

UMTS 30.531 WG3 Work Plan and Study Items

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UMTS 30.531 WG3 Work Plan and Study Items

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Intellectual Property Rights

Foreword

This Technical Report has been produced by the 3rd Generation Partnership Project, Technical Specification Group RAN WG3.

The contents of this TR may be subject to continuing work within the 3GPP and may change following formal TSG approval. Should the TSG modify the contents of this TR, it will be re-released with an identifying change of release date and an increase in version number as follows:

Version m.t.e

where:

- m indicates [major version number]
- x the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.
- y the third digit is incremented when editorial only changes have been incorporated into the specification.

Scope

This document presents the workplan for TSG RAN WG3. It describes the work procedures of WG3, and the necessary milestones in order to reach the goal of completing the specifications by the end of 1999. The document also contains a list of all specifications to be produced by WG3, and a list of study items identified by WG3.

References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies.
- A non-specific reference to an ETS shall also be taken to refer to later versions published as an EN with the same number.

[1]

[2]

Definitions, symbols and abbreviations

Definitions

For the purposes of the present document, the [following] terms and definitions [given in ... and the following] apply.

<defined term>: <definition>.

example: text used to clarify abstract rules by applying them literally.

Symbols

For the purposes of the present document, the following symbols apply:

<symbol> <Explanation>

Abbreviations

<ACRONYM> <Explanation>

General

Document version numbering

The specifications in the work plan are numbered according to a three digit numbering system. The first digit is increased when a new version is endorsed or approved by RAN TSG. The second digit is increase when a new version is approved by WG3. The last digit is raised after every new version released by the editor. E.g. version 0.0.1 is the first version of the specification created by the editor. Version 0.1.0 is the first version approved by the WG. Version 1.0.0 is the first version endorsed by RAN TSG, and version 3.0.0 is the first version approved by RAN TSG.

Meeting intensity

The meeting intensity of WG3 must fulfil at least two requirements:

- often enough to be able to produce the necessary specifications by the end of 1999,
- seldom enough to enable ad-hoc groups and/or subworking groups to work between the meetings.

To fulfil the above requirements the meeting intensity of WG3 will be roughly once every 6th week with a meeting duration of a complete week.

Work procedures

TSG RAN WG3 has the overall responsibility of the specifications listed in ch. 6. In order to have the specifications ready by the end of 1999 WG3 will have the following split between the WG3 plenary meeting and the sub-working groups.

Plenary meeting

1. In the plenary meeting discussions and contributions in order to produce the following overall specifications (see list of specifications in ch. 6) should be treated:
 - 25.401: UTRAN Overall Description

- 25.402: Synchronisation in UTRAN, stage 2
 - L1 specifications referring to existing standards, i.e. 25.411, 25.421, 25.431
 - The technical reports 25.831, 25.832, 25.931, 30.531 ~~and I3.05~~
2. The work that is performed in the different sub-working groups will be co-ordinated in the plenary meeting. Decisions taken in the sub-working groups should be formally approved by the WG3 Plenary.
 3. It is the forum where each specification will be approved.

Sub-working groups (SWG)

TSG RAN WG3 contains two SWGs:

Iu SWG:

The Iu SWG is responsible for the Iu specifications 25.410, 25.412, 25.413, 25.414, 25.415 and 25.419.

Iur&Iub SWG.

The Iub/Iur SWG is responsible for the Iur specifications 25.420, 25.422, 25.423, 25.424, 25.425, 25.426, 25.427, the Iub specifications 25.430, 25.432, 25.433, 25.434 and 25.435, and 25.442: UTRAN Implementation Specific O&M Transport.

TSG RAN WG3 can decide the creation of SWGs.

WG3 may create new or terminate existing SWGs and a rapporteur is appointed by WG3. The rapporteur is responsible for the reporting of the progress in the ad-hoc group to WG3.

