

Source: Secretary 3GPP TSG-RAN Working Group 2 (NEC Technologies UK)

Draft minutes of the 3GPP TSG-RAN WG2 meeting #1
20 – 22 January 1999, Helsinki, Finland

The Convenor of the 3GPP TSG-RAN WG2, Mr. Denis Fauconnier (Nortel) chaired the first meeting of this group. Mr. Fauconnier opened the meeting and introduced the agenda (tdoc 001/98).

Clarifications:

- Harmonisation of documents from the different Standardisation Organisations (SDO) will be discussed under Agenda Item (AI) 6.
- Proposals on working procedures will be treated under AI 9. The agenda was approved.

The meeting appointed Georgi Petkov (NEC Technologies UK) as Secretary of TSG-RAN WG2. Mannesmann informed the meeting that they had a contribution (td 20) on the general utilisation of ETSI Special Task Force (STF) resources in support of the activities of 3GPP. The contribution was referred to AI 9.

The Chairman pointed out that so far standards documents have been contributed to this meeting only by ETSI and ARIB/TTC and asked if there were any contributions from other SDO-s. There was no response from representatives of other SDO-s at the meeting. Contributions from other SDO-s were not available.

1. Presentation from 3GPP members (SDO's) of own existing L23 documentation (AI 4)

Mr. K. Yamagata (NTT DoCoMo) suggested the Editors of the contributions from ARIB/TTC to introduce the respective documents.

Td 008 (TTC/ARIB): Radio Interface Protocol Architecture for 3G Mobile System Version: 1.0.0

The Editor, Mr. E. Schön (Nippon Ericsson) presented and explained the structure of the document. There were no questions.

Td 006 (TTC/ARIB): TTC/ARIB LAC layer draft specification

Mr. K. Sugiyama (Fujitsu) presented and explained the structure of the document

Clarifications and comments:

Convenor: What is recommended about SDL in TTC? Which level of SDL will be adopted?

Mr. K. Sugiyama: There is intention to discuss different schemes and currently two proposals from Ericsson and NTT DoCoMo are considered with the purpose of harmonisation

Td 009 (ARIB): MAC Sub-layer Specification

Mr. T. Nakamura (Fujitsu) presented the document on behalf of the Editor.

Td 010 (TTC/ARIB): RRC Specification

Mr. T. Sato (NTT DoCoMo) presented the document on behalf of the Editor (Nokia, Japan). The document was similar to the corresponding ETSI document with a few differences, which were pointed out by Mr. Sato.

2. Proposals for the WG2 documentation structure (AI 5)

Td 003 (joint contribution*): Proposal of Specification Structure for WG2

(* Ericsson, NTT DoCoMo, Japan Telecom, Nokia, Siemens, Vodafone, Fujitsu, NEC, LGIC, Nortel, France Telecom, Telia, Alcatel, Bosch, Motorola, Philips, Mitsubishi)

The proposal suggested that the documents would be indicated with notation where Sx.yy stands for Specification under the responsibility of WGx and the yy is the document number. The suggestion to indicate documents internal for the groups by Ix.yy could be changed to Rx.yy for example but should be harmonised with the other working groups.

Clarifications and comments:

- Regarding S2.03 it should be indicated that the UTRAN side is also included and not only the UE side.
- The proposed title S2.01 did not seem to reflect that it was intended as specification document. The title was changed to Description of the Radio Interface Protocol Architecture

Vodafone: Proposed to use the ETSI documents as starting point and incorporate any relevant aspects from the documents of other standards bodies

NTT DoCoMo: Proposed a similar approach.

Ericsson: Proposed to discuss comparison documents, which will identify the differences between documents from TTC/ARIB and ETSI in order to align the terminology and the understanding of the underlying concepts.

NTT DoCoMo: What terminology will be adopted for 3GPP standards in order to cover 3rd generation work from other regions and how possible compatibility with 2nd generation will be handled.

Chairman: Regarding terminology, at the December 98 meeting of 3GPP, RAN was adopted for UTRAN as more generic name and CN remained as a generally accepted term. Regarding handover to 2nd generation, part of the work related to GSM will be handled in SMG and part in 3GPP.

