

# 3G TR 30.531 V0.8.2 (2000-08)

---

*Technical Report*

## **3rd Generation Partnership Project; Technical Specification Group RAN; UMTS 30.531 WG3 Work Plan and Study Items (Release 1999)**



The present document has been developed within the 3<sup>rd</sup> Generation Partnership Project (3GPP™) and may be further elaborated for the purposes of 3GPP.

The present document has not been subject to any approval process by the 3GPP Organisational Partners and shall not be implemented. This Specification is provided for future development work within 3GPP only. The Organisational Partners accept no liability for any use of this Specification. Specifications and reports for implementation of the 3GPP™ system should be obtained via the 3GPP Organisational Partners' Publications Offices.

---

Keywords

---

**3GPP**

Postal address

---

3GPP support office address

---

650 Route des Lucioles - Sophia Antipolis  
Valbonne - FRANCE  
Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Internet

---

<http://www.3gpp.org>

---

**Copyright Notification**

---

No part may be reproduced except as authorized by written permission.  
The copyright and the foregoing restriction extend to reproduction in all media.

© 2000, 3GPP Organizational Partners (ARIB, CWTS, ETSI, T1, TTA, TTC).  
All rights reserved.

---

# Contents

Foreword.....	4
1 Scope .....	5
2 References .....	5
3 Definitions, symbols and abbreviations.....	5
4 General.....	5
4.1 Meeting intensity .....	5
5 Work procedures.....	5
5.1 Plenary meeting .....	6
5.2 Sub-working groups (SWG) .....	6
5.3 Meeting arrangements.....	7
5.4 Prioritisation of work.....	8
6 Release 99 Work.....	8
6.1 Radio network layer specifications, General .....	9
6.2 Radio network layer specifications, Iu.....	9
6.3 Radio network layer specifications, Iur/Iub .....	10
6.4 Transport layer specifications .....	12
6.5 Technical reports .....	13
7 Release 00 Work.....	14
7.1 Work Items agreed by TSG-RAN.....	14
7.1.1 R00, Iu related work items agreed by TSG RAN.....	14
7.1.2 R00, Iur/Iub related work items agreed by TSG RAN .....	14
7.1.3 R00, UTRAN-wide TSG RAN approved work items.....	15
8 Study items .....	16
<b>Annex A: Change history .....</b>	<b>17</b>

---

## Foreword

This Technical Report (TR) has been produced by the 3<sup>rd</sup> Generation Partnership Project (3GPP).

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

Version x.y.z

where:

- x the first digit:
  - 1 presented to TSG for information;
  - 2 presented to TSG for approval;
  - 3 or greater indicates TSG approved document under change control.
- y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.
- z the third digit is incremented when editorial only changes have been incorporated in the document.

---

## 1 Scope

The present document presents the workplan for TSG RAN WG3. It describes the work procedures of WG3. The document also contains a list of all specifications under responsibility of RAN WG3, and a list of all open issues remaining for R99 specifications. Also, the work intended for R00 is listed.

---

## 2 References

Void

---

## 3 Definitions, symbols and abbreviations

Void

---

## 4 General

### 4.1 Meeting intensity

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

- often enough to be able to produce the necessary specifications on time,
- 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 6<sup>th</sup> week with a meeting duration of a complete week.

---

## 5 Work procedures

TSG RAN WG3 has the overall responsibility of the specifications listed in chapter 6. In order to achieve efficient progress, WG3 will have the following split between the WG3 plenary meeting and the sub-working groups.

## 5.1 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.
  - General protocol principles, that should be aligned between all interfaces
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 reported to and formally approved by the WG3 Plenary. Decisions on detailed protocol issues can be taken in SWGs and considered WG-approved by default unless the issue is requested to be discussed in the plenary. Architectural issues, protocol methodology issues or controversial issues should always be brought to WG plenary.
3. It is the forum where CRs to approved specifications and new specifications are formally WG-approved to be sent to TSG RAN for approval.

## 5.2 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 specifications 25.420, 25.422, 25.423, 25.424, 25.425, 25.426, 25.427, 25.430, 25.432, 25.433, 25.434, 25.435, and 25.442.

