# Technical Specification Group, Radio Access Network Madrid, Spain, 13-15 March 2000

Source: RAN WG3 Chairman

Title: Revised Report from WG3 chairman to TSG RAN

**Document for:** Discussion

Agenda Item: 6.4.1

# 1. GENERAL

Since the last TSG RAN, RAN WG3 has had two meetings, focusing on corrections and functional additions for R99. Around 280 CRs are presented for approval.

Of the open issues (corrections) presented at RAN#6 for the approved specifications, about 70% have been solved. There has been a lack of contributions for some topics. In addition to the earlier listed open issues, several others have been identified, and a lot of them have been solved.

The effort of delegates and the meeting time required for corrections is larger when working with CRs compared to the situation before approval of the specifications, despite the good support we have got from the secretary / support team. Above 980 Tdoc number have been allocated already this year. One risk is that the WG is very dependent on very few experts identifying dependencies between different specs and functions. Increased activity from more delegates is requested to ensure the overall quality of the standard.

The progress for the functions identified to be added to RAN#7 has been good for most functions, even if some work is remaining on some of the Iur/Iub related functions.

Almost all focus has been on corrections and the added functions to R99. The progress and activity on R99 Technical Reports, R00 issues and other tasks has been very limited.

# 2. ORGANISATION AND WORKPLAN

WG3 chairman: Per Willars, Ericsson

WG3 vice chairman: Jean-Marie Calmel, Nortel

WG3 secretary: Carolyn Taylor, MCC

Most work has been done in the two subworking groups (SWGs):

• Iu SWG (Chairman: Atte Länsisalmi, Nokia)

• Iur/Iub SWG (Chairman: Per Willars, Ericsson)

Meetings have been held and are planned on the following dates:

Meeting	Dates	Venue, host
WG3#10	24 – 28 January, 2000	Ericsson
RAN RRM ad hoc	9 – 11 February	Turin, Italy, CSELT
Iu broadcast ad hoc	21 February, 2000	Dusseldorf, Mannesman
WG3#11	28 February – 4 March, 2000	ETSI
WG3#12	10 – 13 April, 2000	Korea
WG3#13	22 – 26 May, 2000	US, T1P1
WG3#14	3 – 7 July, 2000	Finland, Nokia
WG3#15	21 – 25 august, 2000	Germany, Berlin, Siemens
WG3#16	11 – 15 September, 2000 (may be shortened)	US, T1P1
WG3#17	23 – 27 October, 2000	No host!
WG3#18	20 - 24 November, 2000	US, Motorola

# 3. STATUS OF ADDITIONAL R99 FUNCTIONS FOR RAN#7

The following functions were identified at RAN#6 as the functions to add to R99 to RAN#7. Iu-related:

- Cell/Service Area broadcast protocols between SMS-CBC and RNC:
  - A solution has been developed with some limitations based on a prerequisite from T2 to not modify the CBC-UE protocol.
  - Limitation: one Service Area can only be one cell (violates radio network independence in CN)
  - A new TS 25.419 is sent for approval.
  - Solution with SA/cell independence identified as a potential work task for R00
- Iu time alignment (25.402, 25.415): Completed. CRs submitted.
- CN invoked trace deactivation: completed. CR submitted.

Iur / Iub - related:

- CPCH support on Iur and Iub:
  - Good progress. Several CRs submitted. Changes to NBAP proposed but not concluded.
- Possibility to perform soft handover during an active compressed mode pattern: Still open.
- Delayed activation at RL establishment. Not completed, lack of contributions.
- Support for positioning methods on Iur and Iub, basic (cell and RTT based). Not completed.
  - Missing support on Iur to transfer mapping between UC-id and geographical area to SRNC
  - Missing support on Iur/Iub for the RTT measurements
- DSCH and USCH over Iur, reusing RACH/FACH principles (25.423, 25.425):
  - Good progress, several CRs submitted. Changes to RNSAP proposed but not concluded.
- Capacity modelling of Node B resources, simple solution. Completed.

In addition, the following function was not identified by RAN#6, but has been heavily debated:

• Support for TrFO on Iu: Not completed, basic principles not agreed.

For the functions not completed, TSG RAN needs to decide whether to extend the deadline, or whether to remove the function from R99. Several other additional functions have been rejected by RAN3 for R99 following the guideline to not include any more new functionality.