Conclusions:

- ETSI documentation to be used as starting point.
- Comparison documents (which will be discussed under AI 6) will be used in order to incorporate the documents from other regions.

3. Incorporation of material from 3GPP members in the WG2 documentation (AI 6)

The meeting assigned documents to temporary Editors, as the representatives of ARIB/TTC needed more time to discuss their interest in taking up the editorship of 3GPP documents.

Ericsson accepted the temporary Editorship of S2.01, based on UMTS YY.01 from ETSI as a starting point.

Td 024 (Ericsson, NTT DoCoMo, Nokia and Siemens): Comparison of the Radio Interface Protocol Architecture in TTC/ARIB and ETSI

Ericsson presented the contribution, pointing out details of the difference between the corresponding protocol architecture documents td 11 (YY.01 from ETSI) and td 8 (from ARIB)

NTT DoCoMo: Should the detailed functional description as assumed in td 11, which is not included in td 08 be adopted.

Chairman: The functionality had been assumed to belong to the protocol architecture and the Specifications describe the protocols.

NTT DoCoMo: Regarding Out-of-sequence delivery the decision is pending in ARIB in order to decided on having header compression

Chairman: It had been agreed in ETSI and it is a CN decision whether Out-of-sequence or In-sequence will be used.

NTT DoCoMo: Regarding Multi-cast delivery and in general preferred to keep items with FFS notes in the documents as contribution by ARIB/TTC will be submitted on such FFS items

Siemens: Why “Arbitration ...” in the RRC function section was requested FFS by TTC/ARIB?

Ericsson: FFS as the text for the function is somewhat vague.

Vodafone: Concerned about “arbitration ...” being some kind of automatic function which the operators may not have control over. More details are needed.

Chairman: The function is best to leave FFS.

NTT DoCoMo: On FACH/RACH termination – ARIB/TTC have not considered Case C

Chairman: The decision would be difficult and the assumption behind the YY.01 is that common channel signalling over Iur is supported. There is need to follow the progress on the issue in TSG-RAN WG3 and revisit the decision if the assumption is changed.

NTT DoCoMo: “Immediate delivery” definition should be taken from the TTC/ARIB document td 24, as it is clear. Also “ ... paging information ...” (in “Acknowledged mode ...” for “Dedicated Control”, p 23 in td 11) should be replaced by “upper layer information”

Decisions (based on Table 1 in td 24):

- The split of RLC in C-plane and U-plane remains.
- Transparent RLC entity remains.
- Detailed SAP-s in Fig. 2 from td 11 was taken.
- Description of RLC p 10 in td 11 was taken with a FFS note for C-plane.
- Editorial changes (e.g. references to previous documents) to be changed through contributions.
- Differences regarding RACH, FACH, BCH and DCH descriptions are mainly editorial. Remained as in td 11.
- Transport Channels:
 - The ODMA related TCH-s remain.
 - SCH is kept, conditional on contributions with justification, to be submitted to TSG-RAN WG2 by Siemens.
 - On PCH – reflect the use for control information, presently including broadcast and notification and indicate that broader use is envisaged

The shared channels and the fast uplink signalling channel as described in the ETSI documentation remain.

