Exhibit C

ETSI Technical Committee SMG
Meeting No. 19
Kista, 24-28 June, 1996

T Doc SMG#19 384/96

Title : SMG2 Speech Experts Group Report on current activities:
SEG meeting #7 report (Nuremberg, 19-21 June, 1996)

Source : Chairman SEG

Table of Contents

Report of the Speech Experts Group meeting #7

1. Opening of meeting.

The meeting SEG#7 took place in Nuremberg (Germany) and was hosted by Ericsson. It was chaired by Paolo Usai (CSELT.
Mr. Karl Hellwig welcomed the delegates and outlined the practical arrangements for the meeting.

2. Approval of Agenda.

The Agenda contained in Tdoc 58/96R was approved, as given in Annex A to this report.

3. Registration and Allocation of documents.

See Annex B for the list of documents and Annex A for the agenda items and related allocation of documents. The list of participants is given in Annex C.

4. Approval of report of meeting no. 6.

Tdoc 57/96R SEG Meeting #6 report was approved without modifications.

5. Reports from other groups and Action items from SMG#18 and SMG2#18.

The Chairman introduced Tdoc 59/96, an extract from SMG#18, containing action points for SEG, the main action points being the start of a new activity regarding 03.50 matters, and the preparation of a work program to evaluate the inter-operability HR/FR/EFR and the effects on quality of TFO.
The status of the proposal to sub-contract, on a commercial basis (ETSI funding of about 27,500 pounds), the preparation of the VAD test sequences to a UK based company, Ensigma Ltd, that prepared already the test sequences for the GSM half rate codec) was illustrated. It was stressed the point to have the formal contract signed as soon as possible. Ensigma committed to deliver the final report by 20th September 1996, in time for SMG#20 meeting.

6. Further EFR evaluations. Work program for the subjective assessment of the inter-operability HR/FR/EFR

At SMG#18 it was proposed a Work program in two phases for the subjective assessment of the inter-operability HR/FR/EFR. The work program for Phase 1, achievable only in case ETSI funding is available for the functions of host laboratory and listening laboratories, is given in Annex D.
Matra showed possible interest (confirmed) to act as host laboratory, and a number of up to five organisations to perform the subjective tests. Two ad hoc groups were set-up to finalise the test plan and the Tandem-Free Operation mode (TFO) implementations in the host lab, respectively. The report of TFO sub group is given in Annex E.

7. EFR ETR (subjective, objective and verification test results, complexity and delay)

It was agreed to record the performance of the EFR codec in a ETR (06.55), containing both EFR verification results and characterisation subjective test results.
The draft final version was accepted and will be presented at SMG#19 meeting.

8. EFR Recommendations.

Test sequences on Discontinuous Transmission (DTX) and Comfort Noise Insertion (CNI) will be produced by Nokia by September 20th, 1996.
Change Requests to bring Rec. 06-series in-line with the agreed minor modifications to Rec 05.03 were discussed and agreed. Nokia distributed copies of the C-code modified accordingly to the agreed changes.
SEG approval to forward the set of CR to ETSI Secretariat was agreed by SMG2-SEG.

9. SMG2-SEG new work item: 03.50 matters.

Chairman informed SEG that information on this matter was received by the Rapporteur on Work Item on test methods for handsfree terminals, and encouraged delegates to start possible SEG tasks.

10. TCH/HS matters

There was a presentation of Tdoc 30/96 about problems identified in the Half rate speech coder specifications: Motorola investigated on the matter and reported to SEG meeting that the identified problems were considered and solved.

11. UMTS matters.

No documents were available.

12. Liaison statements.

Two documents were produced.
Additional test sequences (8-bit resolution) for testing GSM codecs were identified by and agreed within SMG2-SEG: a liaison statement to SMG (for information) and to SMG8 on the subject was prepared (see ANNEX F).
Motorola and CNET pointed out difficulties about the availability of the software used for producing 13- bit test sequences at the time of development of full-rate and Half-rate, respectively.
A reply to a liaison statement from SMG3 on TFO matters was prepared (see ANNEX G).

13. C.R., A.R.

The agreed C.R. will be forwarded to SMG#19 meeting for approval.

14. A.o.b.

No other business were discussed, except the proposal from the Chair to have an ftp site at ETSI to store data bases like EP and working docs for SEG activities.

15. Date of next meeting.

The group identified the need of a two days meeting of TFO sub-group on 30 September and 1st October, 1996, followed by a three days meeting of the SEG group (2-4 October, 1996). Invitation is warmly awaited.

16. Close of the meeting and Acknowledgements.

The Chairman thanked again Ericsson for hosting the meeting and the delegates for their work, and the meeting was closed.

SMG2-SEG
Nuremberg, 19-21 June, 1996

Tdoc SEG-58/96R

Subject: Agenda for the SEG#7 meeting.

Source: SMG2-SEG Chairman

Item	Topic	Documents
1	Opening of the meeting	
2	Approval of Agenda	Tdoc SEG 58/96R
3	Registration and allocation of documents	Tdoc SEG 94/96
4	Approval of SEG#6 meeting report (Milano,1-2 April 1996)	Tdoc SEG 57/96
5	Reports from other groups SMG#18 meeting (Bonn, 9-12 April 1996) SMG2#18 meeting (Helsinki, 28-31 May 1996) ITU-T meeting	Tdoc SEG 59/96
6	Approval of EFR ETR (subjective and verification testing results, complexity and delay)	Tdoc SEG 60/96 Tdoc SEG 83/96
7	Subjective tests on the interoperability HR/FR/EFR & TFO: work program/time scale	Tdoc SEG 127/95 Tdoc SEG 34/96 Tdoc SEG 51/96 Tdoc SEG 78/96 Tdoc SEG 79/96 Tdoc SEG 85/96 Tdoc SEG 88/96 Tdoc SEG 91/96 Tdoc SEG 92/96
8	EFR specification matters: completion of VAD/DTX test sequences within 20 September 96	Tdoc SEG 61/96 Tdoc SEG 62/96
9	C.R. (05 and 06 Series)	Tdoc SEG 63 to 73/96 Tdoc SEG 90/96
10	Half-rate matters	Tdoc SEG 31/96 Tdoc SEG 84/96
11	GSM codecs: 8-bit test sequences FR: codec homing procedure	Tdoc SEG 29/96 Tdoc SEG 50/96 Tdoc SEG 74/96 Tdoc SEG 75/96 Tdoc SEG 86/96 Tdoc SEG 87/96
12	UMTS matters	
13	03.50 matters: SMG2-SEG work items: Headset, Handsfree & Handset terminals / noise suppression	Tdoc SEG 43/96 Tdoc SEG 44/96 Tdoc SEG 76/96 Tdoc SEG 77/96
14	Liaison statements	Tdoc SEG 78/96 Tdoc SEG 79/96 Tdoc SEG 89/96 Tdoc SEG 93/96
15	ETSI ftp site for speech material and EP database	Tdoc SEG 80/96
16	Date and venue of next SEG meeting	
17	Appointment of rapporteurs to GSM recommendations (PT12 request)	Tdoc SEG 81/96
18	A.o.b.	Tdoc SEG 82/96

ETSI SMG2 Speech Expert Group **TD 94 / 96**
Nürnberg, 19-21 June 1996

List of Documents at SEG meeting # 7

T Doc. #	Title	Source
58/96	Agenda of the SEG#7 meeting	SEG Chair
59/96	Future activities in SMG2-SEG	SEG Chair
60/96	Draft ETR 305 (GSM 06.55 version 1.0.0)	SMG2-SEG
61/96	Letter on EFR VAD vectors	Ensigma
62/96	Test coverage analysis for GSM Enhanced Full Rate Speech codec	Nokia
63/96	CR: Moving of the pre-channel coding from 06-series to the 05-series for the EFR codec	Nokia
64/96	CR: Moving of the pre-channel coding from 06-series to the 05-series for the EFR codec	Nokia
65/96	CR: Correction to Bit Exact Code	Motorola, Nokia
66/96	CR: Moving of the pre-channel coding from the 06 Series to the 05 series	Nokia
67/96	CR: L_Extract routine	TI and Nokia
68/96	CR: Initialization of algebraic codebook search	TI and Nokia
69/96	CR: Moving of the pre-channel coding from 06-series to the 05-series for the EFR codec	SMG2-SEG
70/96	CR: Moving of the pre-channel coding from 06-series to the 05-series for the EFR codec	SMG2-SEG
71/96	CR: Clarification of text	Motorola
72/96	CR: Moving of the pre-channel coding from 06-series to the 05-series for the EFR codec	SMG2-SEG
73/96	CR: Moving of the pre-channel coding from 06-series to the 05-series for the EFR codec	SMG2-SEG
74/96	A-law versions of DTX Test vectors	BT laboratories
75/96	Letter on 8-bit test sequences	Ensigma
76/96	Test method and quality assessment for handsfree mobile station	FT/CNET
77/96	Optimal loudness ratings under various ambient noise level conditions	ITU/T Q 27/12 (NTT)
78/96	Liason statement to SMG3 on Tandem Free Operation	SMG2
79/96	Proposed answer to the liason statement from SMG2 on Tandem Free Operation	SMG3
80/96	Letter on error patterns for GSM HR and FR speech codecs	SFR

81/96	GSM/DCS status list (before SMG #19)	SMG
82/96	Update of the 05.05 due to EFR introduction	Nortel
83/96	Frequency response	CSELT-Italtel
84/96	Response to "Half Rate speech coder problems" from Prairie Comm	Motorola
85/96	Complete backwards compatibile solution to prevent tandem coding in mobile to mobile calls	Nokia
86/96	Addendum to Tdoc 74/96 "A-law versions of DTX test vectors"	BT laboratories
87/96	Availability of Software for Test Sequences for the EFR codec (adapted from FR)	FT/CNET
88/96	Proposed experiments for subjective tests of tandem free operation	Bosch Telecom
89/96	Liason statement to SMG and SMG8 on 8-bit test sequences for TRAU type approval	SMG2-SEG
90/96	CR: Removal of unused lines in error concealment C code	Nokia
91/96	Report of the TFO sub-group	TFO ad hoc group
92/96	Evaluation of the interoperability HR-FR-EFR (Phase I)	STSG of SEG
93/96	Liaison Statement to SMG3 on Tandem Free Operation (TFO)	SMG2-SEG
94/96	List of documents at SEG meeting # 7	SEG Chair
95/96	Report of ETSI/SMG2-SEG meeting # 7	SEG Chair

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ETSI SMG2 SEG **TD SMG2-SEG 92/96 Rev. 1**
Speech Experts Group
Nuremberg, 19 - 21 June 1996

Source[1] : Subjective Testing Sub-Group

Title : Evaluation of the interoperability HR-FR-EFR (Phase I)

A separate meeting took place to define the test plan and organise the work between the Host Laboratory and the Test Laboratories. Eight SEG members attended this meeting under the chairman ship of Paolo USAI (CSELT) :

- Paul BARRETT (BT),
- Jerome BOUDY (MATRA),
- François CHAMBON (SAGEM),
- Pekka Kapanen (NOKIA),
- Wolfgang KOCH (DT),
- Jens Erik PEDERSEN (DANCALL TELECOM), and
- Dominique PASCAL (FT),

The work programme for interoperability testing which is contained in TD 51/96 was approved by SMG. It is divided in two phases of subjective assessments :

- first to assess the interoperability over a range of error conditions (EP0 to EP2)
- second to asses interoperability with background noise and with a combination of background noise and errors.

Interoperability under Errors (phase 1) - Test Plan

Time scale :

July	Exchange media compatibility check
29th of July 96	Source files received by Host Lab
August (12th -22th)	Host Lab session
22th of August	Mailing processed files to Test labs
30th of August	Processed files received by all Test labs
2nd of September	Start of experiment

[1] Contact Persons : Dominique PASCAL
Paolo USAI

13th of September	Raw data send to Coordinator
16th of September	Start of global analysis

Test plan

After discussion, it was decided by the group to follow the test plan given TD 34/96.
-The list of conditions will be kept to 48. The number of test conditions for Tandem Free Operation is maintained to 3 (one per type of codec) for each of the two error conditions EP1 and EP2. A DIRECT condition will be added instead of a 6th MNRU value, thus only 5 MNRU references will be introduced in the test (6,12, 18, 24 & 30 dB).
- Filtering and input characteristics of the speech has been chosen to be flat and linear (UPCM).
- All processing stages should follow those described in Document SEG-4 (A Subjective Pre-Selection Test Plan for the Enhanced Full Rate Speech Coding Algorithm), specifically concerning the channel error processing (section 4.3 of SEG-4) where 32 s of the error file are distributed on the 4 talkers.
- SEG-4 will also provide filename convention and details to build the control strings of the experiment which will be used both by Host lab and each of the Test lab.

It was also decided to reject the idea of having a replication of this test plan with a second type of speech signal : noisy samples, in order to have a better understanding of the improvement coming from the TFO for several reasons, one being that the ACR methodology is not appropriate to test the effect of background noise. But the group found that some noisy speech samples should be processed and could be distributed by MATRA to all SEG members who would have liked to get an idea of the performance of the TFO in such an environment by means of informal listening.

TD 34/96 containing the proposed test plan will be updated according to these modifications and send to the Host lab and each different Test lab.

Data Base

48 speech samples (+ 2 for preliminaries) should be produced by each of the 4 talkers (M1, M2, F1, F2). Each of the speech samples should be 8 s length. The data base will be produced at 16 kHz, and 30 dB bellow OVL.

Randomisations

Three randomisations will be required. Listeners in each lab should be organised in 3 groups of 8; each group will listen to one presentation order. The randomisations will be left free and will be part of the task of the listening labs. A more balanced context effect of the presentation order is expected from the analysis of the global results. The presentation order should be designed purely at random and provided by each Test lab to the coordinator.

Host Laboratory Functions

0. MATRA will act as Host Laboratory.

1. An NAD should be signed, whenever necessary, between the Host lab and each Test lab concerning the restricted use of the Data Base.

2. An agreement on exchange media for speech files between Host Lab and each of the Test labs should be found urgently. MATRA proposes either Exabyte (TAR) or CD-ROM but not MOD. A check for compatibility by exchange of both vartridges is necessary as a previous step.

3. Pre-processing (see SEG-4) : flat Filtered, Level Adjusted Speech Files, Channel error processing

4. Processing (see SEG-4) for preliminaries and tested conditions

5. Production of processed speech files (with agreed file name convention) to Test labs along with control strings.

Test Laboratories

3 laboratories commit themselves for testing : CSELT, FT/CNET and NORTEL. BT Labs and DT (AG) have not yet confirmed their participation.

Coordinator Laboratory

CSELT will act as coordinator and do the global analysis of the test results.

Cost

It was also decided the repartition of the fundings (60 kEcu per Phase) between all actors of Phase I : Host lab and 3 or 5 Listening Labs. Provisional repartition of fundings indicate that 20 kEcu could be assigned to the Host Lab and 40 kEcu shared among the listening laboratories. This is subject to further confirmation.

Interoperability with background noise and with background noise and errors (phase 2)

The second phase of testing will examine the issues of interoperability under background noise conditions, as well as the effects of combining background noise with errors. This phase was not investigated.

ETSI/SMG2/SEG **Tdoc 91/96**
Nuremberg
19-21 June 1996

Report of the TFO sub-group

1. Agenda

Identification of conditions to be tested

Identification of transmission chain in experimental conditions (host lab set up)

Specification of each block (Error Concealment, ...)

Allocation of the tasks & time scale

Appointing of ad hoc group on technical solution

2. Identification of conditions to be tested

The proposals of Bosch Telecom (Tdoc 88/96) and CSELT (Tdoc 34/96) were discussed. In order to keep a unique experiment and a double phase test, it was decided to adopt the test plan proposed by CSELT. However it was stressed that the background noise condition and the DTX would have to be properly addressed during the second phase. In particular it was pointed out that an adequate methodology would have to be used for testing the DTX with TFO.

3. Identification of transmission chain in experimental conditions (host lab set up) and specification of each block

Figures 1 and 2 give an high level view of the workbreakdown structure of the simulated transmission chain for mobile-to-mobile communications. The pre- ans post- processing stages as well as the single coding case are provided in annex.

A software tool was designed under the responsibility of the host-lab for the processings performed during the optimization phase of the standardization of GSM HR. This simulation is going to be starting point for the design of the new tool needed for the TFO and Interoperability experiment.

The speech codec simulations will be the GSM FR provided with STL 96, the GSM HR C-source provided in GSM Rec. 06.03 and the GSM EFR C-source provided in GSM Rec. 06.53.

The following list of topics was addressed :

- Channel Decoding
- Error Concealment
- Supression of the D/A and A/D conversions block

- Error Pattern
- Reset of the speech codecs
- Command file

Channel decoding

FR : Nokia will provide the Channel encoder and decoder used for the pre-qualification tests of EFR.

EFR : Nokia will provide the Channel encoder and decoder used for the pre-qualification tests of EFR.

HR : Motorola will provide the Channel encoder and decoder used for the optimization phase of HR.

Error Concealment

In TFO simulation no EC will be used in the network side. There will be a direct transmission of the BFI and UFI flags from the first channel decoder to the second one. An OR operation will then be done between these flags and those stemming from the second channel decoder of the chain.

FR : Nokia will provide the Error concealment used in the pre-qualification tests of the EFR.

HR : The ECU used in the optimization phase of TCH-HS will be used.

EFR : Nokia will provide the Error concealment used in the pre-qualification tests of the EFR.

Supression of the D/A and A/D conversions block

For the interoperabilty processing the block that has been previously utilised in order to simulate the analog part of the PSTN as well as in order to introduce asynchronism in the tandem will be skipped out. It is very seldom that happens in todays networks and is going to be more and more rare in the future. However in order to keep the asynchronism it was decided to introduce a constant shift of 43 PCM samples between the A-Law ending and decoding.

Error Pattern

The error Pattern files are 60 s long. The file pointer for up-link EID will be initialize at the beginning of the EP file while the file pointer for downlink EID will be initialize at the middle of the EP file. This allows to not apply the same segment of the EP in up-link and down-link at the same time. There's a constant 30 s long shift betweent the two pointers.

Reset of the speech codecs

This was not felt as an important issue. Therefore it was decided that the most convenient solution at the time of the design of the tool will be reained.