A SWG has a clearly identified scope, with the identification of the expected results (e.g. draft specification, Change Request on a specification, Technical Report, or more simply an input paper).

The duration and handling of a SWG depends on the importance of the task to be carried out. A SWG may last e.g.

- only a few days, and be carried in evening or parallel sessions of WG3 (WG3 could for example stop one afternoon).
- only between two WG3 meetings, and be conducted either via e-mail or in ad-hoc meetings.
- several months in which case reporting will be made at each occurring WG3.
- until its task is completed.

The meetings and organisation of the SWG will have to be organised in a co-ordinated manner, with enough pre-meeting notice. This is managed by the SWG rapporteur. The SWG rapporteur also acts as chairman for SWG sessions.

In order to facilitate SWG work, and also a quick resolving of the key problems, it is encouraged that SWGs should focus on issues where the involved people is less than the WG3 meeting. Otherwise, the issue can be handled directly in WG3.

The SWGs provide full reports to the WG3 Plenary.

Decisions of SWGs have to be formally approved by the WG3 Plenary.

5.3 Meeting arrangements

WG3 meetings are one week long. The number of parallel sessions should be optimised to minimum that is needed for efficient progress. Also parallel sessions for groups that need very similar expertise should be avoided. Table 1 is an example of a meeting structure designed according to this principle:

Table 1: Example of WG3 meeting structure.

| Monday | Tuesday | | Wednesday | | Thursday | Friday |
|-----------------|---------|---------|-----------|---------|----------|-----------------|
| Opening Plenary | Iu | Iur&Iub | Iu | Iur&Iub | Plenary | Closing Plenary |

The group has allocated three days (Monday, Thursday and Friday) for plenary sessions, and two days (Tuesday and Wednesday) for parallel SWG sessions.

It must be possible to allocate time for the opening and closing plenaries in a flexible manner.

Draft agenda for the next meeting should be agreed upon in the closing plenary.

Meeting schedule:

| Meeting | Dates | Venue, host |
|---------------------------------------|------------------------------|-------------------------------------|
| WG3#8 | 25-29 October , 1999 | Abiko, Japan, NEC |
| <i>WG3 Messages and ASN.1 ad hocs</i> | <i>22-24 November, 1999</i> | <i>Helsinki, Finland, Nokia</i> |
| WG3#9 | 6-10 December, 1999 | Paris, France, FT and Alcatel |
| WG3#10 | 24 – 28 January, 2000 | Gothenburg, Sweden, Ericsson |
| <i>RRM ad-hoc</i> | <i>8-10 February</i> | |
| WG3#11 | 28 February – 34 March, 2000 | Sophia Antipolis, France, Mediathel |
| <i>TSG RAN#7</i> | <i>13 – 15 March</i> | |
| WG3#12 | 10 – 14 april, 2000 | Korea, Samsung |
| WG3#13 | 22 – 26 May, 2000 | US, T1P1 |
| <i>TSG RAN#8</i> | <i>19-21 June</i> | |
| WG3#14 | 3 – 7 July, 2000 | Finland, Nokia |
| WG3#15 | 21 – 25 august, 2000 | Germany, Siemens |
| WG3#16 | 11 – 15 September, 2000 | US, T1P1 |
| <i>TSG RAN#9</i> | <i>27 – 29 September</i> | |
| WG3#17 | 23 – 27 October, 2000 | No host. Offer from Korea. |
| WG3#18 | 20 – 24 November, 2000 | US, Motorola |
| <i>TSG RAN#10</i> | <i>6-8 December</i> | |

Prioritisation of work

The following prioritisation order applies for year 2000:

1. Ensure completeness/correctness of R99 TSs for the “Basic” (RAN#6) functionality
2. Complete the R99 TSs with the identified functions for RAN#7 (listed in ch. 0)
3. Update the not completed R99 TRs
4. Start the work on R00

Contents of Release 99

As a starting point, all functions defined in Uu for Release 99 should be considered as part of Release 99 of Iub, Iur and Iu.