- L1 Functions:
 - Rate matching will be added.
 - Definitions of Transport Blocks, Transport Formats, etc. are included in YY.02 (from ETSI) and will be included in S2.02 respectively.
 - Transport Block Size, etc. will be taken from td 11 with addition regarding SIR etc. from td 8.
- MAC services and functions:
 - Reporting of measurements is incorporated with FFS removed.
 - Allocation/deallocation will be kept with FFS note.
 - Add acknowledged of MAC SDU-s as FFS and segmentation and reassembly for data transfer is not provided to upper layers
- Logical channels:
 - Td 08 (p. 10) contains sub-division of BCCH in constant and variable. This will be included in the WG2 document with a FFS note. More detailed contributions are expected in order to decide whether to accept the sub-division.
 - Use of PCCH when UE is in cell connected state remains.
 - SCCH (TDD), OCCCH, etc. (ODMA related) remain.
 - Include MCH as proposed.
- Mapping between logical channels and TCH accepted as proposed in the ETSI documentation (which is used as starting point).
- MAC functions:
 - The editorial differences were left for future clarification.
 - Traffic volume monitoring will be as in td 8 (TTC/ARIB) in MAC and will be removed from RLC.
 - [Next two accepted]
 - Ciphering, including where it will be performed remained FFS.
 - Retransmission function in MAC (optional for UE and mandatory for RAN, controlling the usage of the function) will be included with FFS note.
 - “Constrained execution ...” included FFS.
 - “Succeeding Transmission” function will be included as is with an Editor note that further clarification was required and the exact usage is FFS.
 - On page 16 in td 11 (4th bullet) include the following changes: “bursty traffic” to “bursty transfer” as more general, covering packet traffic and control. Also “common channels” becomes “common transport channels”.
- RLC Services and Functions:
 - The use of RLC was adopted for use throughout the WG2 documentation.
 - “Transparent data transfer / delivery mode ...” was left for the Editor to integrate appropriately
 - Out-of-sequence delivery will be kept as it is in td 11.
 - Multi-cast delivery will be included FFS.
 - The first six items on p. 5 agreed as in the ETSI documents
 - Keep alive - removed
 - “Sequence number check ...” will be taken from the TTC/ARIB document
 - “QoS adaptation” [?]
 - “Quick Repeat” taken as in TTC/ARIB documents
- Data flow PCCH => PCH keep the td 11 version with an FFS note
- Data flow SCCH => SCH conditional as discussed above on SCH.
- Data flow CCCH => FACH/RACH

On MAC header - keep as is in the td 11, which covered both the ETSI and TTC/ARIB.

- Data flow DCCH/DSCH from td 11
- Dedicated control - keep as is in the td 11
- RRC functions
 - The first four items in this section of the table- keep as is in the td 11
 - “Arbitration ...” - keep as is in the td 11 with an addition that the exact requirements on the standard is FFS
 - The next two functions kept as in td 11
 - Contention resolution - keep as is in the td 11 for TDD and FFS for FDD
 - “Paging notification” and “Routing ...” - keep as is in the td 11 without FFS note as those have been agreed in ARIB/TTC
- Keep Interaction between RRC and lower layers as in td 11 and remove the measurement from RLC to RRC in Fig. 11 of td 11.
- Protocol termination
 - DCH – keep with considering the outcome from the discussion on MAC.
 - FACH/RACH – add a note indicating that the current position will be reviewed if the assumption on the Iur Common Channel support changes under 3GPP.
 - FAUSCH – keep as in td 11
- “UE identification ...” and “UE connection ...” - - keep as is in the td 11
- Activity levels – removed
- UE modes – keep the UE modes in section 9 in td 11 and remove the explanation of the transition, as the details will be included in YY.03.

The proposal by Mr. T. Sato (NTT DoCoMo) on “immediate delivery” and “paging information” in td 11 (see above) was accepted.

Td 025 (Ericsson, Nokia and Siemens): Comparison of ETSI and TTC/ARIB documentation: YY.02 Layer 1 General requirements

Ericsson presented the contribution, pointing out details of the difference between the corresponding documents td 12 (YY.02 from ETSI) and td 9 (from ARIB).

Clarifications:

- Overview of interfaces to MAC and RRC does not exist in td 9 and the primitives (PHY and RPHY) are included in the ARIB Layer 1 specification.
- Temporary Editor of S2.02 will be Mr. Denis Fauconnier (Nortel).

Decision:

- Regarding the comparison of Section 6 through to Section 9 inclusive in the table of td 25 the entries to S2.02 will be kept as in document td 12 (YY.02) with the following additions from the ARIB document (td 9):
 - “Rate matching” in the services and functions from the Layer 1
 - “Limited data field” (RACH) with additional note FFS
- Section 9.2: Add “Limited data field” from the ARIB document including the text “exact number of allowed bits is FFS
- Section 10: The List of parameters for the full list of primitives will be reviewed and compared with the parameters in the ARIB L1 Specification
- The FFS for PHY-STATUS will be removed.

Td 026 (Ericsson, Nokia and Siemens): Comparison of connected mode procedure documentation in ETSI and TTC/ARIB

The Temporary Editor of S2.03 will be Mr. M. Rinne (Nokia). (The same procedure as for td 24 and td 25 was applied).