Command file

The host lab will do the command files. These command files will be similar to those used so far. Additional key words will be used for the new conditions.

The software delivered by Nokia will be object files. NDA will be signed between the Host-Lab (Matra Communication) and Nokia as well as between the Host-Lab and Motorola for all the software exchanges.

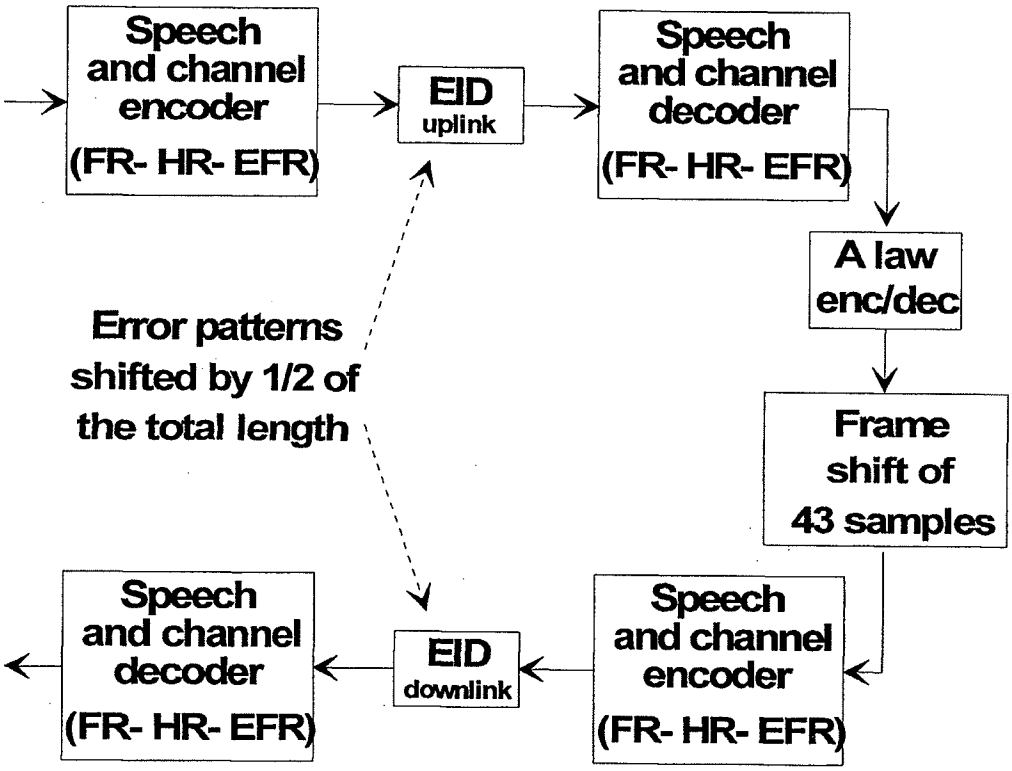


Fig. 1 - Simulation chain for the Tandem conditions.

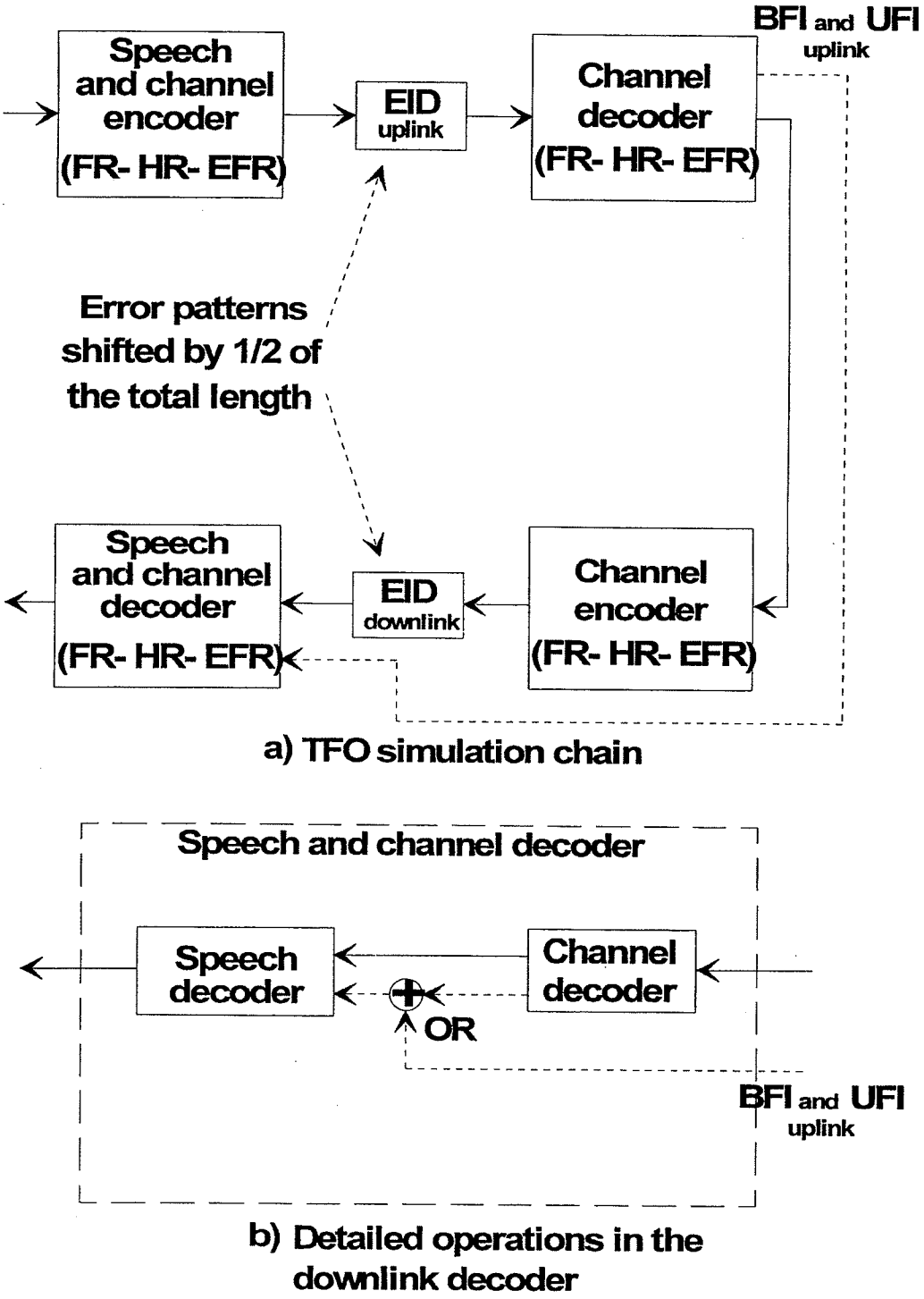


Fig. 2 - Simulation chain for the Tandem free conditions: a) TFO simulation chain, b) Detailed operation in the downlink decoder.

4. Allocation of the tasks and time schedule

July 5	Reception by the Host Lab of the missing blocks delivered by Motorola and Nokia
July 29	Reception by the Host Lab of the speech material
August 3	Development and Validation of the simulation tool completed
August 12	Beginning of the processings
August 22	Mailing of the speech material

5. Appointing of ad hoc group on technical solution

During next SEG meeting two days will be allocated to the TFO work for reviewing the results of the subjective tests and for working on the design of the TFO solution.

In the meantime the ad hoc TFO group will work by correspondence. The group will be chaired by Tarek Salem (DeTemobil).

The registered members are :

Daniele Sereno	(CSELT)
Eric Ekkuden	(Ericsson)
Steve Aftelak	(Motorola)
Kari Jarhvinen	(Nokia)
Matti Lehtimaki	(Nokia)
Tarek Salem	(DeTemobil)
Bertram Waechter	(Bosch Telecom)
Karl Hellwig	(Ericsson)
William Navarro	(Matra Communication)

ETSI / SMG#19 **Tdoc / 96**
Stockholm, 24-28 June, 1996

Title: **Liaison Statement to SMG and SMG8 on 8-Bit Test Sequences for TRAU Type Approval**

Source: **SMG2-SEG**

Date: **20 June 1996**

At SMG2-SEG#6 in Milano in April 1996 it was proposed to check if for type approval of the TRAU alternatively test sequences in 8-bit representation could be used instead of the currently defined 13-bit test sequences.
The major advantages of such an approach would be to test the TRAU via its "natural" interfaces thus saving costs and - more important - allowing testing "in situ", i.e. within the operational network.
These alternative 8-bit test sequences would be defined in parallel to the existing 13-bit sequences thus allowing manufacturers to choose either way for approving TRAU equipment.

At SMG-SEG#7, meeting in Nürnberg in June 1996, first results were presented for the Enhanced Full Rate Codec and the Full Rate and Half Rate VADs. The existing 13-bit test sequences were simply translated into the corresponding 8-bit representation and the test coverages of all three versions (13-bit, 8-bit Alaw, 8-bit ulaw) were measured and compared.
As expected the test coverage of the 8-bit sequences were not as high as that of the 13-bit version.

Considering the simplicity of this first approach most delegates, however, found the results quite promising and were in favour to continue efforts in that direction for the Enhanced Full Rate Codec and its related side functions (VAD, DTX, CN).
Final Results should be available for the September meeting of SMG2-SEG and a final conclusion may be drawn at that meeting.

For the Full Rate and Half Rate Codec no test coverage measurements could be performed so far since the relevant measurement tools do not exist anymore.
It may, however, be expected that similar results as for the Enhanced Full Rate could be found. Coverage measurements for both codecs are expected for the September meeting.

SMG2-SEG#7
Nürnberg, 19-21 June 1996

SEG-TD 93 / 96 rev 1

Title: **Liaison Statement to SMG3 on Tandem Free Operation (TFO)**

Source: **SMG2-SEG**

Date: **21 June 1996**

SMG2-SEG has the following comments to the liaison statement from SMG3 (SEG-TD79/96; SMG3-Tdoc 96P186) on tandem free operation:

In the second paragraph of the SMG3-LS it is stated that an out-of-band-signalling (OBS) would be necessary as a fall back solution in addition to the in-band-signalling (IBS) to disable the TFO-mechanism.
Since any operator may enable/disable the TFO scheme any time in his own network, SEG did not understand the necessity for such an OBS and seeks for further clarification.

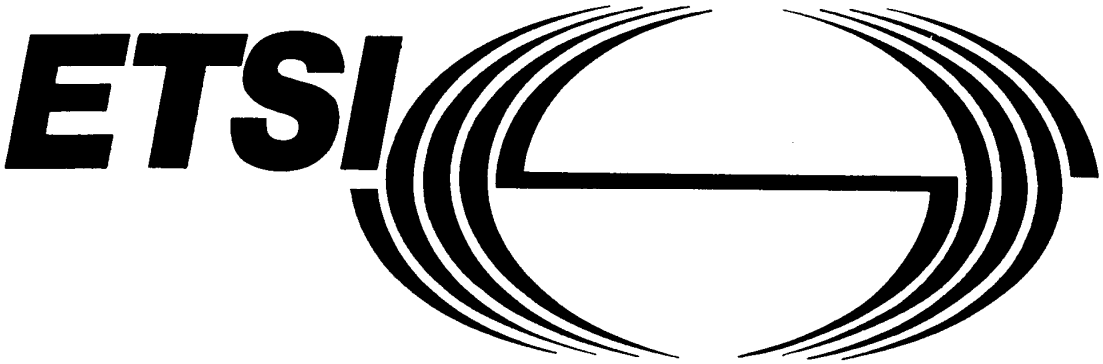
Further down in the SMG3-LS it is stated that an OBS between the TRAUs would be necessary in case of different codecs on both radio legs (e.g. HR <-> FR).
SEG is, however, of the opinion, that even in these cases an IBS between the TRAUs could recognise that situation. The TRAUs can then inform their associated higher layer control instances about the need to change the codec mode and hence resolve the problem. Thus an OBS between TRAUs is not seen to be necessary. SEG, however, sees the need that SMG3 investigates the further processing within the MSC of the information provided by the TRAU.

Multi-party calls can generally only be established within the time domain signal, i.e. in the decoded PCM format. TFO is out of question in that case.

SEG recognises the concerns of SMG3 about the DTMF transparency.
The TFO mode is currently designed in a way that the addition of the DTMF tones within the MSC (after the TRAU) will immediately disable the TFO mode for the time of the DTMF tones present. Thus there will be no perceivable difference to the current solution (normal tandeming).
SEG will take care that the TFO mode is reestablished after the DTMF tones are finished.

Exhibit D

EUROPEAN TELECOMMUNICATIONS STANDARDS INSTITUTE



ETSI SUB TECHNICAL COMMITTEE SMG2 WPB

SPECIAL MOBILE GROUP

Draft **Meeting Report**

12th SMG2 WPB meeting (Aalborg, Denmark)

11 - 13 January 2000

EXECUTIVE SUMMARY OF THE 12th SMG2 WPB meeting (11 - 13 January, 2000)

1 Meeting date

The 12th meeting of SMG2 WPB was held in Aalborg, Denmark, (11 - 13 January, 1999) and was hosted by **Bosch Telecom**. The meeting was chaired by Mr. Niels P. S. Andersen, Motorola A/S. A total of 75 delegates attended the meeting, representing 31 companies. Tdocs SMG2 34/00, 104/00, 129/00, 168/00, 350/00, 408/00 and 457/00 were withdrawn. Electronic version is missing for Tdocs 410/00 and 455/00.

2 Scope of the meeting

The meeting was dedicated to general GSM matters, like modifications of released specifications, Location Services (LCS), Packet Radio (GPRS), Support of Local Service Area (SoLSA), Antenna Test Methods, Enhanced Data rate for GSM Evolution (EDGE) and its derivatives, GSM 400 MHz and Adaptive Multi Rate (AMR), GSM/EDGE RAN (GERAN) release 2000.

3 Result of the meeting

See Annex D for the complete list of the Output from the meeting.

4 Liaisons with other groups

The agreed LSs and the agreed CRs will be forwarded to SMG2#31 Plenary for approval.

See Annex D.

5 Future meeting dates

SMG2 have scheduled the following meeting(s):

7 February, 2000 Teleconference on **Radio Requirements for the GERAN**

10-11 February 2000 Joint meeting **3GPP TSG RAN RRM Ad Hoc meeting (9-11 february 2000) /SMG2** on GSM-3G handovers and multimode operation, hosted by CSELT, Turin, Italy, starting at noon of February 10th, 2000.

21-25 February 2000 EDGE#13 workshop, hosted by Ericsson in Stockholm, Sweden

21-22 February 2000 Joint SMG12/S2/SMG2 on GERAN Architecture, during the EDGE#13 workshop, hosted by Ericsson in Stockholm, Sweden (tbc)

3 - 7 April 2000 SMG2-WPB#13, host tbd

22 - 26 May 2000 SMG2-WPB#14, host tbd

28 August - 1 September 2000 SMG2-WPB#15, host tbd

13 -17 November 2000 (i.e. the week immediately after SMG Plenary) SMG2-WPB#16, host tbd

Eventually, other meetings will be held, if needed.

ETSI STC SMG2 WPB Meeting no 12

Aalborg, Denmark

11 - 13 January 2000

Title: Draft Report of ETSI STC SMG2-WPB#12

Source: Secretary SMG2 WPB

Table of Contents

Total number of pages: 36

Source: **SMG2 WPB Secretary**

Title: **Draft Report of the 12th ETSI STC SMG2 WPB meeting during SMG2 no. 34.**

7.2.1 Opening of the meeting

The 12th meeting of SMG2 WPB was held in Aalborg, Denmark, (11 - 13 January, 2000) and was hosted by **Bosch Telecom**. The meeting was chaired by Mr. Niels P. S. Andersen, Motorola A/S, that welcomed the delegates. The list of delegates who attended the meeting (and "signed/ticked" the attendance list) can be found in Annex A.

7.2.2 Approval of the agenda

The Agenda was approved (Tdoc SMG2 003/00, see Annex B).

The list of documents is given in Annex C. The Output documents are in Annex D.

7.2.3 Approval of report of the last meeting

The revised report from SMG2-WPB meeting No. 11 was presented during last SMG2 meeting (Tdoc SMG2 1998/99, alias J98/99) and approved; minor editorial corrections were done in Tdoc SMG2 1998/99R, alias J98/99R, made available at this meeting to all delegates. Usually, the reports of meetings are distributed by the Secretary asap, and about 2 weeks are allowed to the delegates for comments/request of changes, etc.

7.2.4 Letters / Reports from other groups

7.2.4.1 SMG

No documents were produced for this Agenda Item.

7.2.4.2 Other ETSI groups

Tdoc SMG2 140/00 "LS to SMG2 on 02.06 specification transfer to 3GPP", from TSG-SA WG1, was already dealt with under A.I. 4.2. It was noted that it was necessary to check if the small MS are adequately defined without GSM 02.06. A reply was provided in

Tdoc SMG2 484/00 "Proposed Response to Liaison Statement on GSM 02.06 specification transfer to 3GPP", from SMG2-WPB, was agreed and will be forwarded to SMG2 Plenary.

7.2.4.3 Others

No documents were discussed under this Agenda Item.

7.2.5 Modifications of released specifications **(including completed phase 2+ work)**

7.2.5.1 03-series

No contribution was presented under this agenda item.

7.2.5.2 05-series

No contribution was presented under this agenda item.

7.2.5.3 08-series (TS 08.60 and TS GSM 08.61)

No documents were presented under this agenda item.

7.2.6 Phase 2+ work

7.2.6.1 Location Services (LCS)

Tdoc SMG2 118/00 "CR 05.50-A012 Background information for requirements on TOA LMU (R98)", from T1P1.5, and

Tdoc SMG2 119/00 "CR 05.50-A013 Background information for requirements on TOA LMU (R99)", from T1P1.5, were presented by Mr. S. Fischer. Stand alone and share deployed scenarios were discussed, focusing on the LMU measurement/control interfaces and thei related gain/attenuation/precision. Concern on the methodology followed and the limited analysis (e.g. pico-cells not tested) was raised. References to T1P1 documents were requested to be put in an Appendix to the Annex, ignoring whether some documents are rather huge. An updated version was requested to be produced in Tdocs SMG2 382/00 and SMG2 383/00, respectively; see also Tdocs SMG2 120/00 and 121/00.