Functions for RAN#7

The following (unordered list of) new functions should be considered for completion to RAN#7, i.e. to be included in Release 99. Other open issues mainly related to incomplete functions are listed for each specification in ch. 0 'Milestones'.

Iu related:

- Cell broadcast protocols between SMS-CBC and RNC
- Iu time alignment
- Tracing deactivation from CN

Iub/Iur related:

- Support for positioning on Iur and Iub, limited to basic method (cell and RTT based), including hooks for R00
- DSCH over Iur
- USCH on Iur
- CPCH
- Support for soft handover during active compressed mode pattern
- Delayed activation at RL establishment
- Capacity modelling of NodeB resources

The NBAP common procedures ("logical O&M") should be complete for basic interoperation with subject of minimising operator testing. It is however recognised that in order to have Iub stable in Release 99, there may be a need to limit the extent of features. Additional features will be progressed in future releases.

Functions not included in R99

The following list of functions are not included in R99 as agreed at TSG-RAN#6:

Iu related:

- SoLSA on Iu

Iub/Iur related:

- Support for specific positioning methods (OTDOA, GPS-assisted) on Iur and Iub based on 25.305
- FACH power control on Iur
- DPC Rate Reduction in Soft Handover, DPC mode handling and switching
- TDD neighbour cell measurements (pending feasibility of synchronisation scheme from R1)
- Reconfiguration of DL TPC step size
- Gated transmission (Uu, Iur, Iub)

- Load information on Iur (global procedure for neighbour cell information between CRNCs)
- Available capacity estimate in a drift cell (connection related signalling from DRNC to SRNC)

Contents of Release 00

Work Tasks agreed by TSG-RAN

The following unordered list contains the Work Tasks for R00 agreed by TSG-RAN:

- Gated DPCCH transmission
- IP transport in UTRAN
- Incorporation of narrowband TDD chiprate functionality

Milestones

The work plan with milestones is shown in **Error! Reference source not found.**

Parallel work shall be possible, e.g. specification of RANAP procedures and IE coding may run concurrently.

Table 2: Work plan with milestones

| Identity and type | Title | Rapporteur | Date for approval | Dependency | Features under study (Sections) | Editor | Current status (Date to become stable) |
|-------------------|---|----------------------------|-------------------|------------|---------------------------------|--------|--|
| 25.401 Spec. | UTRAN Overall Description | Jean-Marie Calmel (Nortel) | Approved | | | | v.3.1.0. Open issues: <ul style="list-style-type: none"> List of functions may still need some update and review (Positioning and Cell Broadcast service missing) Performance requirements (delay budget) |
| 25.402 Spec. | Synchronisation in UTRAN, Stage 2 | Flavio Piolini (Italtel) | Approved | | | | v.3.0.0 Open issues: <ul style="list-style-type: none"> Clarification of determination of OFF (minor) Requirements for Network Synchronisation |
| 25.410 Spec. | UTRAN Iu Interface General Aspects and Principles | Richard Townend (BT) | Approved | | | | v.3.1.0. |
| 25.411 Spec. | UTRAN Iu Interface Layer 1 | Achim Brandt (Siemens) | Approved | | | | v.3.1.0. |

