 25.434 v 1.0.x: Agreed with some editorial modifications.

18.5 Iur CCH, radio network layer (25.425),

243, 337: Not treated due to time constraints => treat in plenary.

18.6 Iur CCH, transport layer (25.424),

240: Concluded that it is currently difficult to fill in technical contents since agreement on the principles (e.g. transport protocol) is missing.

306: Not treated due to time constraints => treat in plenary.

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

251, 319: Not treated due to time constraints => treat in plenary.

25 Any other business

25.2 Hybrid ARQ

Not treated due to time constraints => treat in plenary.

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Annex E – Document Register

Number	Title	Source
R3-99226	S3.01 version 0.1.0	Editor (Nortel)
R3-99227	S3.10 version 0.1.0	Editor (BT)
R3-99228	S3.20 version 0.1.0	Editor (Lucent)
R3-99229	S3.30 version 0.1.0	Editor (Fujitsu)
R3-99230	S3.11 version 0.1.0	Editor (??)
R3-99231	S3.21 version 0.1.0	Editor (??)
R3-99232	S3.31 version 0.1.0	Editor (??)
R3-99233	S3.12 version 0.1.0	Editor (Telecom Modus)
R3-99234	S3.22 version 0.1.0	Editor (Telecom Modus)
R3-99235	S3.32 version 0.1.0	Editor (Fujitsu)
R3-99236	S3.13 version 0.1.0	Editor (Nokia)
R3-99237	S3.23 version 0.1.0	Editor (Ericsson)
R3-99238	S3.33 version 0.1.0	Editor (NTT DoCoMo)
R3-99239	S3.14 version 0.1.0	Editor (Ericsson)
R3-99240	S3.24 version 0.1.0	Editor (Alcatel)
R3-99241	S3.34 version 0.1.0	Editor (Telia)
R3-99242	S3.15 version 0.1.0	Editor (Ericsson)
R3-99243	S3.25 version 0.1.0	Editor (Alcatel)
R3-99244	S3.35 version 0.1.0	Editor (Nortel)
R3-99245	S3.26 version 0.1.0	Editor (Nokia)
R3-99246	S3.27 version 0.1.0	Editor (Nokia)
R3-99247	I3.01 version 0.1.0	Editor (CSELT)
R3-99248	I3.02 version 0.1.0	Editor (BT)
R3-99249	I3.03 version 0.1.0	Editor (Ericsson)
R3-99250	I3.04 version 0.1.0	Editor (??)
R3-99251	I3.05 version 0.1.0	Editor (Vodafone)
R3-99252	draft minutes of meeting #2	interim secretary
R3-99253	Draft agenda	Chairman
R3-99254	Response to the Proposal for Iub Interface O&M Work Item and amendment of TSG-RAN Terms of Reference	TSG-SA WG5
R3-99255	Principles of User Data Retrieve at SRNS Relocation & GPRS/UMTS H/O in the IP domain	Alcatel (N. Devon)
R3-99256	Sequence charts of User Data Retrieve at SRNS Relocation in the IP domain	Alcatel (N. Devon)
R3-99257	Load sharing on Iu for IP domain user plane	Alcatel (N. Devon)
R3-99258	Need for Q.AAL2 on the Iub	Alcatel (N. Devon)
R3-99259	RNSAP Signalling bearer on Iur	Alcatel (N. Devon)
R3-99260	ALCAP signalling bearer on Iur	Alcatel (N. Devon)
R3-99261	Proposed RRC Connection Re-establishment Procedure	Fujitsu
R3-99262	Clarity of Specifications and Confusion between RNS and RNC	BT
R3-99263	Admission Control Based On Power and Interference Management	BT
R3-99264		kiran.thakare@t-modus

Number	Title	Source
R3-99265		Motorola Inc (Kethees Ketheesan)
R3-99266		Motorola Inc (Kethees Ketheesan)
R3-99267		Motorola Inc (Kethees Ketheesan)
R3-99268		Motorola Inc (Kethees Ketheesan)
R3-99269		Motorola Inc (Kethees Ketheesan)
R3-99270		Motorola Inc (Kethees Ketheesan)
R3-99271		Motorola Inc (Kethees Ketheesan)
R3-99272	Uplink Overload Metrics	QUALCOMM Europe
R3-99273	Editor's Proposal for changes to S3.10	Editor
R3-99274	Proposed Editorial changes to S3.30: Iub Interface: General Aspects and Principles V 0.1.0	Editor (Fujitsu)
R3-99275		Ericsson (Björn Ehrstedt)
R3-99276		Ericsson (Björn Ehrstedt)
R3-99277		Ericsson (Björn Ehrstedt)
R3-99278		Ericsson (Björn Ehrstedt)
R3-99279		Ericsson (Björn Ehrstedt)
R3-99280		Ericsson (Björn Ehrstedt)
R3-99281		Ericsson (Björn Ehrstedt)
R3-99282		Ericsson (Björn Ehrstedt)
R3-99283		Ericsson (Björn Ehrstedt)
R3-99284		Ericsson (Björn Ehrstedt)
R3-99285	"Final Minutes of 3GPP TSG RAN WG3 meeting #1, February 2 - 5, 1999, Bonn, Germany"	Interim Secretary
R3-99286	Study Item [ARC/1] Report	Alcatel
R3-99287	NOT USED	
R3-99288	NOT USED	
R3-99289	NOT USED	
R3-99290	NOT USED	
R3-99291	NOT USED	
R3-99292	NOT USED	
R3-99293	NOT USED	
R3-99294	NOT USED	
R3-99295	NOT USED	
R3-99296	NOT USED	