Tdoc SMG2 114/00 "CR 05.05-A236 RF requirements for TOA LMU (R98)", from T1P1.5, and

Tdoc SMG2 115/00 "CR 05.05-A237 RF requirements for TOA LMU (R99)", from T1P1.5, were presented by Mr. S. Fischer. Blocking characteristics and absolute time scale were requested to be clarified. Both CRs were agreed.

Tdoc SMG2 120/00 "CR 05.50-A014 Background information for requirements on E-OTD LMU and E-OTD MS(R98)", CR included in the revised document of Tdoc SMG2 118/00 which was Tdoc SMG2 382/00, and

Tdoc SMG2 121/00 "CR 05.50-A015 Background information for requirements on E-OTD LMU and E-OTD MS (R99)", from T1P1.5, were presented by Mr. Sven Fischer. An updated version was requested to be produced in Tdoc SMG2 383/00; see also Tdocs SMG2 118/00 and 119/00.

Tdoc SMG2 382/00 "CR 05.50-A012 rev 1 Background information for requirements on TOA LMU (R98)", from T1P1.5, and

Tdoc SMG2 383/00 "CR 05.50-A013 rev 1 Background information for requirements on TOA LMU (R99)", from T1P1.5, were presented by Mr. S. Fischer. Both were approved.

Tdoc SMG2 116/00 "CR 05.05-A238 Requirements on E-OTD LMU and E-OTD MS (R98)", from T1P1.5, and

Tdoc SMG2 117/00 "CR 05.05-A239 Requirements on E-OTD LMU and E-OTD MS (R99)", from T1P1.5, were presented by Mr. S. Fischer. A discussion took place on the method to calculate the measurement accuracy. Both were agreed.

Tdoc SMG2 112/00 "GMSK/8-PSK burst detection", from T1P1.5, was presented by Mr. S. Fischer. It was provided for background information.

Tdoc SMG2 106/00 "CR 03.30-A009 LCS operation with repeaters (R98)", from T1P1.5, and

Tdoc SMG2 107/00 "CR 03.30-A010 LCS operation with repeaters (R99)", from T1P1.5, were presented by Mr. S. Fischer. Both were agreed.

Tdoc SMG2 103/00 "CR 02.07-Axxx Changes to SMSCB DRX MS requirements to support LCS Assistance Data broadcast service (R98)", from T1P1.5, was presented by Mr. S. Fischer. It was provided for information. Noted.

Tdoc SMG2 104/00 "CR 02.07-Axxx Changes to SMSCB DRX MS requirements to support LCS Assistance Data broadcast service (R99)", from T1P1.5, was withdrawn. The document was provided for information. It was noted that SMG1 had decided to remove this specification for R99, so the CR was not needed any more.

Tdoc SMG2 105/00 "CR 03.71-A003 rev 1 Corrections for LCS Open Issues (R98)", from T1P1.5, was presented by Mr. Sven Fischer. It was noted for information.

Tdoc SMG2 113/00 "CR 04.31-A001 Modification of RRLP messages (R98)", from T1P1.5, was presented by Mr. Sven Fischer. It was left for the discussion in SMG2-WPA for the details.

Tdoc SMG2 129/00 was withdrawn.

7.2.6.2 Packet Radio (GPRS)

Tdoc SMG2 276/00 "Concept proposal: SMSCB operation in GPRS transfer mode", from Motorola, was presented by Mr. M. Pecen. The mechanism was requested to be clarified by Mr. B. Persson and H. Jokinen, which was done by the Chairman (for GPRS idle mode). Noted. The delegates were urged to study the proposal and if there is any need for adding any information to the specifications.

Tdoc SMG2 19/00 "CR 03.64-A069 rev 1 GPRS and SMS-CB interworking", from Mannesmann, was replaced by Tdoc SMG2 338/00.

Tdoc SMG2 338/00 "CR 03.64-A069 rev 2 GPRS and SMS-CB interworking", from Mannesmann, was presented by Mr. O. Dietrich. Some modifications were requested (deletion of first line, a few editorials, further guidance added for operators). The updated version was provided in Tdoc SMG2 385/00. The corresponding CR to GSM 05.02 was provided in Tdoc SMG2 388/99.

Tdoc SMG2 385/00 "CR 03.64-A069 rev 3 GPRS and SMS-CB interworking", from Mannesmann, was presented by Mr. O. Dietrich. It was agreed.

Tdoc SMG2 388/00 "CR 05.02-A142 GPRS and SMS-CB interworking", , from Mannesmann, was presented by Mr. O. Dietrich. It was revised in Tdoc SMG2 485/00.

Tdoc SMG2 485/00 "CR 05.02-A142 rev 1 GPRS and SMS-CB interworking", from Mannesmann, was presented by Mr. O. Dietrich. It was agreed.

Tdoc SMG2 20/00 "CR 05.02-A121 PTCCH block numbering R97", from Ericsson, was presented by Mr. B. Persson. It was rejected (not essential for this release).

Tdoc SMG2 21/00 "CR 05.02-A122 PTCCH block numbering R98", from Ericsson, was presented by Mr. B. Persson). It was rejected (not essential for this release).

Tdoc SMG2 22/00 "CR 05.02-A123 PTCCH block numbering R99", from Ericsson, was presented by Mr. B. Persson. It was agreed.

Tdoc SMG2 23/00 "CR 05.02-A124 Correction of BS_PRACH_BLKS range R97", from Ericsson, was presented by Mr. B. Persson. It was agreed.

Tdoc SMG2 24/00 "CR 05.02-A125 Correction of BS_PRACH_BLKS range R98", from Ericsson, was presented by Mr. B. Persson. It was agreed.

Tdoc SMG2 25/00 "CR 05.02-A126 Correction of BS_PRACH_BLKS range R99", from Ericsson, was presented by Mr. B. Persson. It was agreed.

Tdoc SMG2 26/00 "CR 05.08-A229 Clarification of Extended Measurement requirements R97", from Ericsson, was presented by Mr. B. Persson. It was rejected (not essential for this release).

Tdoc SMG2 27/00 "CR 05.08-A230 Clarification of Extended Measurement requirements R98", from Ericsson, was presented by Mr. B. Persson. It was rejected (not essential for this release).

Tdoc SMG2 28/00 "CR 05.08-A231 Clarification of Extended Measurement requirements R99", from Ericsson, was presented by Mr. B. Persson. It was agreed.

Tdoc SMG2 29/00 "CR 05.08-A232 Correction of measurement filtering for power control R99", from Ericsson, was presented by Mr. B. Persson. It was revised (a small correction) in Tdoc SMG2 401/00.

Tdoc SMG2 401/00 "CR 05.08-A232 rev1 Correction of measurement filtering for power control R99" was agreed.

Tdoc SMG2 90/00 "Justification of CR to 05.05 on GPRS receiver performance", from Alcatel, was presented by Mr. P. Desblancs. Mr. A. Annunziato commented that for CS4 case CSELT/Ericsson results were aligned, which was recognized, although Alcatel pointed out that in other cases some misalignment was detected (using an ideal simulator). Alcatel felt the request for relaxation justified for CS4 case. Mr. H. Jokinen found other existing mistakes/imperfections in the simulation procedure and assumptions, leading to an even more strict requirement value for BLER=10% performance. Ericsson found the current specification values achievable, according to their simulations. Motorola would like to support Alcatel's proposal. A decision was requested to be taken at this very meeting, for which purpose the Chairman asked for the presentation of the following document.

Tdoc SMG2 38/00 "GPRS CS-4 receiver performance", from CSELT, was presented by Mr. Armando Annunziato. The document asked not to accept the Alcatel's CRs now, and asked new results to be provided from Alcatel, using consistent and common assumptions in line with GSM 05.50 results. Comments: Nokia felt Alcatel's results sufficient to take a decision now, which was requested by Mr. H. Van Bussel. The Chairman remarked the further relaxation was limited to 1/2 dB, for CS4 cases TU3 and TU50, respectively, and for high input level (which represents a difference in the assumption of GSM 05.50).

Decision: Mr. H. van Bussel proposed to accept the relaxation for R97, and the Chairman proposed to extend the decision to R98/R99, as well. TIM and CSELT asked to add the simulation assumptions of Alcatel in the specification, and suggested to add the document SMG2 90/00 from Alcatel in GSM 05.50, which was agreed. Alcatel, in agreement with Cselt, will provide the CRs to GSM 05.50.

Tdoc SMG2 91/00 "CR05.05-A145 Relaxation of C/I performance requirement for CS4 (R97)", from Alcatel, was agreed.

Tdoc SMG2 92/00 "CR05.05-A146 Relaxation of C/I performance requirement for CS4 (R98)", from Alcatel, was agreed.

Tdoc SMG2 93/00 "CR05.05-A147 Relaxation of C/I performance requirement for CS4 (R99)", from Alcatel, was agreed.

Tdoc SMG2 411/00 "CR 05.50-A016 Update of GPRS background information (R97)", from Alcatel, was agreed.

Tdoc SMG2 412/00 "CR 05.50-A017 Update of GPRS background information (R98)", from Alcatel, was agreed.

Tdoc SMG2 413/00 "CR 05.50-A018 Update of GPRS background information (R99)" , from Alcatel, was agreed.

Tdoc SMG2 229/00 "Overall description of GPRS simple class A mobiles", from Vodafone Airtouch, was already presented by Mr. J. Carrizo under A.I. 6.3. It was reminded that power control was still an open issue, beyond the timing advance issue. Noted. The open item discussed was the power control. It was suggested that the power control should respect the rules for both CS and GPRS power control, and , e.g., CS should be considered as GPRS with all blocks addressed to that mobile when seen from the GPRS perspective.

Tdoc SMG2 230/00 "Timing Advance handling for simple class A mobiles", from Vodafone Airtouch, was presented by Mr. J. Carrizo. Mr. B. Persson commented the case of access burst at handover; it was proposed to ignore the GPRS TA procedures and rely only on the CS TA

Tdoc SMG2 244/00 "CR 05.02-A136 Correction to non-DRX mode (R97)", from Alcatel, and

Tdoc SMG2 245/00 "CR 05.02-A137 Correction to non-DRX mode (R98)", from Alcatel, and

Tdoc SMG2 246/00 "CR 05.02-A138 Correction to non-DRX mode (R99)", from Alcatel, were presented by Mr. J. Achard. The three documents were considered together with

Tdoc SMG2 261/00 "CR 05.02-A139 Clarification of non-DRX mode and (P)CCCH operation (R97)", from Nokia,

Tdoc SMG2 262/00 "CR 05.02-A140 Clarification of non-DRX mode and (P)CCCH operation (R98)", from Nokia, and

Tdoc SMG2 263/00 "CR 05.02-A141 Clarification of non-DRX mode and (P)CCCH operation (R99)", from Nokia.

Comments were made by H. Jokinen and B. Persson. The proposal in Tdoc SMG2 244/00 was preferered, therefore the change request in Tdoc SMG2 261, 262, 263/00 were rejected.

It was suggested to elaborate the Alcatel's proposal in Tdocs SMG2 402/00, 403/00, and 404/00.

Tdoc SMG2 402/00 "CR 05.02-A136 rev 1 Correction to non-DRX mode (R97)", from Alcatel, was presented by Mr. J. Achard. It was agreed.

Tdoc SMG2 403/00 "CR 05.02-A137 rev 1 Correction to non-DRX mode (R98)", from Alcatel, was presented by Mr. J. Achard. It was agreed.

Tdoc SMG2 404/00 "CR 05.02-A138 rev 1 Correction to non-DRX mode (R99)", from Alcatel, was presented by Mr. J. Achard. It was agreed.

Tdoc SMG2 226/00 "Clarification of the cell reselection for a GPRS MS", from France Telecom, was presented by Mr. O. Devaud. H. van Bussel supported the document, and the drafting of a LS to N1/S2 proposing a proposal to replace the text of CRs by appropriate references. A liaison statement to S2 and N1 was drafted in Tdoc SMG 406/00.

Tdoc SMG2 406/00 "Proposed Liaison Statement on Clarification of the cell reselection for a GPRS MS", from SMG2-WPB, was briefly presented by Mr. O. Devaud. It was agreed.

Tdoc SMG2 177/00 "CR 04.60-A746 Channel Group structs in PSI4 (R97)", from Nokia, and

Tdoc SMG2 178/00 "CR 04.60-A747 Channel Group structs in PSI4 (R98)", and

Tdoc SMG2 179/00 "CR 04.60-A748 Channel Group structs in PSI4 (R99)" were presented by Mr. A. Leppisaari. For information from SMG2-WPA. The change requests were found acceptable except for a couple of minor corrections needed. Mr. H. van Bussel asked to modify the Reason for change. This was agreed.

SMG2-WPA will revise the change requests.

Tdoc SMG2 242/00 "CR 05.02-A135 Simple class A: definition of DTM classes (R99)", from Vodafone Airtouch, was revised in Tdoc SMG2 350/00.

Tdoc SMG2 350/00 "CR 05.02-A135 rev 1 Simple class A: definition of DTM classes (R99)" was withdrawn.

7.2.6.3 SoLSA

No documents were produced for this A.I.

7.2.6.4 GSM-3G handovers and multimode operation

Tdoc SMG2 130/00 "LS to SMG2-WPA on UMTS PLMN selection", from TSG-N WG1, was already presented during A.I. 4.2. The liaison statement was noted. Further it was noted that a draft split had been created.

Tdoc SMG2 131/00 "CR on removal of CN procedures from 03.22 (03.22 split) (Work Item TEI)", from 03.22 split drafting group, was already presented during A.I. 4.2. It was agreed. References to be fixed before presentation to SMG#31.

Tdoc SMG2 132/00 "Proposed TS 23.122 (03.22 & 23.022 split)", from 03.22 split drafting group, was already presented during A.I. 4.2. Used together with Tdoc SMG2 131/00. TS 23.122 has already been agreed by TSG-CN.

Tdoc SMG2 133/00 "CR 03.22-A039 rev1 Correction of Figure A.2 in Annex A (WI PCS1900 Harmonisation)", from TSG-N WG1, was already presented during A.I. 4.2. Agreed by TSG-CN and provided for information.

Tdoc SMG2 134/00 "GSM 03.22 version 7.3.0 – For information and reference", from MCC, was already introduced during A.I. 4.2. It was illustrated in detail by the Chairman.

The split was accepted and a Rapporteur was proposed to be appointed, as soon as identified.

Tdoc SMG2 137/00 "LS to SMG2 on the measurement requirements for GSM in UMTS", from TSG-RAN WG2, was presented by the Chairman. A reply will be provided c/o a drafting group in Tdoc SMG2 463/00.

Tdoc SMG2 463/00 "Draft Liaison Statement on the measurement requirements for GSM in UMTS", from SMG2-WPB, was presented by Mr. H. Jokinen. It was agreed.

Tdoc SMG2 351/00 "CR 05.08-A242 Intersystem handover and cell reselection", from Ericsson, was presented by Mr. B. Persson. A number of comments were made, from Mr. H. van Bussel on mode of operation set by parameters, on Q search, to safeguard the operator's decision power about parameter setting and handover of MS; on use of new parameter for handover from GSM; from Mr. M. Farber on the general assumptions for measuring reports and the related information, in case of transition between different technologies; from Ms. J. Pekonen on handover based on reporting thresholds, and continuous reporting, which would increase the operator's flexibility; Mr. H. Jokinen in the case a service is not supported by UMTS. The editor will take all comments into account.

7.2.6.5 Antenna test methods

Tdoc SMG2 462/00 "Proposed Liaison Statement on Twinkling replacement antennas", from Telia, was presented by MR. U. Tegth. It was agreed.

7.2.6.6 Enhanced Data Rates for GSM Evolution (EDGE)

Tdoc SMG2 386/00 "**Proposed Liaison Statement to SMG7 on Testing of Link Quality Measurement accuracy**", from SMG2 EDGE workshop #12, was presented by Mr. A. Furuskär. It was agreed to send the liaison statement as revised in Tdoc SMG2 453/00.

Tdoc SMG2 453/00 "Proposed Liaison Statement to SMG7 on Testing of Link Quality Measurement accuracy" was agreed.

Tdoc SMG2 387/00 "**Proposed Answer to Liaison Statement from SMG7 on Definition of Block Errors**", from SMG2 EDGE workshop #12, was presented by Mr. A. Furuskär. It was agreed to send the liaison statement.

EGPRS

Tdoc SMG2 250/00 "Optional Filtering for EGPRS LQC measurements", from Nokia, was presented by Mr. G. Sebire. It was requested by Mr. M. Farber that the reliability of mobile speed determination from the network and benefits of transmitting the so called "forgetting factor" be

clarified. A discussion took place whether MS speed or forgetting factor should be transmitted. Mr. A. Furuskar asked to wait for the approval of the mechanism. Mr. G. Sebire asked whether objections would exist to the MS use of the speed knowledge determined by the MS itself. It was commented that risk exists to have two categories of MSs in the field. Impact on quality measurements and whether new parameters are defined/used was clarified. An alignment between the text of the CR and of the document as far as regards the involved parameter(s) was requested by Mr. J. Achard. It was accepted to allow the forgetting factor on a TBF basis. However, it was for the time being not accepted to include the speed.

Tdoc SMG2 35/00 "**Link Quality Control Measurements Filtering for EGPRS**", from Ericsson, was presented by Mr. S. Jäverbring. Nokia supported the filtering proposal contained in the document. The proposal was accepted in principle.

Tdoc SMG2 252/00 "CR 05.08-A240 EGPRS LQC measurements filtering", from Nokia, was presented by Mr. G. Sebire. Some changes were identified and the document was updated in Tdoc SMG2 353/00 "CR 05.08-A240 EGPRS LQC measurements filtering". Tdoc SMG2 353/00 was amended as well (concerning the accuracy of speed parameter determination). The revised document will be in Tdoc SMG2 421/00.

Tdoc SMG2 421/00 "CR 05.08-A240 rev 2 EGPRS LQC measurements filtering", from Nokia, was revised in Tdoc SMG2 502/00.

Tdoc SMG2 502/00 "CR 05.08-A240 rev 3 EGPRS LQC measurements filtering" was agreed.

Tdoc SMG2 36/00 "Link Quality Control Measurement Accuracy Requirements for EGPRS", from Ericsson, was withdrawn.