Clarifications:

Nokia: Regarding section 7: YY.03 should already contain everything relevant from the ARIB/TTC documentation. There was no objection to keep the YY.03 version.

NTT DoCoMo: Why is it necessary to indicate the network nodes in the figures (section 9 of td 13)?

Chairman: The YY.03 is more detailed than the corresponding ARC EG document as the L23 EG has concentrated on the logical protocol entities while the ARC EG has concentrated on the procedures indicating what should be supported across the RAN interfaces.

NTT DoCoMo: Conflicts between WG2 and WG3 should be avoided.

Chairman: The current understanding about the work of WG2 and WG3 is as follows:

- WG2 concentrates on Radio interface protocol (i.e. protocol termination and protocol interfaces) the network nodes are shown in YY.03 (proposed for incorporating in S2.03 of WG2) only to indicate where the protocols reside.
- WG3 concentrates on the protocols and procedures across the RAN interfaces.

Decision:

The S2.03 will be produced from td 13 (YY.03). Regarding the differences identified in the table of td 26 the corresponding entries were approved as currently in td 13. Alignment with the relevant parts of ARIB/TTC documents has already been achieved.

Td 027 (Ericsson, Nokia and Siemens): Comparison of idle mode procedure documentation in ETSI and TTC/ARIB

The Temporary Editor of S2.04 will be Mr. T. Leivonen (Nokia). (The same procedure as for td 24 and td 25 was applied)

Clarifications:

There was no document from ARIB/TTC corresponding to the YY.04 from ETSI.

Decision:

The contents related to all sections in the table of td 27 was agreed as in td 14 (YY.04) with the following additional notes:

- Regarding Section 8 of the table the entry from Section 8 in td 14 is taken and the difference with the ARIB/TTC document will be discussed in relation to the RRC protocol.
- Regarding “Multicast services” the text from section 10.1 in td 14 is taken with “or FACH” removed from the Editor’s note. The whole section remains FFS.

Td 029 (Ericsson, Nokia, NTT DoCoMo and Siemens): Difference between RRC description documents in TTC/ARIB and ETSI

Nokia presented the contribution. (The same procedure as for td 24 and td 25 was applied). 3GPP S2.31 was produced by merging Td 10 (TTC/ARIB) and td 17 (ETSI).

Clarifications:

- Ericsson:* Regarding section 8 in the table (td 29) proposed to take the YY.31 grouping
- Motorola:* Mr. S. Barrette (Motorola) agreed to be temporary Editor of S2.31
- Nortel:* The first paragraph in section 8.1.1 in td 10 is more restrictive than the corresponding part in 8.1.1 of td 17

Decision:

(The sections numbers refer to those from the table in td 29 if not indicated differently.)

- Section 8.1.1 - take Section 8.1.1 from TTC (td 10) without the 2nd paragraph removed plus 2nd sentence of 3rd paragraph (rewarded) plus the full list of classes (FFS), plus the 1st paragraph of section 8.1.1 from td 17. Include System information from td 17 and align with S2.04.
- Section 8.1.2 – PAGING REQUEST becomes PAGING. BCCH modification information to be incorporated FFS. Include the text from 8.1.2 from td 10 with three notes as follows:
 - The addresses to be used in a paging message are still to be defined (e.g. RNTI P-TMSI).
 - The number of address in a paging message is still to be defined
 - The need for a separate paging message for CN and UTRAN initiated paging needs to be confirmed.
- Section 8.1.3 – to be taken from td 17. Add the note referring to TTC identified as a difference in the table of td 29.
- Section 8.2.1 –Keep the corresponding part from td 17. The UE-id is FFS.
- Section 8.2.2 – Keep the corresponding part from td 17.
- Section 8.2.3 – Keep the corresponding part from td 17. The need for a complete message from UE to UTRAN (as in td 10) is included with the corresponding text and an FFS note.
- Section 8.3.1.1 – Keep the corresponding part from td 17 add the text for TTC from the table in td 29.
- Section 8.3.1.2 –Take text from td 10 section 8.3.3 with modification. For synch the part from td 17.
- Section 8.3.1.3 – Take the corresponding part from td 10 section 8.3.2 with similar modification as above.
- Section 8.3.2 – Take the td 17 part with “exact usage of the procedure FFS” added regarding (c)
- Sections 8.3.3, 8.3.4, 8.3.5.1 8.3.5.2, 8.3.5.5, 8.3.5.6, 8.3.5.7 and 8.3.5.7 – Take the corresponding td 17 parts.
- Section 8.3.6 – Take the td 17 part with PAGING for the message name.
- Section 8.3.7.1 and 8.3.7.2 – Take the td 17 part. Included a sub-section “ UE measurement procedures” with the TTC part from section 8.5 with editor’s note that the entry will be reviewed.
- Section 8.3.8.1, 8.3.8.2 and 8.3.8.3 – Take the td 17 part.
- Section “4. Other Items” in td 29 refers the changes relevant to the document becoming a technical specification under WG2. Scope, References, etc. will be revised accordingly. Sections 4 – 7, 9 from td 17 will be taken and updated appropriately.
- Section 10.1 – Take the relevant parts from section 10 in td 17 and the annex at the end of td 10 (starting p. 20).
- Sections 10.2 – 10.6: keep the titles and develop the contents according the progress on methodology to be used in describing the RRC protocol.