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 normally 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	lu	lur&lub	lu	lur&lub	Plenary	Closing Plenary

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 – 3 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	Hawaii, US, T1P1
<i>TSG RAN#8</i>	<i>21-23 June</i>	
WG3#14	3 – 7 July, 2000	Helsinki, Finland, Nokia
WG3#15	21 – 25 august, 2000	Berlin, Germany, Siemens
<i>TSG RAN#9</i>	<i>20 – 22 September</i>	
WG3#16	16 – 20 October, 2000	Plan:Windsor, UK, Nortel, Motorola, BT, Vodafone
WG3#17	20 – 24 November, 2000	Chicago, US, Motorola
<i>TSG RAN#10</i>	<i>6-8 December</i>	

## 5.4 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.
3. Update the not completed R99 TRs.
4. Work on agreed R00 work items.
5. Discussion on potential additional R00 work items

---

## 6 Release 99 Work

The work remaining for R99 is listed per TS / TR below. The current version of the document is indicated as well.



## 6.1 Radio network layer specifications, General

### 25.401 UTRAN Overall Description, v3.3.0

Rapporteur: Pierre Lescuyer, Nortel

Open issues:

- List of functions may still need some update and review
- Performance requirements missing (delay budget still open)

Solved issue:

- Support for fast AMR rate control commands over Iub/Iur (redefinition of coordinated set of DCHs)

### 25.402 Synchronisation in UTRAN, stage 2, v3.2.0

Rapporteur: Thomas Ulrich, Siemens

Open issues: None

## 6.2 Radio network layer specifications, Iu

### 25.410 UTRAN Iu Interface: General Aspects and Principles, v3.2.0

Rapporteur: Richard Townsend, BT

Open issues: None

### 25.413 UTRAN Iu interface RANAP signalling, v3.2.0

Rapporteur: Jyrki Jussila, Nokia

Open issues:

- Message syntax clarification (add new type of Abstract Syntax error in 10.3)
- Handling of not supported procedure codes, criticality set to "reject": error indication or failure message?
- Handling of not-supported non-core functionality (procedure text + cause values)

Solved issue:

- Clarification of ASN.1 vs. tabular (normative/informative etc)

### 25.415 UTRAN Iu interface user plane protocols, v3.3.0

Rapporteur: Martin Israelsson, Ericsson

Open issues: None

### 25.419 UTRAN Iu interface: Service Area Broadcast Protocol SABP, v3.1.0

Rapporteur: Brendan McWilliams, Vodafone

Open issues: None

### 29.108 Application of the Radio Access Network Application Part (RANAP) on the E-interface, v3.0.0

Rapporteur: Alexander Vesely, Siemens

Open issues:

- Stage 2 specification of subsequent MSC-B handover (Idependency to N1)

## 6.3 Radio network layer specifications, Iur/Iub

### 25.420 UTRAN Iur Interface: General Aspects and Principles, v3.1.0

Rapporteur: Babul Miah, Lucent

Solved issue:

- Align diversity control description with NBAP, RNSAP

### 25.430 UTRAN Iub Interface: General Aspects and Principles, v3.2.0

Rapporteur: Mick Wilson, Fujitsu

Solved issue:

- Align diversity control description with NBAP, RNSAP

### 25.423 UTRAN Iur interface RNSAP signalling, v3.2.0

Rapporteur: Göran Rune, Ericsson

New issues:

- Is the DRNC required to group measurement reports when several node-B's are involved for SRNC initiated measurements?
- Retention capabilities of a DRNC (what does this really mean; can the DRNC request release of RL's from SRNC?)?
- Handling of blocking in CRNC: how can it ensure that common/dedicated resources are freed?
- How can the SRNC perform DL power control balancing if it is not aware of the power range set by the DRNC for each RL?
- Cell\_FACH to Cell\_DCH in DRNS [FDD].
- cell\_DCH to URA\_PCH, transfer of URA info without crnti.
- Knowledge of maximum DL power in the SRNC.

Solved issues:

- DSCH and USCH over Iur - correction of TFCI signalling within DRNS needed [FDD].
- The handling of the Transaction ID and its scope of uniqueness.
- Triggering of the Common Transport Channel Resources Initiation procedure (selection of S CCPCH).
- Crossing signalling between the Physical Channel Reconfiguration procedure and other procedures.
- U-RNTI reallocation over Iur - considered not needed.
- STTD indicator in neighbor cell information
- Positioning: Geographical area indication from DRNC to SRNC

### 25.433 UTRAN Iub interface NBAP signalling, v3.2.0

Rapporteur: Nobutaka Ishikawa, NTT Docomo

Static issues:

- Cause values e.g. for the Common procedures
- Resource Status Indication: sometimes ambiguous (eg. can only 1 error be reported or cleared with 1 message or multiple)

New issues:

- Multiple TTI's on one RACH (2 RACH's on one PRACH?)