Tdoc SMG2 260/00 "Link Quality Control Measurement Accuracy Requirements for EGPRS", from Ericsson, was presented by Mr. S. Jäverbring. Replaces Tdoc SMG2 36/00. It was requested to clarify the statistical properties of measurement errors and whether all "forgetting factor" cases were included, depending on the channel conditions. Nokia felt requirements (e.g. accuracy) to be smoothed before approving them. Mr. J. Achard asked different channel conditions to be considered (beyond the TU3 case used in the document). The proposed principles for specification of the LQC measurement Accuracy Requirements were found acceptable.

Tdoc SMG2 37/00 "**Incremental Redundancy Performance Requirements for EGPRS**", from Ericsson, was presented by Mr. S. Jäverbring. The proposed principles were agreed, however it was noted that time is required to verify the proposed values.

Tdoc SMG2 409/00 "**CR 05.09-A006 Incremental Redundancy performance requirements**", from Ericsson, was presented by Mr. S. Jäverbring. it was debated whether the CR would be better addressed to GSM 05.05 and/or GSM 05.08, as Informative Annex, with figures still to be agreed in []. It was agreed to include the changes in GSM 05.05 and GSM 05.08 Tdoc SMG2 451/00 and Tdoc SMG2 452/00.

Tdoc SMG2 451/00 "CR 05.05-A150 Incremental Redundancy Performance", from SMG2-WPB, was agreed.

Tdoc SMG2 452/00 "CR 05.08-A244 Example on Link Adaptation Algorithm for EGPRS", from SMG2-WPB, was agreed.

Tdoc SMG2 352/00 "CR 05.03-A037 Correction for EGPRS channel coding" was agreed.

ECSD

Tdoc SMG2 253/00 "CR 05.03-A036 Correction for ECSD Channel Coding", from SMG2 EDGE workshop #12, was presented by Mr. G. Sebire. It was agreed.

LAYER 1

Tdoc SMG2 86/00 "Outcome of Drafting group on MS EGPRS RX performance", from SMG2 EDGE workshop #12, was noted.

Tdoc SMG2 60/00 "CR 05.05-A140 EGPRS receiver performance for MS DCS 1800 and PCS 1900", from Ericsson, Motorola, Nokia, was presented by Mr. M. Samuelsson. The text in the Note was requested to be put in a normative section. USF numbers were proposed to be inserted as well. An updated version will be produced in Tdoc SMG2 454/00.

Tdoc SMG2 454/00 "CR 05.05-A140 rev 1 EGPRS receiver performance for MS DCS 1800 and PCS 1900" was updated in Tdoc SMG2 459/00 (see below).

Tdoc SMG2 85/00 "Outcome of Drafting group on BTS EGPRS RX performance", from SMG2 EDGE workshop #12, was noted.

Tdoc SMG2 81/00 "EGPRS Receiver Performance for BTS", from Ericsson. Noted as background for the Ericsson results ín Tdoc SMG2 85/00.

Tdoc SMG2 254/00 "Proposed values for 05.05 ECSD receiver performance (MS)", from Ericsson, Nokia, and

Tdoc SMG2 349/00 "CR 05.05-A148 ECSD Receiver performance for MS" were treated together. The values were requested to be confirmed, page 49 Table corrected, GPRS values adopted, and the CR number in the document fixed. A revised version will be provided in Tdoc SMG2 455/00.

Tdoc SMG2 455/00 "CR 05.05-A148 rev 1 ECSD Receiver performance for MS" was updated in Tdoc SMG2 459/00.

Tdoc SMG2 84/00 "ECSD Receiver performance for BTS", from Ericsson, was noted as background for Tdoc SMG2 255/00.

Tdoc SMG2 255/00 "Proposed values for 05.05 ECSD receiver performance (BTS)", from Ericsson, Nokia, was noted for information. Corresponding change request expected for the next EDGE workshop.

Tdoc SMG2 32/00 "EDGE 8-PSK Nominal Error Rate Receiver Performance", from Lucent Technologies. The results were noted.

Tdoc SMG2 210/00 "NER performance for (MS) 8-PSK", from Nokia. The results were noted.

Tdoc SMG2 82/00 "NER Performance for 8-PSK", from Ericsson. The results were noted.

Tdoc SMG2 61/00 "CR 05.05-A141 Nominal Error Rate performance for 8-PSK", from Ericsson, was presented by Mr. M. Samuelsson. It was concluded that an update would be needed, to take into account the results in the previous documents. This was provided in Tdoc SMG2 504/00.

Tdoc SMG2 504/00 "CR 05.05-A141 rev 1 Nominal Error Rate performance for 8-PSK" was agreed.

Tdoc SMG2 83/00 "USF Performance for 8-PSK", from Ericsson. Values noted; similar results from Nokia in Tdoc SMG2 211/00.

Tdoc SMG2 211/00 "USF performance for 8-PSK", from Nokia, was noted.

Tdoc SMG2 418/00 was revised in

Tdoc SMG2 456/00 "Outcome of the Drafting Group on EDGE Receiver Performance", from EDGE Drafting Group on BTS / MS Receiver Performance; EQ 50 was requested to be removed, 850 MHz bandwidth was instead requested to be included, additional test loop request was raised as rather urgent issue, if needed. Conclusion. It was agreed not to include EQ-50 for 8-PSK. Delegates were urged to continue the discussion in order to have proposals for the open values.

Tdoc SMG2 87/00 "CR 05.05-A101 rev 3 Transmitter/receiver performance for EDGE", from SMG2 EDGE workshop #12, was presented by Mr. M. Samuelsson. A number of comments were given. It was proposed to combine Tdocs SMG2 454/00 and 455/00 as well into a unique CR, if possible; The revised document was Tdoc SMG2 459/00.

Tdoc 459/00 " CR 05.05-A101 rev 4 Transmitter/receiver performance for EDGE", from SMG2-WPB, was commented by Mr. D. Choukroun and the Chairman about the Tables on 10% and 30% BLER and their field of applicability (text to be improved for clarity, marking the cases related to 10% and 30% BLER, respectively). The revised version will be provided in Tdoc SMG2 503/00.

Tdoc SMG2 503/00 "CR 05.05-A101 rev 5 Transmitter/receiver performance for EDGE" was agreed.

Tdoc SMG2 42/00 "CR 05.05-A134 Measurement Filter for EDGE EVM", from Agilent Technologies, was presented by Mr. D. Dunne. It was revised in

Tdoc SMG2 460/00 "CR 05.05-A134 rev 1 Measurement Filter for EDGE EVM", which was agreed.

Tdoc SMG2 43/00 "CR 05.05-A135: Definition of 8PSK modulation accuracy parameters in Annex G", from Agilent Technologies, was presented by Mr. D. Dunne. The CR was discussed. Concern was raised about the lack of information about the compensation of the signal. On this background it was not possible to approve the change request. The CR was represented in Tdoc SMG2 471/00.

Tdoc SMG2 471/00 "CR 05.05-A135 rev 1 Definition of 8PSK modulation accuracy parameters in Annex G" was revised in Tdoc SMG2 505/00.

Tdoc SMG2 505/00 "CR 05.05-A135 rev 1 Definition of 8PSK modulation accuracy parameters in Annex G" was agreed.

Tdoc SMG2 34/00 "Effect of Removing Droop Compensation from the EVM Calculations", from Siemens, was withdrawn.

Tdoc SMG2 384/00 "CR 05.05-A149 EVM requirements for EDGE BTS transmitter with combining equipment", from SMG2 EDGE workshop #12, was agreed.

Tdoc SMG2 56/00 "CR 05.05-A136 Clarification of Intra BTS Intermodulation Attenuation requirements for MXM 850 and MXM 1900 BTS", from SMG2 EDGE workshop #12, was presented by Mr. M. Samuelsson. It was agreed.

Tdoc SMG2 57/00 "CR 05.05 A137 Clarification of Intra BTS Intermodulation Attenuation requirements for PCS 1900 BTS", from SMG2 EDGE workshop #12, was presented by Mr. M. Samuelsson. It was agreed.

Tdoc SMG2 58/00 "CR 05.05 A138 Definition of MS for Mixed-mode network", from SMG2 EDGE workshop #12, was presented by Mr. M. Samuelsson. It was agreed.

Tdoc SMG2 59/00 "CR 05.05-A139 Correction to Output level dynamic operation", from SMG2 EDGE workshop #12, was presented by Mr. M. Samuelsson. It was agreed.

Tdoc SMG2 63/00 "CR 05.05-A142 Corrections to receiver characteristics for EDGE", from Ericsson, was presented by Mr. M. Samuelsson. It was agreed.

Tdoc SMG2 33/00 "EDGE Practical BTS Implementation and Spectrum due to Switching Requirements", from Siemens, was noted as providing background for the CR in Tdoc SMG2 273/00.

Tdoc SMG2 273/00 "CR 05.05-A151 Switching Transients for 8-PSK", from Siemens, was presented by Mr. D. Thomas. It was amended in Tdoc SMG2 482/00, due to a wrong CR number.

Tdoc SMG2 482/00 "CR 05.05-A151 Switching Transients for 8-PSK" was agreed.

Tdoc SMG2 62/00 "CR 05.10-A050 Modifications for 8-PSK", from Ericsson, was presented by Mr. M. Samuelsson. It was agreed.

Tdoc SMG2 101/00 "CR 05.50-A011 8-PSK Introduction Change Request for GSM 05.50", from Nortel Networks, was presented by Mr. D. Choukroun. It was revised in

Tdoc SMG2 458/00 "CR 05.50-A011 8-PSK Introduction Change Request for GSM 05.50", that was agreed.

Tdoc SMG2 47/00 "CR 05.90-A001 EMC Aspects of 8PSK modulation", from SMG2 EDGE workshop #12, was presented by Mr. J. Oudelaar. As there was still discussion on a few of the parts of the change request is was agreed to try to resolve the open issues by E-mail in order to have a updated version presented to the next EDGE workshop.

Finally it was agreed to withdraw GSM 05.90 from Release 99 and onwards !

Tdoc SMG2 461/00 "Open items on EDGE release 99", from Rapporteur, was presented by Mr. F. Muller and T Ljunggren. Noted. A revised version will be provided in Tdoc SMG2 486/00, to be presented at the Plenary, taking into account the output from the ad-hoc groups.

Tdoc SMG2 486/00 "Open items on EDGE release 99"

EDGE COMPACT

Tdoc SMG2 151/00 "CR 04.60-A426 rev3 Non-GSM Broadcast Information", from Ericsson, was presented by Mr. P. Barany. Noted as for information; SMG2-WPA will deal with the details.

Tdoc SMG2 223/00 "CR 04.18-A003 rev 2 Non-GSM Broadcast Information", from SMG2 EDGE workshop #12, was presented by Mr. P. Barany. Noted as for information; SMG2-WPA will deal with the details.

Tdoc SMG2 95/00 "CR 05.02-A127 COMPACT Change Request for GSM 05.02", from SMG2 EDGE workshop #12, was presented by Mr. P. Barany. A number of comments were made. The revised version will be produced in

Tdoc SMG2 464/00 "CR 05.02-A127 rev 1 COMPACT Change Request for GSM 05.02" was agreed.

Tdoc SMG2 96/00 "CR 05.08-A234 COMPACT Change Request for GSM 05.08", from SMG2 EDGE workshop #12, was presented by Mr. P. Barany. A number of comments were made. The revised version will be produced in

Tdoc SMG2 465/00 "CR 05.08-A234 rev 1 COMPACT Change Request for GSM 05.08" was agreed.

Tdoc SMG2 97/00 "CR 05.08-A203 Rev. 1 COMPACT Change Request for GSM 05.08", from SMG2 EDGE workshop #12, was presented by Mr. P. Barany. Mr. B. Persson commented that no requirement is set on the accuracy of measurements in the CR. A number of other comments were made. The revised version will be produced in

Tdoc SMG2 466/00 "CR 05.08-A203 rev. 2 COMPACT Change Request for GSM 05.08" was revised in Tdoc SMG2 506/00.

Tdoc SMG2 506/00 "CR 05.08-A203 rev. 3 COMPACT Change Request for GSM 05.08" was agreed.

Tdoc SMG2 144/00 "CR 05.10-A051 Timegroup definition removal from 05.10", from Ericsson, was presented by Mr. C. Lindheimer. It was agreed.

Tdoc SMG2 145/00 "CR 05.02-A128 Timegroup rotation and NIB Clarification", from Ericsson, was presented by Mr. C. Lindheimer. It was agreed.

Tdoc SMG2 222/00 "CR 05.02-A133 USF Handling in B0", from SMG2 EDGE workshop #12, was presented by Mr. C. Lindheimer. It was agreed.

Tdoc SMG2 146/00 "CR-05.02-A129 Clarifications in 05.02", from Ericsson, was presented by Mr. C. Lindheimer. It was treated together with Tdoc SMG2 227/00.

Tdoc SMG2 227/00 "CR 05.02-A134 Amount of CPBCCH and CPPCH blocks per PDCH", from Lucent Technologies, was presented by Mr. J. Oudelaar.

Conclusion. It was agreed that the contents of Tdoc SMG2 227/00 were included by Tdoc SMG2 146/00.

Tdoc SMG2 146/00 "CR-05.02-A129 Clarifications in 05.02" was agreed.

Tdoc SMG2 147/00 "CR-03.22-A049 Cell Selection (corrections after SA1)", from Ericsson, was presented by Mr. C. Lindheimer. It was provided for information. Noted as being under CN responsibility. The change should be converted to a change to TS 23.122.

Tdoc SMG2 488/00 "Liaison Statement on CR 23.122 after split in SMG2 and CN1", from SMG2-WPB was revised in Tdoc SMG2 500/00, which was agreed.

Tdoc SMG2 500/00 "Liaison Statement on CR 23.122 after split in SMG2 and CN1" was agreed.

Tdoc SMG2 148/00 "CR 11.11-Axxx COMPACT Cell Selection (For information)", from Ericsson, was presented by Mr. C. Lindheimer. It was provided for information. Noted.

Tdoc SMG2 187/00 "Complete Frequency hopping for COMPACT", from UWCC, was presented by Mr. P. Fouilland. Provided background for the change requests in Tdoc SMG2 188/00 and Tdoc SMG2 190/00. Comments were made.

Tdoc SMG2 417/00 "CR 05.02-A143 Complete Frequency hopping on COMPACT", from Ericsson, was presented by Mr. B. Persson. No support was given to the alternative proposal for an improved frequency hopping for COMPACT, that was not found acceptable.

Tdoc SMG2 188/00 "CR 05.01-A024 on complete Frequency hopping for COMPACT", from UWCC, was presented by Mr. P. Fouilland. It will be revised in Tdoc SMG2 467/00 .

Tdoc SMG2 467/00 "CR 05.01-A024 rev 1 on complete Frequency hopping for COMPACT" was agreed.

Tdoc SMG2 190/00 "CR 05.02-A130 Complete Frequency hopping for COMPACT", from UWCC, was presented by Mr. P. Fouilland. An alternative proposal was presented in Tdoc SMG2 416/00, which was pursued instead of this change request.

Tdoc SMG2 416/00 "Frequency hopping on uplink for COMPACT", from Ericsson, was found acceptable. The change request was agreed, but it was found necessary to update and merge it with the change request in Tdoc SMG2 191/00. The revised change request was issued in Tdoc SMG2 468/00.

Tdoc SMG2 194/00 "New block ordering for COMPACT", from UWCC, was presented by Mr. P. Fouilland. Provides background for the change request in Tdoc SMG2 191/00. It was noted.

Tdoc SMG2 191/00 "CR 05.02-A131 New block ordering for COMPACT", from UWCC, was presented by Mr. P. Fouilland. Change request was agreed, but it was found necessary to update and merge it with the change request in Tdoc SMG2 416/00. The revised change request was issued in Tdoc SMG2 468/00.

Tdoc SMG2 468/00 "CR 05.02-A143 rev 1 Complete Frequency hopping on COMPACT" was agreed.

Tdoc SMG2 193/00 "COMPACT frequency correction burst", from Motorola, was discussed. The document was providing background for the change requests in Tdoc SMG2 189/00 and Tdoc SMG2 192/00. The document proposes a new frequency correction burst for COMPACT which creates a sine wave at ≈ –16.9 kHz (exactly 1625/96) below the RF carrier.

It was commented that the proposed signal is believed to have significant side loops outside the 200 kHz carrier, which unfortunately, seen from the adjacent channel might imitate a normal FCH. It was explained that these side loops was 22 dB below the carrier before filtering, so it was not expected to be a problem after filtering.

Further the proposed signal is a true 8-PSK signal which means that it might be necessary to back-off on the output power. It was explained that as the proposed signal is a sine wave, there is no need for back-off on the output power. However, this was disputed as it was believed that the signal still contained some amplitude modulation, which would require some back-off on the output power in the order of 1 dB. This might impact the RX level measurements.

Taking the drawback into consideration, it was decided to reject the proposal and consequently the change request in Tdoc SMG2 189/00 and Tdoc SMG2 192/00. Therefore,

Tdoc SMG2 189/00 "CR 05.01-A025 COMPACT frequency correction burst", from Motorola, was rejected (see Tdoc SMG2 193/00 for reasoning). And

Tdoc SMG2 192/00 "CR 05.02-A132 COMPACT frequency correction burst", from Motorola, was rejected (see Tdoc SMG2 193/00 for reasoning).

Tdoc SMG2 407/00 "CR 05.08-A243 Missing GSM 850 requirements for Classic BCCH", from Nokia, was presented by Ms. J. Pekonen. This change request is proposed because some GSM 850 requirements for Classic BCCH are missing.

The change request was found acceptable, however a minor revision was proposed. A revised version was issued in Tdoc SMG2 469/00.

Tdoc SMG2 469/00 "CR 05.08-A243 rev 1 Missing GSM 850 requirements for Classic BCCH" was agreed.