Td 28 (Siemens, NTT DoCoMo, Nokia and Ericsson): Comparison between MAC in ETSI and ARIB

Siemens presented the structure of the contribution, which contained the comparison of td 9 (ARIB) and td 17-15 (ETSI). These two documents were merged into 3GPP S2.21. The temporary Editor of S2.21 will be Mr. A. Sitte (Siemens).

Clarifications:

NTT DoCoMo: Proposed not to include the comparison of Section 4.2 of td 15 as ARIB would like to complete their study of some relevant issues (e.g. retransmission for FACH could be included in figure 4.2.4.2)

NTT DoCoMo: In the ARIB document (td 9) MAC functions are described as needed for control of each transport channel which is preferred as clearer.

Siemens: The definitions are not aligned with td 15.

Chairman: The ARIB definitions are at a higher level of detail describing the protocol, which had not been discussed in ETSI. The material should be contributed again for discussion.

Nokia: The parts of SDO documents, which contain acceptable material, should be kept in the 3GPP documents as these had already been discussed and agreed among member companies. Therefore it would not be very efficient to start the discussion from the beginning.

Siemens: Suggested to include the material in an annex to S2.21.

NTT DoCoMo: Annex is acceptable but the presentation of the material needs to be restructured.

Decision:

- Section 4.2 of td 15 will be included with an Editor's note that the contents will be revised after further contributions from ARIB.
- Include the td 15 parts on "MAC configuration ...", BCCH (as agreed earlier in the meeting), PCCH, CCCH, DCCH, SCCH, ODMA related, DTCH and Multicast with editor's note and FFS.
- Transport Channels to be taken from td 15.
- Mapping of Logical to Transport Channels: MCH to be included as FFS entry. The rest taken as in td 15.
- Services provided to upper layers:
 - Data transfer: apply the same agreement as for td 11 (YY.01)
 - Allocation and reallocation of radio resources and reporting of measurements to be aligned with td 11 (YY.01)
- Protocol termination: also to be included as agreed for td 11 (YY.01)
- Services expected from physical layer to be included as agreed for YY.02
- MAC functions also as agreed for td 11. The definitions from section 6 – section 7 from td 9 to be included in an Annex to S2.21.
- Elements for layer to layer communication
 - Primitives between L1 and L2 will be reviewed under the corresponding discussion of YY.02 for S2.02 (as agreed above for td 24). Section 8.1 from td 9 and align with the terminology with S2.03.
 - Primitives between MAC and RRC to be taken from 8.2 and terminology will be aligned accordingly.
- Elements for peer-to-peer communication
 - FACH-ACK to be included FFS. Include reference to an annex containing description based on the relevant text from section 9.2 of td 9. Also include a section for control PDU based on 9.1.4.

MAC operation model has been already reflected in the decisions based on YY.01 and YY.02.

MAC protocol states: has been reflected in the decisions based on YY.03.

- Elementary Procedures
“Dynamic radio bearer control in UE” (“in packet data services” removed) to be kept as in td 15.

The Section Services to be moved before section Functions for alignment with the other documents.