- How many PCH's (FDD) are there in one cell? Currently WG3 assumes multiple, but WG2 assumes 1?
- RACH measurement name, alignment with R1+R4.
- Selection of DSCH TFCI-2 signalling mode

Solved issues:

- Configuration of out of sync parameters via CELL SETUP
- Range of PRACH codeword range (awaiting outcome L1)
- CPCH support on NBAP
- Is timer needed in Synchronous RL\_Reconfiguration case? - considered not needed

#### **Issues common for 25.423 and 25.433:**

Static issues:

- Error Cases/Error Handling details (e.g. timers for synchronised RL reconfiguration etc)
- Need text alignment with tabular format (e.g. handling of all optional elements)
- The need for extensibility of range need to be reviewed for each parameter
- Message syntax clarification (add new type or Abstract Syntax error in 10.3)
- Handling of not supported procedure codes, criticality set to "reject": error indication or failure message?
- Handling of not-supported non-core functionality (procedure text + cause values)

New issues:

- D-field size (only 1 bit supported in WG1 specs; IE in NBAP/RNSAP can probably be removed)
- Relation between UL interference included in RNSAP/NBAP RL\_SETUP/ADD RESPONSE/FAILURE messages, and RSSI measurement (should be the same?)
- SIR error value when SIR target has changed in the middle of a measuring interval (specify averaging or indicate "value incorrect")? Note that this also applies to the compressed mode case.
- How to resolve the inconsistency between WG1/2 and WG3 specs on uni-directional <-> bidirectional dedicated transprot channels? Is it a problem at all?
- Carrier power measurements in case of transmit diversity (should 2 valuse be provided)?

Solved issues:

- Usage of the *Cause* IE on message level and the *Cause* IE for a specific RL as in the RL RECONFIGURATION FAILURE message.
- Definitions of the maximum values for the various "range bounds" in the tabular format.
- Alignment of ASN.1 description and coding to tabular format
- Clarification of ASN.1 vs. tabular (normative/informative etc)
- Positioning: RTT measurement
- DL-DPCH, UL-DPCCH and S-CCPCH slot formats (Pilot Bits Used IE)
- Measurement report grouping (more than one measurement report per message?)
- DL power control behaviour in Node B, if needed for interoperability? (currently unspecified)
- Compress mode
  - Major update of compressed mode parameters (to align with updates in RAN1)
  - RL Setup/Addition during compressed mode
  - Compressed mode procedure: Is repetition of commit allowed?

#### **25.425 UTRAN Iur interface user plane protocols for CCH data streams, v3.2.0**

Rapporteur: Nicolas Drevon, Alcatel

Open issues: None

#### **25.435 UTRAN Iub interface user plane protocols for CCH data streams, v3.3.0**

Rapporteur: Jean-Marie Calmel, Nortel

New issues:

- Include DSCH TFCI-2 control frame; solve timing adjustment.

#### **25.427 UTRAN Iur and Iub interface user plane protocols for DCH data streams, v3.3.0**

Rapporteur: Fabio Longoni, Nokia

New issues:

- BER at UL DTX for TDD
- Solve timing adjustment problem of the DSCH TFCI-2 frame

Solved issue:

- Multiple transport formats with zero user data (new WG1 option interfering with Iub/Iur silent mode)

## 6.4 Transport layer specifications

#### **25.411 UTRAN Iu interface Layer 1, v3.2.0**

Rapporteur: Achim von Brandt, Siemens

Open issues: None

#### **25.421 UTRAN Iur interface Layer 1, v3.0.0**

Rapporteur: Achim von Brandt, Siemens

Open issues: None

#### **25.431 UTRAN Iub interface Layer 1, v3.0.0**

Rapporteur: Achim von Brandt, Siemens

Open issues: None

#### **25.412 UTRAN Iu interface signalling transport, v3.4.0**

Rapporteur: Cheng-Hock Ng, NEC

Open issues: None

#### **25.422 UTRAN Iur interface signalling transport, v3.4.0**

Rapporteur: Babul Miah, Lucent

Open issues: None

#### **25.432 UTRAN Iub interface signalling transport, v3.1.0**

Rapporteur: Mick Wilson, Fujitsu

Open issues: None

**25.414 UTRAN Iu interface data transport & transport signalling, v3.4.0**

Rapporteur: Martin Israelsson, Ericsson

Open issues: None

**25.424 UTRAN Iur interface data transport & transport signalling for CCH data streams, v3.3.0**

Rapporteur: Nicolas Drevon, Alcatel

Open issues: None

**25.434 UTRAN Iub interface data transport & transport signalling for CCH data streams, v3.2.0**

Rapporteur: Hakan Persson, Telia

Open issues: None

**25.426 UTRAN Iur and Iub interface data transport & transport signalling for DCH data streams, v3.3.0**

Rapporteur: Sami Kekki, Nokia

Open issues: None

**25.442 UTRAN Implementations specific O&M transport, v3.1.0**

Rapporteur: Stephan Recker, Mannesman

Open issues: None

## 6.5 Technical reports

**25.931 UTRAN Functions, examples on signalling procedures, v3.0.0**

Rapporteur: Enrico Scarrone, CSELT

Updated primarily in ad hoc meetins and off-line.