7.2.6.7 GSM/EDGE RAN release 2000

Tdoc SMG2 415/00 "GERAN Timeplan for Release 2000 – 2001", from the Drafting Group on GERAN, was presented by Mr. F. Muller. The Chairman commented that MM is beyond SMG2 responsibility, and should be kept separated; a feasibility study document was felt difficult to be fully produced at this point in time, but the radio and upper layer matters could be elaborated. Mr. B. Guarino asked a reference to be added on multiplexing scenarios. Backward compatility issue was clarified to be a requirement. Mr. H. van Bussel remarked the importance of this issue for GSM operators. The subject will be part of the SR to SMG. Based on the comments received in SMG2-WPB a revised version of the document was issued fin Tdoc SMG2 472/00 for discussion in SMG2-WPA.

SMG2-WPA felt the document SMG2 472/00 adequate "as is". No changes were proposed to the document from SMG2-WPA.

Tdoc SMG2 472/00 "GERAN Timeplan for Release 2000 – 2001" will be forwarded to SMG2 Plenary.

Tdoc SMG2 419/00 "Draft Liaison Statement on GERAN (GSM/EDGE) architecture. Response to Tdoc SMG2 141/00", from the Drafting Group on GERAN, was presented by Mr. M. Farber. A revised version was issued in Tdoc SMG2 470/00.

Tdoc 470/00 "Draft Liaison Statement on GERAN (GSM/EDGE) architecture. Response to Tdoc SMG2 141/00" was forwarded to the Plenary SMG2.

Tdoc SMG2 420/00 "Radio Requirements for the GERAN", from the Drafting Group on GERAN, was presented by Mr. M. Johansson. Several comments were made on the text of the document, which will be forwarded to SMG2-WPA as well. A teleconference will be held on February 7th, 2000.

It was updated in Tdoc SMG2 487/00.

Tdoc SMG2 199/00 "Interleaving for Half Rate Channels in EGPRS Phase II", from Lucent Technologies, was presented by Mr. C. Demetrescu. A. Furuskar asked the consequences in case of full-rate and about backward compatibility (not for R2000).

Tdoc SMG2 200/00 "Speech Aspects for Statistically Multiplexed Voice Bearers", from Lucent Technologies, was presented by Mr. J. Seymour. Speech coding rate change was requested to be clarified; bit rate at 4.75 kbit/s will be used in some cases (low quality). Noted.

Tdoc SMG2 201/00 "Performance of burst-based access and assignment for EGPRS Phase II", from Lucent Technologies, was presented by Mr. C. Demetrescu. Questions for clarifications were raised. Worst case was considered C/I=9 dB.

Tdoc SMG2 202/00 "Capacity and Control Channel Overhead for Statistical Multiplexing of Voice in EGPRS Phase II", from Lucent Technologies, was presented by Mr. C. Demetrescu. Mr. A. Furuskar commented the gain of the proposal, and it was clarified the control channel overhead was kept conservative, 25% not allowed for the calculations.

Tdoc SMG2 203/00 "8-PSK vs. QPSK Considerations for RT-EGPRS", from Lucent Technologies, was presented by Mr. J. Seymour. Optimised scheme was not tried. Considering the set of results available, the greater complexity issue was questioned, as well as, on the other side, whether a decision to exclude QPSK could be taken (at this meeting). The discussion was left to be continued off-line. It was suggested that the found gains do not justify to pursue the QPSK further

Tdoc SMG2 204/00 "Access Burst for Block-Based Fast Access", from AT&T, was presented by Mr. B. Guarino. Training sequence access burst (alternative) was felt feasible only if a marker is used. Compatibility and other issues were left for SMG2-WPA competence.

Tdoc SMG2 66/00 "Enhanced multiplexing in EGPRS phase II / GERAN", from Ericsson, was Presented and discussed. Delegates urged to study the details of the proposal. Some dalegates indicated that they had a preference for the proposal in Tdoc SMG2 204/00. About the timing advance alignment issue (for this and the previous document), it was asked whether sufficient info was available to evaluate both proposals.

7.2.6.8 GSM 400

Tdoc SMG2 80/00 "CR 05.05-A143 Spurious emission measurement bandwidths updated to include GSM 400 systems", from Ericsson, was revised in

Tdoc SMG2 348/00 "CR 05.05-A143 rev 1 Spurious emission measurement bandwidths updated to include GSM 400 systems", that was presented by Ms. I. Ericsson. It was agreed.

7.2.6.9 Adaptive Multi Rate codec

Tdoc SMG2 39/00 "CR 05.03-A034 Correction concerning AMR - SID_FIRST signalling and clarification concerning bit order of codec mode code words R98" from Ericsson, Philips, was presented by Mr. B. Persson. It was agreed.

Tdoc SMG2 40/00 "CR 05.03-A035 Correction concerning AMR - SID_FIRST signalling and clarification concerning bit order of codec mode code words R99" from Ericsson, Philips, was presented by Mr. B. Persson. It was agreed.

Tdoc SMG2 41/00 "CR 05.09-A005 Clarification of the identification of the codec modes within the active codec set for AMR" from Ericsson, Philips, was presented by Mr. B. Persson. It was agreed.

7.2.6.10 Cordless Telephony System (CTS)

No documents were presented under this Agenda item.

7.2.6.11 Technical enhancement and improvement

The folllowing documents were presented under this Agenda item:

Tdoc SMG2 78/00 "CR 05.08-A207 rev 3; Enhanced Measurement Reporting", from Nokia, was presented by Ms. J. Pekonen. Lots of comments were made. The reporting mechanism for class A neigbours for the different bands was requested to be clarified, which was done. Priority for different serving/reporting bands and class 1 assignment was asked to be explained as well (max 6 can be reported). Further clarifications were requested on accuracy for the extended range, and on the consistency of all requirements. The principle was agreed. A revised version was provided in Tdoc SMG2 489/00.

Tdoc SMG2 489/00 "CR 05.08-A207 rev 4 Enhanced Measurement Reporting", will be presented directly to the SMG2 Plenary meeting.

Tdoc SMG2 79/00 "CR 05.08-A233 Enhanced Measurement Reporting for (E)GPRS", from Nokia, was presented by Ms. J. Pekonen. Assistance data are not needed for Compact The principle was agreed. A revised version was provided in Tdoc SMG2 501/00.

Tdoc SMG2 501/00 "CR 05.08-A233 rev 1 Enhanced Measurement Reporting for (E)GPRS", will be presented directly to SMG2 Plenary.

Tdoc SMG2 168/00 "CR 05.02-A108 rev1 Introduction of additional resources for BCCH and AGCH", from Nortel Networks, was withdrawn.

Tdoc SMG2 176/00 "CR 05.05-A235 Alignment of spurious emissions GSM-3G(UTRA)", from Telia, was presented by Mr. U. Tegth. Comments: Mr. H. van Bussel observed that GSM operators would NOT like being forced to deploy additional equipment due to the introduction of UMTS; therefore any new requirement would need to be considered with great caution, asking for justification for any change. Mr. B. Persson found some new requirements possibly difficult to achieve. Some more time was requested to examine and evaluate the proposed CR. Conclusion: justification for each of the changes was felt adequate, before a change request can be agreed on the subject.

7.2.6.12 Other phase 2+ work

Tdoc SMG2 88/00 "CR 05.05-A144 Harmonisation of Transmitter/receiver performance requirements for PCS 1900", from Ericsson, was presented by Mr. M. Samuelsson. It was agreed.

7.2.7 Letters to other groups

See Annex D for the complete list of LS forwarded to the Plenary.

7.2.8 Work plan and future meetings

See list of meetings in the Executive Summary.

7.2.9 Any other business

None.

7.2.10 Closing of the meeting

The Chairman thanked **Bosch Telecom** for hosting the meeting, and for the excellent facilities provided during the week, and the delegates for attending the meeting. The meeting was closed.

ANNEX A - List of participants

SURNAME	FIRST	COMPANY
ACHARD	Jacques	Alcatel
ANDERSEN	Niels	Motorola
ANNUNZIATO	Armando	CSELT TI Group
ARZELIER	Claude	Vodafone
BARANY	Peter	Nortel Networks
BOGANI	Elena	Omnitel
BUSIN	Ake	Ericsson L. M.
CARRIZO	Jose	Vodafone Airtouch
CASTELLANI	Andrea	TIM
CAVALLI	Simona	Siemens ICN
CHANI	Richard	VLSI Technology
CHOUKROUN	David	Nortel Networks
DEMETRESCU	Cristian	Lucent Technologies
DESBLANCS	Philippe	Alcatel
DE WARREN	Alexis	Cegetel
DEVAUD	Olivier	France Telecom
DIETRICH	Olaf	Mannesmann Mobilfunk
DUNNE	David	Agilent Technology
EDGE	Stephen	Siemens
EDLUND	Peter	Ericsson L. M.
EJZAK	Richard	Lucent Technologies
ERICSSON	Ingela	Ericsson Radio Systems
EVALD	Jesper	Tele Danmark Net Mobil
FARBER	Michael	Siemens
FISCHER	Sven	Ericsson Eurolab
FOUILLAND	Pascal	Motorola
FURUSKAR	Anders	Ericsson Research
GUARINO	Bernard	AT&T
HAMITI	Shkumbin	Nokia Research Center
HAMMER	Volkmar	France Telecom

IVANOV	Daniel	Ericsson
JAVERBRING	Stefan	Ericsson Radio Systems AB
JOHANSSON	Mathias	Ericsson L. M.
JOKINEN	Harri	Nokia
KAINZ	Andreas	Mobilkom Austria
KENDALL	Stephen	Motorola
LAI	Jersey	Nokia Telecommunications
LARSEN	Torben	Bosch Telecom Danmark
LEPPISAARI	Arto	Nokia Mobile Phones
LINDHEIMER	Christofer	Ericsson
LJUNGGREN	Tommy	AT&T
LLORENTE	Carlos	Telefonica
MULLER	Frank	Ericsson
NANDA	Sanjiv	Lucent Technologies
NIKULA	Eero	Nokia Research Center
OBERNOSTERER	Frank	Lucent Tchnologies
OHANA	Alain	BellSouth Mobility DCS
OUDELAAR	Jan	Lucent Technologies
PALSSON	Annika	Ericsson Mobile Communications AB
PARKER	Chris	Motorola
PECEN	Mark	Motorola
PEDERSEN	Kaj Age	Bosch Telecom
PEKONEN	Johanna	Nokia Telecommunications
PERSSON	Bengt	Ericsson Radio Systems AB
QUIRIN	Emmanuel	Nortel Networks
RANTALAINEN	Timo	Nokia Research Center
RIDDINGTON	Eddie	Nokia
ROBERTS	Jason	One-2-One
SAMUELSSON	Mats	Ericsson Radio Systems
SAVUOJA	Arto	Nokia Networks
SEBIRE	Guillaume	Nokia Research Center
SENNELS	Soren	Nokia Mobile Phones
SEYMOUR	James	Lucent Technologies

SHEN	Donglin	AT&T
SIMMONS	Paul	Nortel Networks
SJERLING	Klas	Ericsson
SONGEON	Lionel	Motorola Toulouse France
TEGTH	Ulf	Telia AB
THOMAS	David	Siemens
TONER	Ben	Roke Manor Researh
USAI	Paolo	ETSI
VAN BUSSEL	Han	T-Mobil
VERBESTEL	Willy	Motorola
WILLIAMSON	John	Cellnet

ANNEX B - Agenda

ETSI STC SMG2 Tdoc SMG2 3/00
Meeting no 34

Aalborg, Denmark
10 - 14 January 2000

Draft Agenda for SMG2-WPB during SMG2 no. 34 in Aalborg

7.2.1 Opening of the meeting

7.2.2 Approval of the Agenda

7.2.3 Approval of report of the last meeting

7.2.4 Letters / Reports from other groups

- 7.2.4.1 SMG
- 7.2.4.2 Other ETSI groups
- 7.2.4.3 Others

7.2.5 Modifications of released specifications (including completed phase 2+ work)

- 7.2.5.1 03-Series
- 7.2.5.2 05-Series
- 7.2.5.3 08-series (TS GSM 08.60 and TS GSM 08.61)

7.2.6 Phase 2+ work

- 7.2.6.1 Location Services (LCS)
- 7.2.6.2 Packet radio (GPRS)
- 7.2.6.3 SoLSA
- 7.2.6.4 GSM-3G handovers and multimode operation
- 7.2.6.5 Antenna test methods
- 7.2.6.6 Enhanced Data Rates for GSM Evolution (EDGE)
- 7.2.6.7 GSM/EDGE RAN release 2000
- 7.2.6.8 GSM in the 450 MHz frequency band
- 7.2.6.9 Adaptive Multirate codec

7.2.6.10 Cordless Telephony System (CTS)

7.2.6.11 Technical enhancements and improvement

7.2.6.12 Other phase 2+ work

7.2.7 Letters to other groups

7.2.8 Work plan and future meetings

7.2.9 Any other business

7.2.10 Closing of the meeting

ANNEX C - List of temporary documents

ETSI STC SMG2

Meeting no 34

Aalborg, Denmark

10 – 14 January 2000

List of documents

Tdoc SMG2	Title	Source	Agenda Item
1/00	Draft Agenda	SMG2 chairman	2
3/00	**Draft Agenda for SMG2-WPB during SMG2 no. 34 in Aalborg**	SMG2-chairman	7.2.2
19/00	**CR 03.64-A069 rev 1 GPRS and SMS-CB interworking**	Mannesmann	7.2.6.2
20/00	**CR 05.02-A121 PTCCH block numbering R97**	Ericsson	7.2.6.2
21/00	**CR 05.02-A122 PTCCH block numbering R98**	Ericsson	7.2.6.2
22/00	**CR 05.02-A123 PTCCH block numbering R99**	Ericsson	7.2.6.2
23/00	**CR 05.02-A124 Correction of BS_PRACH_BLKS range R97**	Ericsson	7.2.6.2
24/00	**CR 05.02-A125 Correction of BS_PRACH_BLKS range R98**	Ericsson	7.2.6.2
25/00	**CR 05.02-A126 Correction of BS_PRACH_BLKS range R99**	Ericsson	7.2.6.2
26/00	**CR 05.08-A229 Clarification of Extended Measurement requirements R97**	Ericsson	7.2.6.2
27/00	**CR 05.08-A230 Clarification of Extended Measurement requirements R98**	Ericsson	7.2.6.2
28/00	**CR 05.08-A231 Clarification of Extended Measurement requirements R99**	Ericsson	7.2.6.2
29/00	**CR 05.08-A232 Correction of measurement filtering for power control R99**	Ericsson	7.2.6.2
32/00	**EDGE 8-PSK Nominal Error Rate Receiver Performance**	Lucent Technologies	7.2.6.6

Tdoc SMG2	Title	Source	Agenda Item
33/00	**EDGE Practical BTS Implementation and Spectrum due to Switching Requirements**	Siemens	7.2.6.6
34/00	**Effect of Removing Droop Compensation from the EVM Calculations WITHDRAWN**	Siemens	7.2.6.6
35/00	**Link Quality Control Measurements Filtering for EGPRS**	Ericsson	7.2.6.6
36/00	**Link Quality Control Measurement Accuracy Requirements for EGPRS *REPLACED by TDOC SMG2 260/00***	Ericsson	7.2.6.6
37/00	**Incremental Redundancy Performance Requirements for EGPRS**	Ericsson	7.2.6.6
38/00	**GPRS CS-4 receiver performance**	CSELT	7.2.6.2
39/00	**CR 05.03-A034 Correction concerning AMR - SID_FIRST signalling and clarification concerning bit order of codec mode code words R98**	Ericsson, Philips	7.2.6.9
40/00	**CR 05.03-A035 Correction concerning AMR - SID_FIRST signalling and clarification concerning bit order of codec mode code words R99**	Ericsson, Philips	7.2.6.9
41/00	**CR 05.09-A005 Clarification of the identification of the codec modes within the active codec set for AMR**	Ericsson, Philips	7.2.6.9
42/00	**CR 05.05-A134 Measurement Filter for EDGE EVM**	Agilent Technologies	7.2.6.6
43/00	**CR 05.05-A135 : Definition of 8PSK modulation accuracy parameters in Annex G**	Agilent Technologies	7.2.6.6
47/00	**CR 05.90-A001 EMC Aspects of 8PSK modulation**	SMG2 EDGE workshop #12	7.2.6.6
56/00	**CR 05.05-A136 Clarification of Intra BTS Intermodulation Attenuation requirements for MXM 850 and MXM 1900 BTS**	SMG2 EDGE workshop #12	7.2.6.6
57/00	**CR 05.05 A137 Clarification of Intra BTS Intermodulation Attenuation requirements for PCS 1900 BTS**	SMG2 EDGE workshop #12	7.2.6.6
58/00	**CR 05.05-A138 Definition of MS for Mixed-mode network**	SMG2 EDGE workshop #12	7.2.6.6
59/00	**CR 05.05-A139 Correction to Output level dynamic operation**	SMG2 EDGE workshop #12	7.2.6.6
60/00	CR 05.05-A140 EGPRS receiver performance for MS DCS 1800 and PCS 1900	Ericsson, Motorola, Nokia	7.2.6.6
61/00	CR 05.05-A141 Nominal Error Rate performance for 8-PSK	Ericsson	7.2.6.6
62/00	**CR 05.10-A050 Modifications for 8-PSK**	Ericsson	7.2.6.6
63/00	**CR 05.05-A142 Corrections to receiver characteristics for EDGE**	Ericsson	7.2.6.6
78/00	CR 05.08-A207rev 3; Enhanced Measurement Reporting	Nokia	7.2.6.11