Td 21 (NTT DoCoMo, Ericsson, Nokia and Siemens): Comparison between RLC in ETSI and LAC in ARIB/TTC

The contribution contained the comparison of td 6 (ARIB) and td 16 (ETSI) and merging into 3GPP S2.22.

Chairman: Td 6 is more advanced than td 16. SDL related had not been discussed in ETSI yet. The parts, which have not been discussed in ETSI, will be included in an annex.

Nokia: proposed to include the parts which have not been discussed in ETSI in the main part of the S2.22 document as the same treatment was given to the parts of ETSI documents which have not been discussed in ARIB/TTC. Only the conflicting parts should go in annexes.

Chairman: The material on SDL is not sufficiently clear and did not seem appropriate for the main part of the WG2 document

Nokia: Agreed to have the SDL related parts in an annex, but the Nokia comment above should apply to the other part.

NTT DoCoMo: Transparent mode for CCCH (Figure 2 in td 16) should be FFS

NTT DoCoMo: Regarding Elements for peer-to-peer communication BGN PDU and BGAK PDU are considered necessary for possible abnormal operation.

Philips: Preferred that BGN PDU and BGAK PDU should at least be able to ‘piggy-back’ data.

Fujitsu: ‘Section 10 in td 6 – under study’ meant the section was not complete and needs to be aligned with e.g. retransmission.

Decision:

- Sub-layer Architecture: keep Figures 1, 2 and 3 from td 16. MUX/Logical Channel Selection and DEMUX/ROUTING to be marked FFS. Also change the 2nd and 3rd sentence in text following Figure 2 and mark as FFS. Add text to say that transparent mode for CCCH is FFS.
- Functions have been discussed earlier and the decisions made apply here accordingly. “Keep alive” and “FCS error ...” removed. “Quick Repeat” is FFS.
- Service provided to upper layers: Include Tables 1-4 from td 16 with Unacknowledged service applicability to CCCH marked FFS.
- Services expected from MAC: Updated according to S2.01 The use of MAC ACK service added FFS
- Elements for layer to layer communication.
Section 8 from td 16 will be taken. Include ‘Quick Repeat’ plus corresponding text from td 6 and mark FFS.
Take the MRLC-RELEASE from section 6.3.1 in td 6 and add MRLC-CONFIGURE.
- Elements for peer-to-peer communication: take from td 6.

Take as Section 7.1. In table 7.1 Establishment and Release to be renamed Management of the Connection with STAT and USTAT marked FFS.
Section 7.2: Take from p. 14 to p. 17 and the full list to be reviewed when the protocol is defined.
Section 8 to be included.
Section 9: to be included with some rewording and reviewed at a later stage.
Section 10 to be included with SDL related parts FFS.
The Appendix of td 6 is included. (The values of the parameters will be checked when the protocol is defined.)

Generally, for all documents where applicable the section on Services will precede the section on Functions.

Td 18 (L23 EG): UMTS YY.40 v010: Description of principles for error handling and message description

Comments:

Chairman: The document contained recommendations and suggestions. It will be developed through contributions proposing how to apply this document to the protocol definitions. The document should provide a basic principle for developing the L2 L3 protocol specification.

Ericsson: Proposed to start an e-mail discussion on the topic of methodology.

The document was accepted as a starting point for WG2 in accordance with the above comments. The reflector contributions will be collected and contributed as a temporary document for the next meeting.

4. Reports and Liaisons from other groups (AI 8)

Td 23 (L1 EG): Liaison from SMG2 L1 Expert group to L23 on the Uplink Shared Channel (USCH)
The contribution was a LS sent by the L1 EG to the L23 EG and was resubmitted to the TSG-RAN WG2 for information. The L1 EG informed that they had been studying the issue of the USCH concept at the time of sending the LS.

The document was noted

Td 22 (L1 EG): Liaison statement to SMG2 L23 and UTRAN architecture groups on network timing issues

The L1 EG had received proposals on Synchronisation in SHO and HHO and would like to check the impact on signalling load. Two contributions from Nokia had been referred to but those had not been submitted to L23 EG or to WG2.

The document was noted and will be considered at the next meeting together with the relevant contributions from Nokia.