| Identity and type | Title | Rapporteur | Date for approval | Dependency | Features under study (Sections) | Editor | Current status (Date to become stable) |
|-------------------|--|---|-------------------|------------|---------------------------------|--------|--|
| 25.412 Spec. | UTRAN Iu Interface Signalling Transport | Kiran Thakare (Telecom Modus) | Approved | | | | v.3.2.0. |
| 25.413 Spec. | UTRAN Iu Interface RANAP Signalling | Jyrki Jussila (Nokia) | Approved | | | | v.3.0.0 Open issues: <ul style="list-style-type: none"> Partial relocation (and handover) (R3 solution pending acknowledgements from other groups) |
| 25.414 Spec. | UTRAN Iu Interface Data Transport & Transport Signalling | Martin Israelsson David Comstock (Ericsson) | Approved | | | | v.3.2.0. |
| 25.415 Spec. | UTRAN Iu Interface CN-RAN User Plane Protocols | Martin Israelsson Alain Maupin (Ericsson) | Approved | | | | v.3.1.0. Open issues: <ul style="list-style-type: none"> Timing over Iu, including Time Alignment |
| <u>25.419</u> | | Brendan McWilliams (Vodafone Airtouch) | <u>March 2000</u> | | | | <u>v.0.0.x</u> |
| 25.420 Spec. | UTRAN Iur Interface General Aspects and Principles | Kiran Thakare (Telecom Modus) | Approved | | | | v.3.0.0 Open issues: <ul style="list-style-type: none"> Definitions chapter |
| 25.421 Spec. | UTRAN Iur Interface Layer 1 | Achim Brandt (Siemens) | Approved | | | | v.3.0.0. |

| Identity and type | Title | Rapporteur | Date for approval | Dependency | Features under study (Sections) | Editor | Current status (Date to become stable) |
|-------------------|---|-------------------------------|-------------------|------------|---------------------------------|--------|---|
| 25.422 Spec. | UTRAN Iur Interface Signalling Transport | Kiran Thakare (Telecom Modus) | Approved | | | | v.3.2.0. |
| 25.423 Spec. | UTRAN Iur Interface RNSAP Signalling | Göran Rune (Ericsson) | Approved | | | | v.3.0.0 Open issues: <ul style="list-style-type: none"> • Triggering of the Common Transport Channel Resources Initiation procedure (selection of S CCPCH) • Crossing signalling between the Physical Channel Reconfiguration procedure and other procedures. • Definition of DRX Parameter on Iur – possible problem with definition in the RRC specification • The usage of the BLER in the DRNS is undefined in the procedures text. • The handling of the <i>Allocation/Retention Priority</i> in the DRNS. Especially the “retention” mechanisms are undefined. Presently there are no means for pre-emption in a DRNS. • The definition and usage of the <i>Mean Bit Rate</i> IE is not defined in the procedures. <p>See also open issues common for NBAP and RNSAP listed for 25.433 below.</p> |
| 25.424 Spec. | UTRAN Iur Interface Data Transport and Transport Signalling for Common Transport Channel Data Streams | Nicolas Drevon (Alcatel) | Approved | | | | v.3.1.0. |

| Identity and type | Title | Rapporteur | Date for approval | Dependency | Features under study (Sections) | Editor | Current status (Date to become stable) |
|-------------------|--|--------------------------|-------------------|------------|---------------------------------|--------|---|
| 25.425 Spec. | UTRAN Iur Interface User Plane Protocols for Common Channel Data Streams | Nicolas Drevon (Alcatel) | Approved | | | | v.3.0.0 Open issues: <ul style="list-style-type: none"> • Error handling • Extension mechanisms and compatibility principles |
| 25.426 Spec. | UTRAN Iur & Iub Interface Data Transport and Transport Signalling for Dedicated Transport Channel Data Streams | Sami Kekki (Nokia) | Approved | | | | v.3.1.0 |
| 25.427 Spec. | UTRAN Iur & Iub Interface User Plane Protocol for Dedicated Transport Channel Data Streams | Fabio Longoni (Nokia) | Approved | | | | v.3.1.0. Open issues: <ul style="list-style-type: none"> • Version handling and backward compatibility. |
| 25.430 Spec. | UTRAN Iub Interface General Aspects and Principles | Mick Wilson (Fujitsu) | Approved | | | | v.3.0.0 |
| 25.431 Spec. | UTRAN Iub Interface Layer 1 | Achim Brandt (Siemens) | Approved | | | | v.3.0.0. |
| 25.432 Spec. | UTRAN Iub Interface Signalling Transport | Mick Wilson (Fujitsu) | Approved | | | | v.3.1.0. |