Tdoc SMG2	Title	Source	Agenda Item
79/00	CR 05.08-A233 Enhanced Measurement Reporting for (E)GPRS	Nokia	7.2.6.11
80/00	CR 05.05-A143 Spurious emission measurement bandwidths updated to include GSM 400 systems	Ericsson	7.2.6.8
81/00	EGPRS Receiver Performance for BTS	Ericsson	7.2.6.6
82/00	NER Performance for 8-PSK	Ericsson	7.2.6.6
83/00	USF Performance for 8-PSK	Ericsson	7.2.6.6
84/00	ECSD Receiver performance for BTS	Ericsson	7.2.6.6
85/00	Outcome of Drafting group on BTS EGPRS RX performance	SMG2 EDGE workshop #12	7.2.6.6
86/00	Outcome of Drafting group on MS EGPRS RX performance	SMG2 EDGE workshop #12	7.2.6.6
87/00	CR 05.05-A101 rev 3 Transmitter/receiver performance for EDGE	SMG2 EDGE workshop #12	7.2.6.6
88/00	**CR 05.05-A144 Harmonisation of Transmitter/receiver performance requirements for PCS 1900**	Ericsson	7.2.6.12
90/00	Justification of CR to 05.05 on GPRS receiver performance	Alcatel	7.2.6.2
91/00	CR05.05-A145 Relaxation of C/I performance requirement for CS4 (R97)	Alcatel	7.2.6.2
92/00	CR05.05-A146 Relaxation of C/I performance requirement for CS4 (R98)	Alcatel	7.2.6.2
93/00	CR05.05-A147 Relaxation of C/I performance requirement for CS4 (R99)	Alcatel	7.2.6.2
95/00	CR 05.02-A127 COMPACT Change Request for GSM 05.02	SMG2 EDGE workshop #12	7.2.6.6
96/00	CR 05.08-A234 COMPACT Change Request for GSM 05.08	SMG2 EDGE workshop #12	7.2.6.6
97/00	CR 05.08-A203 Rev. 1 COMPACT Change Request for GSM 05.08	SMG2 EDGE workshop #12	7.2.6.6
101/00	CR 05.50-A011 8-PSK Introduction Change Request for GSM 05.50	Nortel Networks	7.2.6.6
103/00	CR 02.07-Axxx Changes to SMSCB DRX MS requirements to support LCS Assistance Data broadcast service (R98)	T1P1.5	7.1.5.2, 7.2.6.1
104/00	CR 02.07-Axxx Changes to SMSCB DRX MS requirements to support LCS Assistance Data broadcast service (R99)	T1P1.5	7.1.5.2, 7.2.6.1
105/00	CR 03.71-A003 rev 1 Corrections for LCS Open Issues (R98)	T1P1.5	7.1.5.2, 7.2.6.1

Tdoc SMG2	Title	Source	Agenda Item
106/00	CR 03.30-A009 LCS operation with repeaters (R98)	T1P1.5	7.2.6.1
107/00	CR 03.30-A010 LCS operation with repeaters (R99)	T1P1.5	7.2.6.1
112/00	GMSK/8-PSK burst detection	T1.P1.5	7.2.6.2
113/00	CR 04.31-A001 Modification of RRLP messages (R98)	T1P1.5	7.1.5.2, 7.2.6.1
114/00	CR 05.05-A236 RF requirements for TOA LMU (R98)	T1P1.5	7.2.6.1
115/00	CR 05.05-A237 RF requirements for TOA LMU (R99)	T1P1.5	7.2.6.1
116/00	CR 05.05-A238 Requirements on E-OTD LMU and E-OTD MS (R98)	T1P1.5	7.2.6.1
117/00	CR 05.05-A239 Requirements on E-OTD LMU and E-OTD MS (R99)	T1P1.5	7.2.6.1
118/00	CR 05.50-A012 Background information for requirements on TOA LMU (R98)	T1P1.5	7.2.6.1
119/00	CR 05.50-A013 Background information for requirements on TOA LMU (R99)	T1P1.5	7.2.6.1
120/00	CR 05.50-A014 Background information for requirements on E-OTD LMU and E-OTD MS (R98)	T1P1.5	7.2.6.1
121/00	CR 05.50-A015 Background information for requirements on E-OTD LMU and E-OTD MS (R99)	T1P1.5	7.2.6.1
128/00	CR 09.31-A002 Provision of Segmentation support for LCS (R98)	T1P1.5	7.2.6.1
129/00	Withdrawn	T1P1.5	7.2.6.1
130/00	LS to SMG2-WPA on UMTS PLMN selection	TSG-N WG1	4.2, 7.2.6.4
131/00	**CR on removal of CN procedures from 03.22 (03.22 split) (Work Item TEI)**	03.22 split drafting group	4.2, 7.2.6.4
132/00	Proposed TS 23.122 (03.22 & 23.022 split)	03.22 split drafting group	4.2, 7.2.6.4
133/00	CR 03.22-A039 rev1 Correction of Figure A.2 in Annex A (WI PCS1900 Harmonisation)	TSG-N WG1	4.2, 7.2.6.4
134/00	GSM 03.22 version 7.3.0 – For information and reference	MCC	4.2, 7.2.6.4
137/00	LS to SMG2 on the measurement requirements for GSM in UMTS	TSG-RAN WG2	4.2, 7.2.6.4
140/00	LS to SMG2 on 02.06 specification transfer to 3GPP	TSG-SA WG1	4.2, 7.2.4.2

Tdoc SMG2	Title	Source	Agenda Item
144/00	**CR 05.10-A051 Timegroup definition removal from 05.10**	Ericsson	7.2.6.6
145/00	**CR 05.02-A128 Timegroup rotation and NIB Clarification**	Ericsson	7.2.6.6
146/00	**CR-05.02-A129 Clarifications in 05.02**	Ericsson	7.2.6.6
147/00	CR-03.22-A049 Cell Selection (corrections after SA1)	Ericsson	7.2.6.6
148/00	CR 11.11-Axxx COMPACT Cell Selection (For information)	Ericsson	7.2.6.6
151/00	CR 04.60-A426 rev3 Non-GSM Broadcast Information	Ericsson	7.1.5.9, 7.2.6.6
168/00	CR 05.02-A108 rev1 Introduction of additional resources for BCCH and AGCH WITHDRAWN	Nortel Networks	7.2.6.11
176/00	CR 05.05-A235 Alignment of spurious emissions GSM-3G(UTRA)	Telia	7.2.6.11
181/00	Withdrawn		
182/00	Withdrawn		
187/00	Complete Frequency hopping for COMPACT	UWCC	7.2.6.6
188/00	CR 05.01-A024 on complete Frequency hopping for COMPACT	UWCC	7.2.6.6
189/00	CR 05.01-A025 COMPACT frequency correction burst	Motorola	7.2.6.6
190/00	CR 05.02-A130 Complete Frequency hopping for COMPACT	UWCC	7.2.6.6
191/00	CR 05.02-A131 New block ordering for COMPACT	UWCC	7.2.6.6
192/00	CR 05.02-A132 COMPACT frequency correction burst	Motorola	7.2.6.6
193/00	COMPACT frequency correction burst	Motorola	7.2.6.6
194/00	New block ordering for COMPACT	UWCC	7.2.6.6
199/00	Interleaving for Half Rate Channels in EGPRS Phase II	Lucent	7.2.6.7
200/00	Speech Aspects for Statistically Multiplexed Voice Bearers	Lucent	7.2.6.7
201/00	Performance of burst-based access and assignment for EGPRS Phase II	Lucent	7.2.6.7
202/00	Capacity and Control Channel Overhead for Statistical Multiplexing of Voice in EGPRS Phase II	Lucent	7.2.6.7
203/00	8-PSK vs. QPSK Considerations for RT-EGPRS	Lucent	7.2.6.7
204/00	Access Burst for Block-Based Fast Access	AT&T	7.2.6.7
210/00	NER performance for (MS) 8-PSK	Nokia	7.2.6.6
211/00	USF performance for 8-PSK	Nokia	7.2.6.6

Tdoc SMG2	Title	Source	Agenda Item
222/00	**CR 05.02-A133 USF Handling in B0**	SMG2 EDGE workshop #12	7.2.6.6
223/00	CR 04.18-A003 rev 2 Non-GSM Broadcast Information	SMG2 EDGE workshop #12	7.1.5.9, 7.2.6.6
226/00	Clarification of the cell reselection for a GPRS MS	France Telecom	6.6, 7.2.6.2
227/00	CR 05.02-A134 Amount of CPBCCH and CPPCH blocks per PDCH	Lucent	7.2.6.6
229/00	Overall description of GPRS simple class A mobiles	Vodafone Airtouch	6.6, 7.1.5.1 & 7.2.6.2
230/00	Timing Advance handling for simple class A mobiles	Vodafone Airtouch	7.2.6.2
242/00	CR 05.02-A135 Simple class A: definition of DTM classes (R99)	Vodafone Airtouch	7.2.6.2
244/00	CR 05.02-A136 Correction to non-DRX mode (R97)	Alcatel	7.2.6.2
245/00	CR 05.02-A137 Correction to non-DRX mode (R98)	Alcatel	7.2.6.2
246/00	CR 05.02-A138 Correction to non-DRX mode (R99)	Alcatel	7.2.6.2
250/00	Optional Filtering for EGPRS LQC measurements	Nokia	7.1.5.9, 7.2.6.6
252/00	CR 05.08-A240 EGPRS LQC measurements filtering	Nokia	7.2.6.6
253/00	**CR 05.03-A036 Correction for ECSD Channel Coding**	SMG2 EDGE workshop #12	7.2.6.6
254/00	Proposed values for 05.05 ECSD receiver performance (MS)	Ericsson, Nokia	7.2.6.6
255/00	Proposed values for 05.05 ECSD receiver performance (BTS)	Ericsson, Nokia	7.2.6.6
260/00	**Link Quality Control Measurement Accuracy Requirements for EGPRS**	Ericsson	7.2.6.6
261/00	CR 05.02-A139 Clarification of non-DRX mode and (P)CCCH operation (R97)	Nokia	7.2.6.2
262/00	CR 05.02-A140 Clarification of non-DRX mode and (P)CCCH operation (R98)	Nokia	7.2.6.2
263/00	CR 05.02-A141 Clarification of non-DRX mode and (P)CCCH operation (R99)	Nokia	7.2.6.2
273/00	CR 05.05-A151 Switching Transients for 8-PSK	Siemens	7.2.6.6
276/00	Concept proposal: SMSCB operation in GPRS transfer mode	Motorola	7.2.6.2
338/00	**CR 03.64-A069 rev 2 GPRS and SMS-CB interworking**	Mannesmann	7.2.6.2

Tdoc SMG2	Title	Source	Agenda Item
348/00	**CR 05.05-A143 rev 1 Spurious emission measurement bandwidths updated to include GSM 400 systems**	Ericsson	7.2.6.8
349/00	**CR 05.05-A148 ECSD Receiver performance for MS**	Ericsson, Nokia	7.2.6.6
350/00	CR 05.02-A135 rev 1 Simple class A: definition of DTM classes (R99)	Vodafone Airtouch	7.2.6.2
351/00	**CR 05.08-A242 Intersystem handover and cell reselection**	Ericsson	7.2.6.4
352/00	**CR 05.03-A037 Correction for EGPRS channel coding**	Nortel, Nokia, Ericsson	7.2.6.6
353/00	CR 05.08-A240 rev 1 EGPRS LQC measurements filtering	Nokia	7.2.6.6
382/00	CR 05.50-A012 rev 1 Background information for requirements on TOA LMU (R98)	T1P1.5	7.2.6.1
383/00	CR 05.50-A013 rev 1 Background information for requirements on TOA LMU (R99)	T1P1.5	7.2.6.1
384/00	**CR 05.05-A149 EVM requirements for EDGE BTS transmitter with combining equipment**	SMG2 EDGE workshop #12	7.2.6.6
385/00	**CR 03.64-A069 rev 2 GPRS and SMS-CB interworking**	Mannesmann	7.2.6.2
386/00	**Proposed Liaison Statement to SMG7 on Testing of Link Quality Measurement accuracy**	SMG2 EDGE workshop #12	7.2.6.6
387/00	**Proposed Answer to Liaison Statement from SMG7 on Definition of Block Errors**	SMG2 EDGE workshop #12	7.2.6.6
388/00	**CR 05.02-A142 GPRS and SMS-CB interworking**	Mannesmann	7.2.6.2
401/00	**CR 05.08-A232 rev 1 Correction of measurement filtering for power control R99**	Ericsson	7.2.6.2
402/00	CR 05.02-A136 rev 1 Correction to non-DRX mode (R97)	Alcatel	7.2.6.2
403/00	CR 05.02-A137 rev 1 Correction to non-DRX mode (R98)	Alcatel	7.2.6.2
404/00	CR 05.02-A138 rev 1 Correction to non-DRX mode (R99)	Alcatel	7.2.6.2
406/00	**Proposed Liaison Statement on Clarification of the cell reselection for a GPRS MS**	SMG2-WPB	7.2.7
407/00	**CR 05.08-A243 Missing GSM 850 requirements for Classic BCCH**	Nokia	7.2.6.6
408/00	**Incremental Redundancy performance requirements WITHDRAWN**	Ericsson	7.2.6.6
409/00	**CR 05.09-A006 Incremental Redundancy performance requirements**	Ericsson	7.2.6.6
410/00	**Link Quality Measurement Filtering for EGPRS**	Ericsson	7.2.6.6
411/00	**CR 05.50-A016 Update of GPRS background information (R97)**	Alcatel	7.2.6.2

Tdoc SMG2	Title	Source	Agenda Item
412/00	**CR 05.50-A017 Update of GPRS background information (R98)**	Alcatel	7.2.6.2
413/00	**CR 05.50-A018 Update of GPRS background information (R99)**	Alcatel	7.2.6.2
415/00	**GERAN Timeplan for Release 2000 – 2001**	Drafting group on GERAN	7.2.6.7
416/00	CR 05.02-A143 Complete Frequency hopping on COMPACT	Ericsson	7.2.6.6
417/00	**Frequency hopping on uplink for COMPACT**	Ericsson	7.2.6.6
418/00	**Outcome of the drafting group on EDGE Receiver Performance**	Drafting Group	7.2.6.6
419/00	**Draft Liaison Statement on GERAN (GSM/EDGE) architecture. Response to Tdoc SMG2 141/00**	Drafting Group on GERAN	7.2.6.7
420/00	**Radio Requirements for the GERAN**	Drafting Group on GERAN	7.2.6.7
421/00	CR 05.08-A240 rev 2 EGPRS LQC measurements filtering	Nokia	7.2.6.6
425/00	CR 09.31-A002 rev 1 Provision of Segmentation support for LCS (R98)	T1P1.5	7.2.6.1
451/00	**CR 05.05-A150 Incremental Redundancy Performance**	SMG2-WPB	7.2.6.6
452/00	**CR 05.08-A244 Example on Link Adaptation Algorithm for EGPRS**	SMG2-WPB	7.2.6.6
453/00	**Proposed Liaison Statement to SMG7 on Testing of Link Quality Measurement accuracy**	SMG2-WPB	7.2.6.6
454/00	CR 05.05-A140 rev 1 EGPRS receiver performance for MS DCS 1800 and PCS 1900	Ericsson, Motorola, Nokia	7.2.6.6
455/00	**CR 05.05-A148 rev 1 ECSD Receiver performance for MS**	Ericsson, Nokia	7.2.6.6
456/00	**Outcome of the drafting group on EDGE Receiver Performance**	Drafting Group	7.2.6.6
457/00	CR 05.03-A038 Editorial correction to MCS-4 WITHDRAWN	Nokia, Nortel Networks	7.2.6.6
458/00	**CR 05.50-A011 rev 1 8-PSK Introduction Change Request for GSM 05.50**	Nortel Networks	7.2.6.6
459/00	CR 05.05-A101 rev 4 Transmitter/receiver performance for EDGE	SMG2-WPB	7.2.6.6
460/00	**CR 05.05-A134 rev 1 Measurement Filter for EDGE EVM**	SMG2-WPB	7.2.6.6
461/00	Open items on EDGE release 99	Rapporteur	7.2.6.6
462/00	**Proposed Liaison Statement on Twinkling replacement antennas**	Telia	7.2.6.5
463/00	**Draft Liaison Statement on the measurement requirements for GSM in UMTS**	SMG2-WPB	7.2.6.4

Tdoc SMG2	Title	Source	Agenda Item
464/00	**CR 05.02-A127 rev 1 COMPACT Change Request for GSM 05.02**	SMG2-WPB	7.2.6.6
465/00	**CR 05.08-A234 rev 1 COMPACT Change Request for GSM 05.08**	SMG2-WPB	7.2.6.6
466/00	CR 05.08-A203 rev 2 COMPACT Change Request for GSM 05.08	SMG2-WPB	7.2.6.6
467/00	**CR 05.01-A024 rev 1 on complete Frequency hopping for COMPACT**	SMG2-WPB	7.2.6.6
468/00	**CR 05.02-A143 rev 1 Complete Frequency hopping on COMPACT**	SMG2-WPB	7.2.6.6
469/00	**CR 05.08-A243 rev Missing GSM 850 requirements for Classic BCCH**	SMG2-WPB	7.2.6.6
470/00	**Draft Liaison Statement on GERAN (GSM/EDGE) architecture. Response to Tdoc SMG2 141/00**	Drafting Group on GERAN	7.2.6.7
471/00	**CR 05.05-A135 rev 1 Definition of 8PSK modulation accuracy parameters in Annex G**	Agilent Technologies	7.2.6.6
472/00	**GERAN Timeplan for Release 2000 – 2001**	Drafting group on GERAN	7.2.6.7
482/00	**CR 05.05-A151 Switching Transients for 8-PSK**	Siemens	7.2.6.6
485/00	**CR 05.02-A142 GPRS and SMS-CB interworking**	Mannesmann	7.2.6.2
486/00	**Open items on EDGE release 99**	Rapporteur	8.2.2
487/00	**Radio Requirements for the GERAN**	Drafting Group on GERAN	7.2.6.7
488/00	Liaison Statement on CR 23.122 after split in SMG2 and CN1	SMG2-WPB	7.2.6.6
489/00	**CR 05.08-A207 rev 4 Enhanced Measurement Reporting**	Nokia	7.2.6.11
500/00	**Liaison Statement on CR 23.122 after split in SMG2 and CN1**	SMG2-WPB	7.2.6.6
501/00	**CR 05.08-A233 rev 1 Enhanced Measurement Reporting for (E)GPRS**	Nokia	7.2.6.11
502/00	CR 05.08-A240 rev 3 EGPRS LQC measurements filtering	Nokia	7.2.6.6
503/00	**CR 05.05-A101 rev 5 Transmitter/receiver performance for EDGE**	SMG2-WPB	7.2.6.6
504/00	**CR 05.05-A141 rev 1Nominal Error Rate performance for 8-PSK**	SMG2-WPB	7.2.6.6
505/00	**CR 05.05-A135 rev 2 Definition of 8PSK modulation accuracy parameters in Annex G**	SMG2-WPB	7.2.6.6
506/00	**CR 05.08-A203 rev 3 COMPACT Change Request for GSM 05.08**	SMG2-WPB	7.2.6.6

Tdoc SMG2	Title	Source	Agenda Item
507/00	Revised WI description sheet (GSM 10.00); GSM in the 400 MHz bands	Rapporteur	8.2.2
508/00	**Draft Report of ETSI STC SMG2-WPB#12**	Secretary WPB	8.2.1

ANNEX D - Output of the meeting

Withdrawal of GSM 05.90 for R99 !