5. Liaison and output to other groups (AI 7)

The meeting agreed to send a LS to 3GPP TSG-RAN meeting #2 and to WG1 on the progress of WG2.

Td 37 (Chairman): Proposed LS to TSG-RAN WG1

The LS will be sent with the “Deliverables and Work plan” document attached.

Approved as td 48 with td 49 attached.

Td 36 (Chairman): Proposed LS to SMG2 on the status of the TSG-RAN WG2 #1

Similar to td 37

Approved as td 47.

6. Work plan and future meetings (AI 9)

The meeting agreed to maintain a document on Work Plan and Deliverables, which will be edited by the Chairman.

Td 20 (Mannesmann): Project team support for WG-s of 3GPP TSG-s

The contribution will be presented to the other TSG Working Groups.

Chairman: The EG-s of SMG2 did not have ETSI project team support.

Mannesmann: The proposal is about the possibilities in principle. (e.g. if a new Secretary was required the STF support could be requested).

Chairman: There are possibilities for support to be provided by other SDO-s.

The proposals were acceptable for applying when necessary and the document was noted.

Td 5 (Ericsson): Proposal of work procedures

The document suggested that ad hoc and sub-working groups are established.

Td 34 (Nortel Networks): Notion of Work Package

Clarifications and comments:

Nortel: Solutions could be agreed via e-mail discussion but the decisions will be taken at the WG2 meetings.

Motorola: Establishment of fixed groups as in td 5 is less attractive than the Nortel proposal, which allows greater flexibility. The implementation of ‘work in parallel’ sessions is not very practical in terms of resources.

Ericsson: The work of the sub-groups was not proposed to take place in parallel with WG2 meetings.

Ericsson: It is preferable to have a common understanding about how the off-line work is done between the different WG-s. Preferred to call even the work on a Work Package (as in td 34) an ad hoc group activity in order to have more precise scope of the work.

Philips: Preferred the Nortel proposal: A WP to be associated with a group whose activity is not open-ended (i.e. start and end of existence and a specified task on which it reports to WG2)

Motorola: Supported the last position above.

Conclusions:

- The need for work outside the WG2 meeting and use of e-mail discussion is common to both proposals.
- WG2 will define WP for groups with defined start/end and objective. Groups with different WP-s could work in parallel to each other but not in parallel to WG2.

Td 4 (Ericsson): Proposal of Work plan for WG2

Clarifications and comments:

- Ericsson:* “No more work is expected past the ‘X-ed’ month” meant that normally no new contributions should be input and the task should be finalised.
- Motorola:* The above limit was viewed as too restrictive. Preferred that new contributions would not be precluded if they could be dealt with a little effort and brings obvious advantages.
- Chairman:* The contributions could be reflected appropriately in the Work plan and deliverables document of WG2 together with
- Motorola:* Some room was required for contributions on Uplink Shared Channel and there were problems with the proposed deadlines.
- Chairman:* Dead lines to be interpreted end of month or later if agreed. There could be an indicator, e.g. * showing that in some cases new features could be acceptable.
- Motorola:* Logical channels deadline of Feb. 99 could have problem with Multi-cast Channel being FFS.
- Alcatel:* The Feb. 99 deadline for Service provided by L1 should be conditional on the work of WG1.
- Ericsson:* Preferred to have some time limit (i.e. new features no later than April 99)
- Mannesmann:* there should be some description of what is expected from a 3GPP Release.
- NTT DoCoMo:* Preferred the deadline for ~~SDL~~(?)RLC to be moved to June/July 99.
- Chairman:* The deadline could be interpreted as the document being placed under Change Request Control, i.e. when version 1.0.0 is approved by TSG-RAN.

Decisions:

- Work plan is applicable to all approved contents of WG2 documents.
- X means the time when the part should be approved in the WG2 with adjustment according to the exact meeting date and the date of TSG-RAN approval meeting. Special cases dependent on external conditions (e.g. progress in other WG-s) will be indicated with *.
- The possibility to add new features was accepted. New additions should not be precluded until April 99.
- So far *-status has been identified for ‘Services from L1’ as conditional on the progress in TSG-RAN WG1.
- Version is 1.0.0 of specification documents is the version approved by TSG-RAN and then the documents are placed under Change Request Control.
- The deadline for ‘~~SDL~~(?)RLC’ will be June 99.