Number	Title	Source
R3-99297	NOT USED	
R3-99298	NOT USED	
R3-99299	NOT USED	
R3-99300	NOT USED	
R3-99301	LS to R1 and R3 on Hybrid ARQ Type II/III	RAN WG2
R3-99302	Inter RNS Hard Handover via Iur	"Italtel, Siemens, CSELT"
R3-99303	RAB Reconfiguration	"Italtel, Siemens, CSELT"
R3-99304	RRC Connection Re-establishment	"Italtel, Siemens, CSELT"
R3-99305	Study Item (arc/3) Overall Delay Budget within the Access Stratum	"Siemens, Italtel"
R3-99306	Iur Transport Model for Common Channels and DSCH	Nortel Networks
R3-99307	Multiplexing of DCHs over Iur	Nortel Networks
R3-99308	Seperation of UE multiplexed on a DSCH on a transport bearer basis	Nortel Networks
R3-99309	S3.01 v.0.1.1	Editor
R3-99310	CCH and DSCH procedures over Iur	Nortel Networks
R3-99311	Transport of RACH/FACH over Iub	Nokia
R3-99312	Iu User data transport to the IP domain	Nokia
R3-99313	Transmission Delay Considerations	Nokia
R3-99314	Specification Methods in UMTS	Siemens
R3-99315	CN Distribution Function	Siemens
R3-99316	Proposed LS on Ciphering Algorithm Selection	Vodafone
R3-99317	Meeting report from Iub O&M Ad Hoc #1 (Milan)	Rapporteur
R3-99318	Amendment to I3.03 for Iub O&M work item	Vodafone
R3-99319	Contribution to I3.05 - Node B O&M Functional Description	Vodafone
R3-99320	Editor's Proposal for changes to S3.20	Editor
R3-99321	On definitions	Telia
R3-99322	On O&M Requirements	Telia
R3-99323	Choice of a coding method to be used for protocols inside the RNS and on the Radio Path	Alcatel
R3-99324	RNSAP Signalling Bearer	Nokia
R3-99325	"Updated proposed new presentation for Iu RANAP procedure "SRNS Relocation" "	Nokia
R3-99326	"Updated proposed new presentation for Iu RANAP procedure "Hard Handover" "	Nokia
R3-99327	Message contents for the RANAP RAB assignment and Iu release procedures	Nokia
R3-99328	Message contents for the RANAP SRNS Relocation and Hard Handover Procedures	Nokia
R3-99329	Message contents for the RANAP Overload Control and Reset Procedures	Nokia
R3-99330	Message contents for the RANAP Common ID and Paging Procedures	Nokia
R3-99331	Message contents for the RANAP Trace Invocation and Cipher Mode Control Procedures	Nokia
R3-99332	"Message contents for the RANAP CN Information, Direct Transfer and Initial UE Message Procedures"	Nokia
R3-99333	Iu User data transport to the IP domain	Nokia
R3-99334	Transport of RACH/FACH over Iub	Nokia
R3-99335	Editorial changes in S3.27	Nokia
R3-99336	RACH/FACH Frame Structure in Iub interface	Nokia
R3-99337	RACH/FACH Frame Structure in Iur interface	Nokia