Tdoc SMG2 472/00 "GERAN Timeplan for Release 2000 – 2001"

Approved Tdocs for LCS

Tdoc SMG2 114/00 "CR 05.05-A236 RF requirements for TOA LMU (R98)", and

Tdoc SMG2 115/00 "CR 05.05-A237 RF requirements for TOA LMU (R99)"

Tdoc SMG2 116/00 "CR 05.05-A238 Requirements on E-OTD LMU and E-OTD MS (R98)", and

Tdoc SMG2 117/00 "CR 05.05-A239 Requirements on E-OTD LMU and E-OTD MS (R99)"

Tdoc SMG2 106/00 "CR 03.30-A009 LCS operation with repeaters (R98)", and

Tdoc SMG2 107/00 "CR 03.30-A010 LCS operation with repeaters (R99)"

Tdoc SMG2 382/00 "CR 05.50-A012 rev 1 Background information for requirements on TOA LMU (R98)", and

Tdoc SMG2 383/00 "CR 05.50-A013 rev 1 Background information for requirements on TOA LMU (R99)"

Approved Tdocs for GPRS

Tdoc SMG2 22/00 "CR 05.02-A123 PTCCH block numbering R99"

Tdoc SMG2 23/00 "CR 05.02-A124 Correction of BS_PRACH_BLKS range R97"

Tdoc SMG2 24/00 "CR 05.02-A125 Correction of BS_PRACH_BLKS range R98"

Tdoc SMG2 25/00 "CR 05.02-A126 Correction of BS_PRACH_BLKS range R99"

Tdoc SMG2 28/00 "CR 05.08-A231 Clarification of Extended Measurement requirements R99"

Tdoc SMG2 91/00 "CR05.05-A145 Relaxation of C/I performance requirement for CS4 (R97)"

Tdoc SMG2 92/00 "CR05.05-A146 Relaxation of C/I performance requirement for CS4 (R98)"

Tdoc SMG2 93/00 "CR05.05-A147 Relaxation of C/I performance requirement for CS4

Tdoc SMG2 385/00 "CR 03.64-A069 rev 3 GPRS and SMS-CB interworking"

Tdoc SMG2 401/00 "CR 05.08-A232 rev1 Correction of measurement filtering for power control R99"

Tdoc SMG2 402/00 "CR 05.02-A136 rev 1 Correction to non-DRX mode (R97)"

Tdoc SMG2 403/00 "CR 05.02-A137 rev 1 Correction to non-DRX mode (R98)"

Tdoc SMG2 404/00 "CR 05.02-A138 rev 1 Correction to non-DRX mode (R99)"

Tdoc SMG2 485/00 "CR 05.02-A142 rev 1 GPRS and SMS-CB interworking"

Tdoc SMG2 411/00 "CR 05.50-A016 Update of GPRS background information (R97)

Tdoc SMG2 412/00 "CR 05.50-A017 Update of GPRS background information (R98)"

Tdoc SMG2 413/00 "CR 05.50-A018 Update of GPRS background information (R99)"

Approved CRs for GSM-3G handovers and multimode operation

Tdoc SMG2 131/00 "CR on removal of CN procedures from 03.22 (03.22 split) (Work Item TEI)". References to be fixed before presentation to SMG#31.

Approved CRs for EDGE

(Tdoc SMG2 486/00 "Open items on EDGE release 99")

EGPRS

Tdoc SMG2 352/00 "CR 05.03-A037 Correction for EGPRS channel coding"

Tdoc SMG2 451/00 "CR 05.05-A150 Incremental Redundancy Performance"

Tdoc SMG2 452/00 "CR 05.08-A244 Example on Link Adaptation Algorithm for EGPRS"

Tdoc SMG2 502/00 "CR 05.08-A240 rev 3 EGPRS LQC measurements filtering"

Tdoc SMG2 504/00 "CR 05.05-A141 rev 1 Nominal Error Rate performance for 8-PSK"

ECSD

Tdoc SMG2 253/00 "CR 05.03-A036 Correction for ECSD Channel Coding"

LAYER 1

Tdoc SMG2 62/00 "CR 05.10-A050 Modifications for 8-PSK"COMPACT

Tdoc SMG2 458/00 "CR 05.50-A011 8-PSK Introduction Change Request for GSM 05.50"

Tdoc SMG2 460/00 "CR 05.05-A134 rev 1 Measurement Filter for EDGE EVM"

Tdoc SMG2 384/00 "CR 05.05-A149 EVM requirements for EDGE BTS transmitter with combining equipment"

Tdoc SMG2 56/00 "CR 05.05-A136 Clarification of Intra BTS Intermodulation Attenuation requirements for MXM 850 and MXM 1900 BTS"

Tdoc SMG2 57/00 "CR 05.05 A137 Clarification of Intra BTS Intermodulation Attenuation requirements for PCS 1900 BTS"

Tdoc SMG2 58/00 "CR 05.05 A138 Definition of MS for Mixed-mode network"

Tdoc SMG2 59/00 "CR 05.05-A139 Correction to Output level dynamic operation"

Tdoc SMG2 63/00 "CR 05.05-A142 Corrections to receiver characteristics for EDGE"

Tdoc SMG2 482/00 "CR 05.05-A151 Switching Transients for 8-PSK"

Tdoc SMG2 505/00 "CR 05.05-A135 rev 1 Definition of 8PSK modulation accuracy parameters in Annex G"

Tdoc SMG2 503/00 "CR 05.05-A101 rev 5 Transmitter/receiver performance for EDGE"

COMPACT

Tdoc SMG2 144/00 "CR 05.10-A051 Timegroup definition removal from 05.10"

Tdoc SMG2 145/00 "CR 05.02-A128 Timegroup rotation and NIB Clarification"

Tdoc SMG2 222/00 "CR 05.02-A133 USF Handling in B0"

Tdoc SMG2 146/00 "CR-05.02-A129 Clarifications in 05.02"

Tdoc SMG2 467/00 "CR 05.01-A024 rev 1 on complete Frequency hopping for COMPACT"

Tdoc SMG2 468/00 "CR 05.02-A143 rev 1 Complete Frequency hopping on COMPACT"

Tdoc SMG2 469/00 "CR 05.08-A243 rev 1 Missing GSM 850 requirements for Classic BCCH"

Tdoc SMG2 464/00 "CR 05.02-A127 rev 1 COMPACT Change Request for GSM 05.02"

Tdoc SMG2 465/00 "CR 05.08-A234 rev 1 COMPACT Change Request for GSM 05.08"

Tdoc SMG2 506/00 "CR 05.08-A203 rev. 3 COMPACT Change Request for GSM 05.08"

Approved Tdocs for GSM 400

Tdoc SMG2 348/00 "CR 05.05-A143 rev 1 Spurious emission measurement bandwidths updated to include GSM 400 systems"

Approved Tdocs for AMR

Tdoc SMG2 39/00 "CR 05.03-A034 Correction concerning AMR - SID_FIRST signalling and clarification concerning bit order of codec mode code words R98"

Tdoc SMG2 40/00 "CR 05.03-A035 Correction concerning AMR - SID_FIRST signalling and clarification concerning bit order of codec mode code words R99"

Tdoc SMG2 41/00 "CR 05.09-A005 Clarification of the identification of the codec modes within the active codec set for AMR"

Approved Tdocs for Harmonisation PCS 1900

Tdoc SMG2 88/00 "CR 05.05-A144 Harmonisation of Transmitter/receiver performance requirements for PCS 1900"

Approved Tdocs for TEI (Correction)

Tdoc SMG2 489/00 "CR 05.08-A207 rev 4 Enhanced Measurement Reporting", will be presented directly to the SMG2 Plenary meeting.

Tdoc SMG2 501/00 "CR 05.08-A233 rev 1 Enhanced Measurement Reporting for (E)GPRS", will be presented directly to SMG2 Plenary.

LS (to be approved in SMG2 Plenary):

Tdoc SMG2 453/00 "**Proposed Liaison Statement to SMG7 on Testing of Link Quality Measurement accuracy**" (**To:** SMG7)

Tdoc SMG2 387/00 "**Proposed Answer to Liaison Statement from SMG7 on Definition of Block Errors**" (**To:** SMG7)

Tdoc SMG2 406/00 "Proposed Liaison Statement on Clarification of the cell reselection for a GPRS MS", was sent from SMG2-WPB (**To:** 3GPP TSG SA2, **Copy:** 3GPP TSG CN1, ETSI SMG7, ETSI SMG)

Tdoc SMG2 463/00 "Draft Liaison Statement on the measurement requirements for GSM in UMTS" (**To:** 3GPP TSG-RAN WG2, **Copy:** 3GPP TSG RAN4)

Tdoc 470/00 "Draft Liaison Statement on GERAN (GSM/EDGE) architecture. Response to Tdoc SMG2 141/00" (**To:** SMG 12 / S2)

Tdoc SMG2 500/00 "Liaison Statement on CR 23.122 after split in SMG2 and CN1" (**To:** TSG CN1)

Tdoc SMG2 484/00 "Proposed Response to Liaison Statement on GSM 02.06 specification transfer to 3GPP" (To: SMG1/3GPP S1, **Copy:** SMG7)

Tdoc SMG2 462/00 "Proposed Liaison Statement on Twinkling replacement antennas" (**To:** TCAM, GSM Association-TWG, GTAAB, **Copy:** ETSI SMG, ETSI ERM, GSM Association, CEPT/ERC, 3GPP TSG RAN, 3GPP TSG T, 3GPP TSG SA, ECTEL TMS)

Exhibit E

3GPP TSG SA WG3 Security — S3#12 Report

11-14 April, 2000, Stockholm, Sweden

Source: **Secretary**

Title: **Draft Report Version 1.0.0**

Status: **Approved**

Stockholm waterfront

Contents

1 Opening of the meeting

The SA WG3 Vice Chairman, Mr. S. Pütz, Chaired the meeting. Mr. Pütz opened the meeting and Mr. R. Blom, Ericsson, welcomed delegates to Stockholm and explained the domestic arrangements.

2 Objectives of meeting

The Chairman outlined the meeting objectives and schedule, provided in TD S3-000266.

- Content and schedule for Release 2000 Security work.
- 3GPP/3GPP2 Security Harmonisation discussions to come to common agreement for the meeting with TIA TR-45 (AHAG) on 12 April 2000.
- 2G Security issues - GPRS encryption and A5/2 algorithm.
- Finalisation of remaining Release 1999 security issues
- Start work on Release 2000 security issues.

3 Approval of the agenda

The Draft Agenda, given in TD S3-000215 was considered and the scheduling discussed. It was then approved without change.

4 Registration and assignment of input documents

The documents available at the start of the meeting were allocated to their appropriate agenda items.

5 Approval of meeting report from S3#11

The report from SA WG3#11 version 0.3.0, provided in TD S3-000216 had been distributed by e-mail for comment. It was further commented upon in the meeting and some minor changes made. The updated report, version 1.0.0 was then approved (available on the 3GPP FTP server, SA WG3 area).

The List of actions from the previous meeting were checked, Action 11/5 was outstanding, 11/10 was partially completed (comments to Mr. G. Køien). All other actions had been completed.

6 Reports / Liaisons from other 3GPP and SMG groups

6.1 3GPP and SMG plenary

TD S3-000229 Draft Report of TSG SA Meeting #7 - version 0.0.1. The Chairman highlighted the items from the Plenary of concern to SA WG3 using TD S3-000230 "Notes on S3 presentation at SA#7" and TD S3-000234 (presentation slides).

- Liaison with N1 is needed on the value of integrity checking for Emergency Calls.
- SA WG3 was asked to clarify the terminology of R98- and R99+ used in their specifications.
- TSG SA formally approved the 3GPP cipher and integrity protection algorithm.
- The need to have a standardized UMTS authentication algorithm was approved. To be developed by ETSI SAGE, subject to funding confirmation.
- Authentication failure notification: MS behaviour on authentication failure is still open. Authentication failure notification was allowed for late inclusion in Release 1999 if completed by CN#8/SA#8.
- MAP Security and EUIC were agreed to be moved to Release 2000, so SA WG3 need to remove these features from the Release 1999 Specifications with CRs and to re-insert them into the new Release 2000 specifications with more CRs. A proposed procedure was to create the Release 1999 version (3.5.0) with the agreed Release 1999 features and then to create an equivalent Release 2000 specification (version 4.0.0). This will then be updated via CRs to include the full agreed Release 2000 features. (i.e. in this way V3.5.0 = V4.0.0). Some discussion over the formalities of updating the specification with CRs at the same SA Plenary as the Release 2000 version 4.0.0 is approved took place.

  At the end it was proposed to request TSG SA for a two step approval procedure: First to present CRs related to Release 1999 to remove MAP Security and EUIC at TSG SA#8. This will result in TS 33.102 version 3.5.0. After plenary approval of these CRs S3 will present in a second step also at SA#8 a set

of other CRs related to R00. Approval of this set of CRs would produce TS 33.102 version 4.0.0. After TSG SA#8, both versions will be produced by MCC. If SA WG3 can explain the benefit of this procedure to TSG SA, it should not become a problem to get it approved (full visibility is given).

SA WG3 therefore need to create CRs to produce the Release 2000 version at the same time as the CRs to remove MAP Security and EUIC from the current Release 1999 version (version 3.4.0). These CRs should then be further discussed by SA WG3 and enhanced to include any additional security required for Release 2000. It should be noted that TSG CN need the Security requirements very soon, in order to avoid the non-inclusion in Release 2000 due to lack of time. Therefore, SA WG3 could assume that the CRs to Release 1999, removing MAP Security and EUIC will be approved at TSG SA#8 and produce CRs to an expected version 3.5.0 for approval at TSG SA#8.

6.2 3GPP WGs and SMG STCs

TD S3-000225: Reply to Location of conversion functions c2 and c3. This was provided for information and noted.

TD S3-000235: Liaison Statement to TSGs on Enhanced User Identity Confidentiality. This LS was noted.

TD S3-000239: Draft Meeting Report of CN WG2 (SA WG3 experts invited). This was provided for information and noted.

TD S3-000223: LS on Open Service Architecture - Security. Delegates were asked to check if they have any problems with the document.

ACTION #12/1: All to check the OSA Security document TD S3-000223 and contribute any security problems or issues to the May 2000 meeting of SA WG3.

TD S3-000218: USIM triggered authentication and key setting during PS connections. CN WG1 do not feel they can complete the work on this for Release 1999 but will consider it for Release 2000. This was noted and the topic was included in the Release 2000 work plan considerations.

TD S3-000217: Liaison response to S3's LS (S3-000190) on Functions of Key Distribution and Key Administration for MAP security. This was provided for information and noted.

TD S3-000224: Answer to LS on Functions of Key Distribution and Key Administration for MAP security. SA WG2 state that there is no impact on Release 1999 work if key update frequency is in the order of weeks or months. Some discussion took place on the validity of the frequency of key updates assumed by SA WG2, and also whether this referred to single network Key updates or complete updates of all roaming partners keys. This was postponed to the MAP Security ad-hoc meeting at SA WG3 #13 (see also the discussion under MAP Security, below).

TD S3-000226: Liaison statement to TSG-S WG3 on GTP Signalling Security. CN WG2 asked SA WG3 to answer the following questions by their meeting 22-26 May 2000:

- Is IPSec the **only** protection mechanism to be used for GTP signalling?
- Is protection required for both GTP User plane and GTP Control plane signalling?

More detail on the CRs to 29.060 mentioned in the liaison were needed in order to understand the meaning of the liaison. As SA WG3 have not yet defined the GTP Security requirements it was argued that CN WG2 should not be defining protocols for this at this time. This was postponed to the MAP Security ad-hoc meeting at SA WG3 #13 (see also the discussion under MAP Security, below).

TD S3-000164: LS from SMG9 to SA WG3 (and SA WG1) on New SIM toolkit feature: "Auto-answer & Mute-ringing". This was presented to the meeting. A response to this LS from SA WG1 was provided in TD S3-000264. This implies some disadvantages regarding privacy with this feature, and will be reviewed by SA WG1, but is not seen as a requirement at present. SA WG1 requested contributions on this in order to decide if it should be included in a Release. SA WG3 were asked for their opinion. It was discussed and concluded that this would allow eavesdropping on users, but activating the mobile without the users knowledge and is against the principles of security.

TD S3-000265: Around Auto-answer. This discusses the Auto-answer proposal, which asks for the feature to be included in SIM Toolkit, and states that this is already a feature of TDMA and mobile "headsets" (hands-free adapters) which allow auto-answer of incoming calls. It argues that the eavesdropping threat is not real,

as the incoming call identity (CLI) is used for screening the callers which are auto-answered. The security level of the CLI was questioned, as visited networks can modify the CLI before forwarding to the MS.

It was concluded that the potential security problems and threats override the advantage of such a feature. If such a feature is requested, then it should be included in SA WG3 as a new security concept for study. A response Liaison statement from SA WG3 to SMG9 was prepared and presented in TD S3-000270 which outlines the security problems with use of CLI for authentication and that SA WG3 will consider the security requirements of this feature if it is a requirement of SA WG1.

6.3 3GPP partners

No input.

6.4 Others (GSMA, GSM2000, T1P1, SAGE, TIA, TR-45)

TD S3-000237: DRAFT LS to GSM-A on Authentication Algorithm. It was reported that there had been no early discussion and agreement on funding and progress had been delayed. The GSM Association Security Group and SA WG3 were asked to co-ordinate their work in future to prevent such problems. It was clarified that the GSM Association have regular liaison with GSM 2000. As there had not been a GSM Association SG meeting, this liaison had not yet been responded to by the GSM Association SG.

TD S3-000236: Work plan for the design of the 3GPP Authentication Algorithm (MCC Task Force). The minutes of the GSM 2000 meeting, where the A5/3 algorithm production was discussed are provided in TD S3-000271. A preference for basing the new A5/3 algorithm on Kasumi was expressed. These documents were noted.