Discussion groups

The following e-mail discussion groups and the respective Rapporteurs were agreed:

RLC protocol	Christiaan Robool (Ericsson)
USCH	Stephen Barrett (Motorola)
Protocol specification methodology	Jukka Vialen (Nokia)

WG2 Elections

There were no objections to WG2 electing one Chairman and one Vice Chairman. The editors of the permanent documents will be selected at the next WG2 meeting. Interest in becoming an editor will be sent to the WG2 reflector and the Secretary will summarise the outcome.

Td 38 (Chairman): Deliverables and work plan

Approved with minor editorial changes as td 49.

Future meetings:

WG2 meeting #2 8 – 11 March 99 possibly in Stockholm, Sweden (hosted by Ericsson)

WG2 meeting #3 13 – 16 April 99 possibly in Japan

24 – 28 May 99 (provisional)

4 – 8 July 99 (provisional)

7. Discussion of Technical Contributions

This agenda item was added as the meeting completed there was spare time available after exhausting the original agenda.

Td 32 (Motorola): Benefits of the Uplink shared channel

Clarifications and comments:

Alcatel: The concept is interesting. It seems acceptable to have fast signalling to allocate resources for uplink UE. For the multiplexing of services, it might be preferable from a L1 point of view to avoid multi-codes transmission on uplink, but this point should be addressed by WG1.

Motorola: One possibility is to put vice and packet on the same code. This could have problems with SHO.

Siemens: The shared MAC concept, which could make possible to apply the proposal to TDD. The possibility for more detailed technical discussion is welcome (e.g. ad hoc group).

Philips: The concept is interesting but it is still difficult to assess the additional complexity, which would result if the new DL channel ACCH were added.

Philips believed that USCH would be most beneficial for best-effort traffic without QoS guarantee in the sense that capacity not used by sources with QoS guarantee in some frames could be fast (i.e. on a 10 ms scale) allocated to traffic sources using the USCH. A good example for this could be sending e-mails. Philips does not believe that the USCH would be of advantage for e.g. VBR real-time video, that require QoS, due to the difficulties in predicting the source behaviour over time.

Motorola: Packet data services have been the main target of the proposed concept. Scheduling would allow delay reduction.

Vodafone: How could priority be determined in UL, as there are multiple UE-s transmitting independently.

Motorola: One possibility is to use RACH. Use of DCH or USCH for scheduling should also be possible [?].

Fujitsu: The scheduling in SHO is a difficulty for shared channels (i.e. USCH) and capacity could be lost.

Chairman: The contribution is a proposal for a new feature and it should be decided whether if it is feasible and not whether it will be implemented. The feasibility requires assessment by the physical layer. The possibility of using arbitration of DCH in UL instead of RACH could improve the possibility of the concept being accepted by physical layer group.

Conclusion:

- The document was noted. Motorola invited comments and enquires as soon as possible in order to meet the document deadlines.
- Siemens requested the discussion and contributions to be extended to TDD mode.

Td 31 (Motorola): Methods for operating the uplink shared channel - proposed additions of new features on permanent documents

The document was noted.

Td (Nokia): Flexible RLC-PDU building in variable rate WCDMA

Clarifications and comments:

Ericsson: Regarding Solution 2 the deterioration of the delay performance by a factor of 4 is not always true (e.g. for IP packets). It could also be much smaller.

Nokia: The increased delay comes from the round trip delay on the RLC protocol [?]

Siemens: Solution, which would transmit shorter PDU, could take advantage of the redundancy [?].

Chairman: Asked how to handle retransmission.

Nokia: Replied that the header will be numbered according to the payload units. The proposal was a possibility to extend the header, to point to the number of payload units individually.

Ericsson: It is important to clarify whether for 32kbps in Solution 2 it is necessary to have 4 payload units and not just one as shown in the figure.

Conclusion:

The document was noted. It will be discussed at the next meeting (e.g. in connection with the RLC retransmission and segmentation issues).

The Chairman also thanked the host Nokia and the sponsors Finnet Group, Sonera and the Telecommunications Administration Centre of Finland of the meeting for the excellent support and working conditions.

The meeting was closed.