Number	Title	Source
R3-99338	Message Contents for the NBAP RL Setup and RL Addition procedures	Nokia
R3-99339	Merging of SRNC Relocation and and Handover RANAP procedures	Nokia
R3-99340	SRNC Relocation Detect Message for SRNC Relocation procedure	Nokia
R3-99341	RNSAP elementary procedures to support RACH/FACH across Iur	Nokia
R3-99342	Amendment to Measurement Termination Initiated by Node B procedure (S3.33)	Vodafone
R3-99343	Proposal for Amendment of TSG RAN terms of reference	Vodafone
R3-99344	Editor's Proposal for changes to S3.10	Editor
R3-99345	Report of ARC/1 study item	Alcatel
R3-99346	LS on UE Physical Layer Capabilities	RAN 1
R3-99347	LS - A new SSN for RANAP	SA 2
R3-99348	Usage of ASN.1 for Application Part Message Definitions	Nokia
R3-99349	Agreed Signalling Bearer Architecture for Iu	SA 2
R3-99350	Support for DSCH on Iur and Iub	RAN 2
R3-99351	Abbreviation for Common Channels	RAN 2
R3-99352	Feasibility Study of Iur Aspects with relation to MAC addressing	RAN 2
R3-99353	LS on principles for further work on terminal capabilities	T 2
R3-99354	need for inter-operator handover UMTS-GSM	SA 1
R3-99355	cell update in DRNC without SRNC Relocation	Nokia
R3-99356	URA update in DRNC without SRNC Relocation	Nokia
R3-99357	Paging Procedure	NEC
R3-99358	Inform UE location information to CN	NEC
R3-99359	Parameters with regard to RANAP SRNS Relocation	NEC
R3-99360	Parameters with regard to RANAP Uplink Transfer	NEC
R3-99361	NBAP Protocol Message Parameters	NTT DoCoMo
R3-99362	RNSAP Protocol Message Parameters	NTT DoCoMo
R3-99363	Neighbour Cell Information	NTT DoCoMo
R3-99364	[Iub/1] study item - ID for NBAP Paging Message	NTT DoCoMo
R3-99365	[Iub/2] study item - Admission Control for Node B	NTT DoCoMo
R3-99366	Response to LS on need for inter-operator handover	Siemens
R3-99367	"Encoding rules and their suitability for Iu, Iur and Iub "	Telecom Modus
R3-99368	comments to Iu U-plane protocols from the multi-RAB perspective	Nortel Networks
R3-99369	25.414 v1.0.1	Editor
R3-99370	Editor's proposal for updates to 25.432	Editor
R3-99371	Editor's proposal for updates to 25.412	Editor
R3-99372	Editor's proposal for updates to 25.422	Editor
R3-99373	Editor's proposal for updates to 25.414	Editor
R3-99374	Editor's proposal for updates to 25.426	Editor
R3-99375	Editor's proposal for updates to 25.434	Editor
R3-99376	CN Architectures to be supported in R99	Siemens
R3-99377	Study Item (Iu/5) separate or combined setup/modify/release of RAB	NEC
R3-99378	Gs interface and paging co-ordination description in UMTS 23.20	NEC
R3-99379	Editor's proposal for updates to 25.411	Editor
R3-99380	Editor's proposal for updates to 25.421	Editor

Number	Title	Source
R3-99381	Editor's proposal for updates to 25.431	Editor
R3-99382	Editor's proposal for updates to 25.422	Editor
R3-99383	Editor's proposal for updates to 25.432	Editor
R3-99384	"LS to R2, answer to LS on Hybrid ARQ"	Siemens
R3-99385	Iu SWG #1 Report	SWG Rapporteur
R3-99386	Editor's proposal for updates to 25.412	Editor
R3-99387	Editor's proposal for updates to 25.413	Editor
R3-99388	Study item [Iub/2] - Admission Control in Node B	NTT DoCoMo
R3-99389	Updated RNSAP specification from Iur/b SWG session	Acting Editor
R3-99390	Response to LS on Hybrid ARQ	Interdigital
R3-99391	Summary of Hybrid ARQ	Interdigital
R3-99392	Iub/r SWG report #1	SWG Rapporteur
R3-99393	"LS to WG2, WG1 on multicarrier cell"	Ericsson
R3-99394	draft LS regarding RNSAP signalling bearer on Iur	Chairman
R3-99395	draft LS to R2 on common channel management over Iur	Nortel Networks
R3-99396	updated CN architectures to be supported in R99	Siemens
R3-99397	25.411 v.0.0.2	Editor
R3-99398	25.421 v.0.0.2	Editor
R3-99399	25.431 v.0.0.2	Editor
R3-99400	25.434	Editor
R3-99401	Transport of Implementation Specific O&M	"Mannesmann, Vodafone"
R3-99402	25.415 v0.1.1	Editor
R3-99403	response to LS on cell update	Nokia
R3-99404	LS to SA2 on addressing of UTRAN nodes in APs	Ericsson
R3-99405	Response to LS on DSCH on Iur/Iub	Nokia
R3-99406	25.414	Editor
R3-99407	25.426	Editor
R3-99408	LS to SA2 re GTP-U	Siemens
R3-99409	25.424	Editor
R3-99410	25.425	Editor
R3-99411	Proposed LS to TSG-RAN on Terms of Reference	Vodafone
R3-99412	Necessity of Implementation Specific O&M on Iur and Iub	NTT DoCoMo
R3-99413	New proposed LS to WG2 on Hybrid ARQ	Interdigital