| Identity and type | Title | Rapporteur | Date for approval | Dependency | Features under study (Sections) | Editor | Current status (Date to become stable) |
|-------------------|-------------------------------------|--------------------------------|-------------------|------------|---------------------------------|--------|---|
| 25.433 Spec. | UTRAN Iub Interface NBAP Signalling | Nobutaka Ishikawa (NTT DoCoMo) | Approved | | | | v.3.0.0 Open issues: <ul style="list-style-type: none"> • Decide whether mandatory or optional for Node B to support origination of certain SIBs on BCCH • Node B capacity modelling. • The use of TSTD and STTD parameters in cell setup (FDD) • DSCH (TDD+FDD): signalling of physical channel parameters • Alignment of the number of DSCHs supported to one UE (and how to signal TFI in case of >1) • Syntax checking of the ASN.1 specification Open issues common for NBAP and RNSAP: <ul style="list-style-type: none"> • Algorithm for DL reference power (FDD) (refer to R1 specifications) • The meaning of applying a measurement to “allRL” • Meaning and usage of RLC Mode • The handling of the Transaction ID and its scope of uniqueness. • Version handling for the user plane (required mechanisms in the control plane) • Usage of the <i>Cause</i> IE on message level and the <i>Cause</i> IE for a specific RL as in the RL RECONFIGURATION FAILURE message. |

| Identity and type | Title | Rapporteur | Date for approval | Dependency | Features under study (Sections) | Editor | Current status (Date to become stable) |
|-------------------|---|-----------------------------|-------------------|------------|---------------------------------|--------|--|
| | | | | | | | <ul style="list-style-type: none"> • Error Cases/Error Handling details (e.g. timers for synchronised RL reconfiguration etc) • Definitions of the maximum values for the various “range bounds” in the tabular format. • Alignment of ASN.1 description and coding to tabular format • Review of criticality information in ASN.1 • Need text alignment with tabular format • The need for extensibility of range of ALL parameters needs to be reviewed. |
| 25.434 Spec. | UTRAN Iub Interface Data Transport and Transport Signalling for Common Transport Channel Data Streams | Magnus Aldén (Telia) | Approved | | | | v.3.1.0. |
| 25.435 Spec. | UTRAN Iub Interface RNC-NodeB User Plane Protocols for Common Transport Channel Data Streams | Jean-Marie Calmel (Nortel) | Approved | | | | v.3.1.0. Open issues: <ul style="list-style-type: none"> • Backward compatibility and definition of the compatibility information • Support of reallocation of physical channel for TDD USCH+DSCH due to harmonisation of model with FDD |
| 25.442 | UTRAN Implementation Specific O&M Transport | Stephan Recker (Mannesmann) | Approved | | | | v.3.0.0. |

| Identity and type | Title | Rapporteur | Date for approval | Dependency | Features under study (Sections) | Editor | Current status (Date to become stable) |
|-------------------------|--|--|-------------------|------------|---------------------------------|--------|--|
| 25.931 Report | RAN Functions: Examples on Signalling Procedures | Enrico Scarrone (CSELT) | | | | | v.1.2.1 |
| 25.832 Report | Manifestations of Handover and SRNS Relocation | Richard Townend (BT) | | | | | v.3.0.0. |
| 30.531 Report | TSG RAN WG3 Work Plan and Study Items | Björn Ehrstedt (Ericsson) | | | | | v.0.65.0 |
| 25.831 Report | TSG RAN WG3 Study Items for Future Releases | Nicolas Drevon (Alcatel) | | | | | v.0.0.2 |
| 13.05 Report | NodeB O&M Functional Descriptions | Andrew De La Torre (Vodafone) | | | | | v.0.2.1 June |

Note 1 – Major milestone for each TS/TR shall be indicated by having additional rows to show features under study together with the date when such additional features become stable.