# 4. R99 TSs AND TRs

Below the status of each document is summarised, together with a list of issues still not completed (may not be exhaustive). Note that most open issues are quite minor (corrections needed).

# 4.1 Radio network layer specifications, General

# 25.401 UTRAN Overall Description

Rapporteur: Pierre Lescuyer, Nortel

Agreed CRs: RP-000073.

Still not completed issues:

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

New open issue:

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

# 25.402 Synchronisation in UTRAN, stage 2

Rapporteur: Flavio Piolini, Italtel Agreed CRs: RP-000074.

## Solved issues:

- Clarification of determination of OFF (minor)
- Requirements for Network Synchronisation

# 4.2 Radio network layer specifications, Iu

# 25.410 UTRAN Iu Interface: General Aspects and Principles

Rapporteur: Richard Townend, BT

Agreed CRs: RP-000075.

# 25.413 UTRAN Iu interface RANAP signalling

Rapporteur: Jyrki Jussila, Nokia

Agreed CRs: RP-000078, RP-000079, RP-000080, RP-000081.

#### New open issues:

- Message syntax clarification (specification now allows duplication of IEs)
- Handling of not–supported functionality (procedure text + cause values)
- Clarification of ASN.1 vs. tabular (normative/informative etc)

#### 25.415 UTRAN Iu interface user plane protocols

Rapporteur: Martin Israelsson, Ericsson

Agreed CRs: RP-000096.

# 25.419 UTRAN Iu interface: Service Area Broadcast Protocol SABP

Rapporteur: Brendan McWilliams, Vodafone

Version 2.0.0: RP-000112 (cover sheet), RP-000113 (TS)

Presented for approval.

# 4.3 Radio network layer specifications, Iur/Iub

## 25.420 UTRAN Iur Interface: General Aspects and Principles

Rapporteur: vacant Agreed CRs: RP-000097.

New open issues:

• Align diversity control description with NBAP, RNSAP

#### 25.430 UTRAN Iub Interface: General Aspects and Principles

Rapporteur: Mick Wilson, Fujitsu

Agreed CRs: RP-000105.

# New open issues:

• Align diversity control description with NBAP, RNSAP

# 25.423 UTRAN Iur interface RNSAP signalling

Rapporteur: Göran Rune, Ericsson

Agreed CRs: RP-000099, RP-000100, RP-000101.

# Still not completed issues:

- 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.

#### New open issues:

- U-RNTI reallocation over Iur (should we support this?)
- Positioning: Geographicall area indication from DRNC to SRNC

#### Solved issues:

- Definition of DRX Parameter on Iur
- The usage of the BLER in the DRNS is undefined in the procedures text.
- The definition and usage of the *Mean Bit Rate* IE is not defined in the procedures.
- The handling of the *Allocation/Retention Priority* in the DRNS.

# 25.433 UTRAN Iub interface NBAP signalling

Rapporteur: Nobutaka Ishikawa, NTT Docomo Agreed CRs: RP-000106, RP-000107, RP-000108

#### New open issues:

- Configuration of out of sync parameters via CELL SETUP
- Cause values e.g. for the Common procedures
- Range of PRACH codeword range (awaiting outcome L1)
- Resource Status Indication:sometimes ambiguous (e.g. can only 1 error be reported or cleared with 1 message or multiple)
- Is timer needed in Synchronous RL\_Reconfiguration case?

#### Solved issues:

- Alignment of the number of DSCHs supported to one UE (and how to signal TFI in case of >1)
- DSCH (TDD+FDD): signalling of physical channel parameters
- The use of TSTD and STTD parameters in cell setup
- Decide whether mandatory or optional for Node B to support origination of certain SIBs on BCCH (Not considered needed to solve.)

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

Still not completed issues:

- Usage of the *Cause* IE on message level and the *Cause* IE for a specific RL as in the RL RECONFIGURATION FAILURE message.
- 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
- 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

# New open issues:

- 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?
- 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)
- Clarification of ASN.1 vs. tabular (normative/informative etc)
- Message syntax clarification (ASN.1 now allows duplication of IEs)
- 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 ramping procedure, if needed
- DL power control behaviour in Node B, if needed for interoperability? (currently unspecified)

# Solved:

- Review of criticality information in ASN.1
- Algorithm for DL reference power (FDD) (refer to R1 specifications)
- Meaning and usage of RLC Mode
- The meaning of applying a measurement to "allRL"
- Version handling for the user plane (required mechanisms in the control plane): concluded that a solution is not needed in R99. A mechanism can be introduced in R00.