**25.832 Manifestations of handover and SRNS relocation, v3.0.0**

Rapporteur: Richard Townend, BT

Open issues: None

**25.831 TSG RAN WG3 Study Items for Future Releases, v0.0.2**

Rapporteur: Nicolas Drevon, Alcatel

Not presented to TSG RAN. No work on this in the WG since last TSG RAN. Work on R00 to be documented in relevant TRs per work item.

**30.531 TSG RAN WG3 Work Plan and Study Items, v0.8.1**

Rapporteur: Carolyn Taylor, ETSI

Updated based on TSG #8.

**25.932 Delay budget in the Access Stratum, v1.0.0**

Rapporteur: Massimo dell'Acqua, Siemens

Substantial number of ad hoc meetings. Still not ready for approval.

Open issues:

- Confirm/adjust simulation results based on updated network/traffic model
- Check processing delay assumptions, incl. delays in UE.

---

## 7 Release 00 Work

Milestones and deliverables for each Work Item is presented in the Work Item descriptions.

### 7.1 Work Items agreed by TSG-RAN

#### 7.1.1 R00, Iu related work items agreed by TSG RAN

##### Agreed work items:

- Handover for realtime services from PS-domain, (25.936)
- RAB support enhancements
- RAB QoS negotiation
- TrFO/TFO

#### 7.1.2 R00, Iur/Iub related work items agreed by TSG RAN

##### Agreed work items for R00:

- Support for LCS, FDD
- Support for LCS, TDD
- Low chiprate TDD option, (25.937)
- Improved support of inter-frequency/system measurements
- RRM optimisation, (25.935):
- RRM optimisation: Congestion handling of DCH

- RRM optimisation: Procedure parallelism on Iub/Iur
- RRM optimisation: DPC Rate Reduction in soft handover
- RRM optimisation: Introduction of common measurements over Iur for neighbouring cell load measurements
- RRM optimisation: Extension of Radio Interface Parameters updating in the user plane
- Hybrid ARQ (WG2 leading)
- Support for multiple CCTrCHs
- Node B synchronisation for TDD
- Terminal power saving features, (25.938)
- Improved common DL channel for CELL\_FACH state
- Candidate enhancements for RL performance (R1 leading)
- USTS (R1 leading)
- Highspeed DL packet access study

### 7.1.3 R00, UTRAN-wide TSG RAN approved work items

#### Agreed work items for R00:

- QoS optimization for AAL2 connections (Q.2630 CS2), (TR 25.935)
- IP transport in UTRAN, (TR 25.933)

---

## 8 Study items

**Table 4: Study items**

#	Title	Responsible person/company	Status



## Annex A: Change history

Document history		
Edition x	<MMMM yyyy>	Publication as <old doctype> <old docnumber>
0.8.2	September 2000	Updated Ch. 6.1 the rapporteur information. In 7.1.2 deleted "Incorporation of narrowband TDD mode".
0.8.1	August 2000	Updated according to TSG RAN#8.
0.8.0	June 2000	Editorial corrections
0.7.1	March 2000	Ch.6.1: open issue list updated; ch. 8: open issues lists updated according to R3 chairman's status report to RAN#7.
0.7.0	March 2000	Approved v.0.6.1 at R3#11.
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"> <li>• 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'.</li> <li>• New ch. 7 'Contents and Prioritisation in Release 00' created.</li> <li>• Features/functions deferred to RAN#7 at R3#8 (Abiko) listed in ch. 6.3.1 (ref. Iub/Iur SWG report g09)</li> <li>• Ch. 8 'Milestones': TS versions stepped.</li> <li>• Ch. 9 'Study items' updated (old Iu SWG study items closed. SI: Iu Time Alignment added).</li> </ul>
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
Rapporteur for 3GPP RAN 30.531 is:		
Carolyn Taylor ETSI Tel.: +33 (0)4 92 94 43 52 Fax : +33 (0)4 93 65 28 17 Email : <a href="mailto:carolyn.taylor@etsi.fr">carolyn.taylor@etsi.fr</a>		
This document is written in Microsoft Word version 6.0/96.		