Note 2 – Editor(s) may be assigned in addition to Rapporteurs in case, for example, the volume of the TS/TR is large.

Study items

Table 3: study items

| # | Title | Responsible person/company | Status |
|---|-------|----------------------------|--------|
| | | | |

History

| Document history | | |
|------------------|---------------|---|
| Edition x | <MMMM yyyy> | Publication as <old doctype> <old docnumber> |
| 0.6.1 | February 2000 | Ch. 8: I3.05 deleted, 25.414 and 25.415 editor changed, 25.419 added; open issues solved at R3#10 deleted. |
| 0.6.0 | February 2000 | Ch. 5.3: meeting schedule updated |
| 0.5.1 | January 2000 | Ch. 4.1: editorial; 5.1: 25.402 added, resp. of 25.410/20/30 moved to SWGs; ch. 5.3: meeting schedule added; new ch. 5.4 'Priority of work' added; ch. 6 'Contents and prioritisation in R99' and ch. 7 'Contents and prioritisation in R00' updated according to agreements at RAN#7; ch. 8 'Milestones' – spec. revisions and open issue lists updated acc. to RP(99)611, spec. approval date -> 'approved', sub-rows for 'features under study (sections)' deleted; ch. 9 'Study Items' updated, deleted SIs covered in spec. OI-list ch. 8; |
| 0.5.0 | December 1999 | TS versions for specifications sent to TSG RAN#6 for approval updated to reflect the version agreed at R3#9. Otherwise the same as v.0.4.1. |
| 0.4.1 | November 1999 | <ul style="list-style-type: none"> Ch. 6.3 'Features/functions for RAN#7 split into two subchapters 6.3.1 'Features/functions proposed by R3' and 6.3.2 'Features/functions agreed by TSG-RAN'. New ch. 7 'Contents and Prioritisation in Release 00' created. Features/functions deferred to RAN#7 at R3#8 (Abiko) listed in ch. 6.3.1 (ref. Iub/Iur SWG report g09) Ch. 8 'Milestones': TS versions stepped. Ch. 9 'Study items' updated (old Iu SWG study items closed. SI: Iu Time Alignment added). |
| 0.4.0 | November 1999 | V.0.3.2 approved by R3#8 (Abiko). 25.402 version corrected to v.0.0.1. |
| 0.3.2 | October 1999 | V.0.3.1 submitted to RAN #5. V.0.3.2 reflects decisions at RAN #5. TS versions updated; list of open issues in TSs added in ch. 6 (Milestones); new TS 25.402 'Synchronisation in UTRAN, stage 2' added; new ch. 6 'Contents and Prioritisation in Release 99'. |

| | | |
|---|----------------|---|
| 0.3.1 | September 1999 | Spec. versions updated in ch. 6. SI-list updated. |
| 0.3.0 | August 1999 | Study items from WG3#6 in Sophia Antipolis added. Version stepped. |
| 0.2.1 | July 1999 | Ch. 6: milestones for xxxAP and user plane specifications updated according to agreements in Helsinki. Ch. 7.1: SI-ARC/1 closed; ch. 7.2: New study items added. |
| 0.2.0 | July 1999 | Updated according to comments at WG3#5 in Helsinki. |
| 0.1.2 | June 1999 | Updated according to comments at WG3#4 in Warwick. |
| 0.1.1 | May 1999 | Updated according to comments at WG3#3 in Kawasaki. |
| 0.1.0 | April 1999 | Version stepped, otherwise same as 0.0.3. |
| 0.0.3 | April 1999 | Table of work plan with milestones updated according to TSG#2 RP(99)157 as agreed at TSG RAN #2 in Florida. |
| 0.0.2 | Mar 1999 | Updated according to comments and changes made at WG3#2 in Nynäshamn, Sweden. |
| 0.0.1 | Feb 1999 | First draft |
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