# 25.425 UTRAN Iur interface user plane protocols for CCH data streams

Rapporteur: Nicolas Drevon, Alcatel

Agreed CRs: RP-000102.

#### Solved issues:

Extension mechanisms - compatibility principles

# 25.435 UTRAN lub interface user plane protocols for CCH data streams

Rapporteur: Jean-Marie Calmel, Nortel

Agreed CRs: RP-000110.

#### Solved:

- 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

# 25.427 UTRAN Iur and Iub interface user plane protocols for DCH data streams

Rapporteur: Fabio Longoni, Nokia

Agreed CRs: RP-000104.

#### New open issue:

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

• Version handling and backward compatibility.

# 4.4Transport layer specifications

#### 25.411 UTRAN Iu interface Layer 1

Rapporteur: Achim von Brandt, Siemens

Agreed CRs: RP-000076.

## 25.421 UTRAN Iur interface Layer 1

Rapporteur: Achim von Brandt, Siemens

# 25.431 UTRAN Iub interface Layer 1

Rapporteur: Achim von Brandt, Siemens

# 25.412 UTRAN Iu interface signalling transport

Rapporteur: vacant Agreed CRs: RP-000077.

#### 25.422 UTRAN Iur interface signalling transport

Rapporteur: vacant Agreed CRs: RP-000098.

#### 25.432 UTRAN lub interface signalling transport

Rapporteur: Mick Wilson, Fujitsu

# 25.414 UTRAN Iu interface data transport & transport signalling

Rapporteur: Martin Israelsson, Ericsson

Agreed CRs: RP-000082.

# 25.424 UTRAN Iur interface data transport & transport signalling for CCH data streams

Rapporteur: Nicolas Drevon, Alcatel

Agreed CRs: RP-000122.

# 25.434 UTRAN Iub interface data transport & transport signalling for CCH data streams

Rapporteur: Magnus Aldén, telia

Agreed CRs: RP-000109.

### 25.426 UTRAN Iur and Iub interface data transport & transport signalling for DCH data streams

Rapporteur: Sami Kekki, Nokia Agreed CRs: RP-000103.

# 25.442 UTRAN Implementations specific O&M transport

Rapporteur: Stephan Recker, Mannesman

Agreed CRs: RP-000111.

# 4.5 Technical reports

# 25.931 UTRAN Functions, examples on signalling procedures

Rapporteur: Enrico Scarrone, CSELT

Version 1.2.4: RP-000087 (cover sheet), RP-000088 (TS)

There has been no meeting time to discuss this. Proposed updates from the editor have been approved on mail reflector.

Anticipated that substantial reviewing is still needed to align with approved TSs.

Presented for information.

# 25.832 Manifestations of handover and SRNS relocation

Rapporteur: Richard Townend, BT

# 25.831 TSG RAN WG3 Study Items for Future Releases

Editor: Nicolas Drevon, Alcatel

Not presented to TSG RAN. No work on this in the WG since last TSG RAN.

#### 4.6 Administrative documents

# 30.531 TSG RAN WG3 Work Plan and Study Items

Editor: Björn Ehrstedt, Ericsson

Version 0.6.0: RP-000114(cover sheet), RP-000115

# 5 OTHER ACTIVITIES

Very little time has been spent on other activities than corrections / additions to R99 TSs.

Delay budget

Answered LS to SA4. However, no substantial progress to settle an overall delay budget.

• Comment LCS stage 2 TS to RAN2

Did not have meeting time for this. RAN WG3 will start work on UTRAN support of LCS as part of R00.

Comment 25.921 Protocol methodology

Did not have meeting time for this.

• Vocabulary.

No activity

# **6 COMING MEETINGS**

The focus will be as follows for the coming meetings:

- 1. Corrections to the R99 specifications. Target: good quality, unambigous specifications.
- 2. Completion of the additional "RAN#7" functions
- 3. Technical Reports for R99 (25.931 + Delay budget report)
- 4. Work on agreed R00 work items
- 5. Discussion on potential additional R00 work items