7 Work item management: New work item structure as defined by SA

Mr. M. Pope, MCC, presented TD S3-000278, TD S3-000279 and TD S3-000280. The Features, Building Blocks and Work tasks were discussed and it was agreed that the Work Plan in TD S3-000281 could be used as a starting point for feedback to SA WG2 on 17 April. There was a problem with reviewing the document and cross-mapping it into the proposals from SA WG2 IGC proposals in time. It was agreed that the updated Work Plan (TD S3-000305) should be used by the Security IGC for inclusion in the overview document.

8 Content and schedule of R00 security work

TD S3-000247, TD S3-000248, TD S3-000249.

Unfortunately, nobody was available from SA WG2 to give a presentation of the current thinking on Release 2000 Network Architecture, however, Mr. P. Howard provided a short summary of the available documents.

TD S3-000248: Release 2000 QoS Key Issues. This document provided for consideration with TD S3-000247 and was noted.

TD S3-000247: Key issues for Release 2000. This document provided the Key Issues list from SA WG2 ad-hoc group and was noted. It should be considered by SA WG3 delegates.

TD S3-000249: Draft TR 23.821 v0.2.0 “Architecture Principles for Release 2000”. This document was provided for information for consideration with TD S3-000246 and was noted.

TD S3-000246: TR 23.821 V0.12.0: Architecture Principles for Release 2000. This provides a general Network architecture and should be considered by SA WG3 delegates. The document was noted.

TD S3-000244: Draft R2000 Project Plan for Security v0.0.2. SA WG2 have started producing draft project plans for Release 2000, and this document provides the Security Project Plan. It includes the Features, Building Blocks and Work Tasks, which were later introduced under Agenda Item 7. It was suggested that SA WG3 concentrate on the Work Tasks and assign Rapporteurs and consider setting up of small Working Parties, if necessary, for some of the larger work tasks.

After some discussion it was agreed that Mr. P. Howard would update the document for further discussion later in the meeting. This was done and document TD S3-000281 was presented along with an update on rejection of unencrypted calls, provided in TD S3-000301 which was agreed to be included. Some modifications were made to the document and the new version provided in TD S3-000305. It was proposed that this document is attached to the LS to SA WG2 in TD S3-000300 (see below).

ACTION #12/2: C. Brookson to contact SMG10 WPD Chairman to ask him to produce a WI description sheet for Lawful Interception for Release 2000.

TD S3-000300: Proposed LS on R00 working methods. This Liaison was approved and TD S3-000305 will be attached and sent to SA WG2.

ACTION #12/3: Secretary: TD S3-000300 (with TD S3-000305 attached) to be sent to SA WG2.

The use of TD S3-000305 for updating the SA IGC table on Security WIs was proposed. It was decided that the Security IGC would be asked to use this document as a basis for filling in the table.

A list of open issues from TSG SA#7 was provided in TD S3-000238, which was noted.

MAP Security:

The timing of the MAP Security for Release 2000 was discussed. TSG SA had asked SA WG3 to produce the CRs (at least for Layer III) for approval in June 2000 so that other groups can complete their work in good time. It was proposed to set up an ad-hoc group on Core Network Signalling Security, and was further suggested that such an ad-hoc should meet at the time of SA WG3 Plenary (e.g. by reducing plenary by one day and holding the ad-hoc the day before). Another suggestion to add one day to the SA WG3 Plenary and reserve a day for ad-hoc meetings. This suggestion was taken and it was arranged after the meeting to hold a 1-day MAP Security ad-hoc meeting after SA WG3 #13, in Japan and also after SA WG3 #14 in Norway.

9 Review 3G security project plan

This was dealt with under agenda item 8, above.

10 Joint session with TIA TR-45 AHAG on 3GPP/3GPP2 harmonisation

TD S3-000232: Draft agenda for joint session with TIA TR-45 AHAG on 3GPP/3GPP2 security harmonisation. The agenda was considered before the joint meeting to determine what preparation SA WG3 needed to do before the meeting. Under the agenda item 6.1: "Joint control of 3GPP AKA specifications" for this meeting, the SA WG3 requirements were discussed. One solution would be to extract the AKA parts of the specification for joint maintenance by the two groups. Another would be to identify the sections which are under joint responsibility and ensure that both groups are aware of proposed change requests. This could be done via liaison rather than formal procedures. It was requested that corrections should not be delayed by unnecessary bureaucracy and should proceed quickly, and that only proposals for functional changes to AKA should be fully approved by both Projects.

TD S3-000309 Liaison statement on HE initiated cancellation of AV in SN: Liaison to AHAG to clarify the revocation of vectors mechanism. The liaison was approved.

ACTION #12/4: Chairman: TD S3-000309 to be sent to TR-45 AHAG.

11 2G security issues

The report on the GSM discussions are included in the report provided in the SMG10 area of the ETSI SMG FTP server. http://docbox.etsi.org/tech-org/smg/Document/smg10/plenary/SMG10-reports/2000.

Action Points #12/5 to 12/12 are allocated under this agenda item.

12 3G security issues

12.1 Algorithms

The need for a test algorithm for 3GPP authentication was discussed. TS 34.108 requires updating for 3GPP as it is currently based upon GSM algorithm. Ericsson have proposed a test algorithm clause for this, which

will be presented to T WG1 for approval at their meeting the following week. SA WG3 were asked if they would like to have input on this. SA WG3 did not need to see this proposal, but should review the test specifications in general to ensure that the security functions are covered by them. SA WG3 would like to review the test algorithm at the May 2000 meeting.

ACTION #12/13: TS 34.108 to be forwarded to M. Pope for distribution to the SA WG3 list to review and comment to the next SA WG3 meeting.

TD S3-000282: Final document on the Evaluation of the 3GPP Confidentiality and Integrity algorithms. An error in Figure 6 was noted and the report will be updated for consideration for publication at the next SA WG3 meeting.

SA WG3 were asked by AHAG at the joint meeting to inform ETSI SAGE that TR-45 have decided to use SHA-1 for the default local authentication algorithm in 3GPP2 and ask them to also consider this as a candidate for 3GPP.

12.2 Review of other specifications

TD S3-000251: Review of TS 24.008. A list of inconsistencies had been identified and detailed in this document. Two proposed CRs to 24.008 were provided in this contribution to correct the problems found.

ACTION #12/14: B. Vinck to forward the proposed changes to CN WG1 colleagues for discussion and action in CN WG1.

Two open issues were identified (VLR and SGSN behaviour on MS reject of authentication token and MS indication of synchronisation failure to the network). These issues need specification in 33.102 before they can be included in 24.008. This should be done via e-mail discussion.

ACTION #12/15: P. Howard to set up e-mail discussion on open issues. All: to consider the open issues and make proposals to SA WG3 in time to provide proposals to CN WG1 on 24.008 (deadline for all changes to 24.008 and 33.102, Release 1999 specifications is June 2000).

12.3 Open R99 security issues

The review of other groups' specifications is ongoing. B. Vinck agreed to continue his review to ensure security requirements are included.

TD S3-000242: Identifying specifications that implement “Secure UMTS-GSM Interoperation”. This contribution, from Ericsson, was noted. Ericsson offered to proceed with the work of reviewing the affected specifications.

12.4 R00 security issues

CN WG4 and SA WG5 have requested that SA WG3 finalise the security requirements for Release 2000 as soon as possible in order for them to complete their work in time for the Release 2000 deadline. The MAP Security work should be reviewed by SA WG3 delegates after this meeting and contributions made on Layer 1 and Layer 2 Security for Release 2000 at the May 2000 meeting.

13 Review of (draft) S3 specifications

13.1 TS 21.133 Threats and requirements

There were no contributions for this TS.

13.2 TS 22.022 Personalisation of ME

There were no contributions for this TS.

13.3 TS 33.102 Security architecture

TD S3-000268: CR 092: "Removal of enhanced user identity confidentiality". This CR was approved.

TD S3-000269: CR093: "Removal of network domain security". This CR was approved.

TD S3-000263: CR 091: "Inclusion of the radio bearer identity to the integrity mechanism". This CR was approved and it was agreed to forward it to RAN WG2.

TD S3-000262: CR 090: "Clarification of BEARER and DIRECTION parameters". This CR was approved and a corresponding CR to 33.105 will be produced by Nokia.

TD S3-000295: CR 088: "Initialisation of synchronisation for ciphering and integrity protection". This CR was approved and it was agreed to forward it to T WG3 and RAN WG2.

TD S3-000261: CR089: "Addition of another variant of sequence number generation". This CR was approved.

TD S3-000291: This CR was postponed to Meeting #13. Delegates are asked to consider this proposal before the meeting in terms of it's acceptability and whether the solution will pass export controls.

TD S3-000293: CR 083: "Authentication and key agreement (minimal)" This CR was approved.

TD S3-000257 and TD S3-000256 were withdrawn. Work is ongoing in 25.331 and consistency of the work should be verified before presenting these CRs.

TD S3-000294: CR084: "Conversion functions for GSM-UMTS interoperation". This CR was approved.

TD S3-000253: CR on "Authentication and key agreement (editorial)" concerning Better presentation of the mechanism for authentication and key agreement, was presented for information. Delegates were asked to check the need for the restucturing proposed in the CR for Release 1999 and/or Release 2000.

ACTION #12/16: Delegates to check the need for restucturing proposed in the CR in TD S3-000253 for Release 1999 and/or Release 2000.

TD S3-000292: CR094: "Cipher and integrity key update once every 24 hours". This CR was approved.

TD S3-000289: CR096 " Clarification on the HFN handling". The order of preference was proposed for removal from this CR. This was done and the CR was approved.

TD S3-000290: CR 081: "Clarification on the UIA and UEA selection". This CR was postponed and delegates were asked to investigate the impact of the proposals and contribute to the next meeting. An e-mail discussion will be set up for this item.

TD S3-000288: CR 080: "Clarification on ciphering and integrity protection at intersystem handover". This CR was approved.

TD S3-000302: CR 095: "Handling of emergency call": This CR was approved.

13.4 TS 33.103 Integration guidelines

There were no contributions for this TS.

13.5 TS 33.105 Algorithm requirements

There were no contributions for this TS.

13.6 TS 33.106 LI requirements

There were no contributions for this TS.

13.7 TS 33.107 LI architecture

There were no contributions for this TS.

13.8 TR 33.120 Security principles and objectives

There were no contributions for this TR.

13.9 TR 33.900 Guide to 3G security

TD S3-000181: TR 33.900 V1.3.0. This was presented by C Brookson and noted. SA WG3 are asked to input any comments to Mr. C Brookson. This document is expected to be approved for presentation to TSG SA as version 2.0.0 in the May 2000 meeting of SA WG3.

13.10 TR 33.901 Criteria for algorithm design process

There were no contributions for this TR.

13.11 TR 33.902 Formal analysis

There were no contributions for this TR.

14 Approval of output documents

TD S3-000299. This liaison was discussed and details contained in TD S3-000304 were incorporated and the updated document provided in TD S3-000307.

TD S3-000283 This Liaison was discussed and it was felt that more investigation into what AHAG want from SA WG3 is required before submitting the liaison. It was agreed to send a liaison to AHAG to clarify this and TD S3-000283 was withdrawn.

TD S3-000287. Withdrawn as a result of TD S3-000283 decision.

TD S3-000297. Proposal on authentication vector generation algorithm for conformance testing. This was dealt with under agenda item 12.1, above.

TD S3-000306: Liaison statement to SMG and CN WG1/SMG3 on GPRS ciphering. This liaison was approved.

TD S3-000308: Liaison statement to CN WG4: Evaluation of the impact on positive authentication reporting on network performance. This liaison was approved.

15 Future meeting dates and venues

TD S3-000298 provides a liaison from CN Chairman asking for a joint meeting between CN WGs and SA WG3 before the next TSG Plenaries (i.e. for May or early June 2000). It was agreed to propose 14-15 June 2000 (Host to be confirmed). This was later revised for 13-14 June 2000 hosted by ETSI in Sophia Antipolis.

ACTION #12/17: Chairman to send the proposed dates for a joint meeting to relevant people.

Meeting	Date	Location	Host
S3#13	23 - 26 May 2000	Tokyo	DoCoMo
S3 / CN WGs Joint ad-hoc on Requirements Impacts	13-14 June 2000 (note)	Sophia Antipolis	ETSI
S3#14	1-4 August 2000	Oslo	TeleNor
S3#15 Probably joint with AHAG	Early September 2000	To be confirmed	Host required
S3#16	27-30 November 2000	Israel (TBC)	Motorola (TBC)

NOTE: After the meeting it was decided to hold a joint CN/S3 meeting on 13-14 June 2000, hosted by ETSI in Sophia Antipolis.

TD S3-000284 contained the invitation to the next meeting, in Yokohama, Japan. This was noted.

16 Any other business

There were no additional topics raised.

17 Close of meeting

The Chairman thanked the Hosts for their arrangements for the meeting and the delegates for their hard work and co-operation and closed the meeting.

Annex A: List of documents at the meeting

Number	Title	Source	Agenda item	Document for	Replaced by Tdoc	Comments Status
S3-000215	Draft Agenda for Meeting #12	Chairman	2	Approval		Approved without change
S3-000216	Draft Report of Meeting #11, version 0.3.0	Secretary	5	Approval		Approved with changes (new version 1.0.0)
S3-000217	Liaison response to S3's LS (S3-000190) on Functions of Key Distribution and Key Administration for MAP security	SA WG5	6.2	Information		Noted
S3-000218	USIM triggered authentication and key setting during PS connections	CN WG1	6.2	Discussion		Considers feature as suitable only for R2000. Noted and considered in R2000 discussions
S3-000219	Reply to LS on "Introduction of rejection of non ciphered calls for GPRS"	CN WG1/SMG3	11.1	Discussion		Rejects CR to 04.08 in S3-000058 B. Vinck to draft an LS to CN WG1 and SMG on SMG10 GPRS ciphering agreements, based upon TDs 201 and 205
S3-000220	CR to 33.102: Ciphering (revised TD 128)	Siemens Atea	x	Approval		CR066r1 Approved by e-mail before the meeting for SA#7
S3-000221	CR to 33.102: Data integrity (revised TD 129)	Siemens Atea	x	Approval		CR067r1 Approved by e-mail before the meeting for SA#7
S3-000222	Initiation of COUNT-I and COUNT-C	Siemens Atea	13.3	Decision		Postponed to Meeting#13
S3-000223	LS on OPEN SERVICE ARCHITECTURE - SECURITY	SA WG2	6.2	Discussion		All to check OSA Security and revisit at SA3#13
S3-000224	Answer to LS on Functions of Key Distribution and Key Administration for MAP security	SA WG2	6.2	Discussion		Postponed to SA3#13 MAP security ad-hoc
S3-000225	Reply to Location of conversion functions c2 and c3	T WG3	6.2	Discussion		Noted
S3-000226	Liaison statement to TSG-S WG3 on GTP Signalling Security	CN WG2	6.2	Discussion		Postponed to SA3#13 MAP security ad-hoc
S3-000227	Requirements Specification for the GSM A5/3 Encryption Algorithm version 0.2	ETSI SAGE	11.2	Information	S3-000285	Revised V0.3 in TD 285
S3-000228	CR to 33.900: O&M Access Control and IP network Security	Orange UK	13.9	Approval		Not a CR as not under Change Control (v1.2.0)
S3-000229	Draft Report of TSG SA Meeting #7 - version 0.0.1	Secretary	6.1	Information		Noted
S3-000230	Notes on S3 presentation at SA#7	Chairman	6.1	Information		Noted
S3-000231	SA WG3 "to-do list" for meeting #12	Chairman	8, 12	Discussion / Action		Noted
S3-000232	Draft agenda for joint session with TIA TR-45 AHAG on 3GPP/3GPP2 security harmonisation	Vice-Chairman 3GPP TSG-SA WG3 and Chairman TIA TR-45 AHAG	10	Approval		Approved
S3-000233	TR-45 AHAG AKA Issues	TR45.2 / TR 45 AHAG	10	Discussion		Discussed in joint AHAG meeting

Number	Title	Source	Agenda item	Document for	Replaced by Tdoc	Comments Status
S3-000234	SA WG3 report to TSG SA#7 (presentation)	Chairman	6.1	Information		Noted
S3-000235	Liaison Statement to TSGs on Enhanced User Identity Confidentiality	TSG SA WG2	6.2	Discussion		Noted
S3-000236	Work plan for the design of the 3GPP Authentication Algorithm (MCC Task Force)	ETSI SAGE	6.4	Discussion		Noted
S3-000237	DRAFT LS to GSM-A on Authentication Algorithm	3GPP TSG SA (drafting person)	6.4	Information		Noted
S3-000238	Open Issues for Release 99 List (from TSG SA Plenary)	TSG SA	8, 12.3	Discussion		Noted
S3-000239	Draft Meeting Report of CN WG2 (SA WG3 experts invited)	MCC CN WG2 Secretary	6,2	Information		Noted
S3-000240	CR to 33.102: Clarification on ciphering and integrity protection at intersystem handover	Ericsson	13.3	Approval	S3-000288	Revised in TD 288
S3-000241	CR to 33.102: Clarification on the UIA and UEA selection	Ericsson	13.3	Approval	S3-000289 S3-000290	Replaced by TDs 289, 290
S3-000242	Identifying specifications that implement “Secure UMTS-GSM Interoperation”.	Ericsson	12.2	Discussion		Noted. Ericsson to review affected specifications
S3-000243	Cipher and Integrity key update	Ericsson	10, 13.3	Discussion	S3-000292	Revised in TD292
S3-000244	DRAFT R2000 Project Plan for Security v0.0.2	P Howard	9	Discussion	S3-000281	Presented and noted.
S3-000245	Project Plan for Security v1.2.1	P Howard	9	Discussion		
S3-000246	23.821 V0.12.0: Architecture Principles for Release 2000	P Howard	8	Discussion		Noted
S3-000247	Key issues for Release 2000	SA WG2 drafting group (P Howard)	8	Discussion		Noted with TD 248
S3-000248	Release 2000 QoS Key Issues	SA WG2 QoS drafting group (P Howard)	8	Discussion		Noted
S3-000249	draft TR 23.821 v0.2.0 “Architecture Principles for Release 2000”	SA WG2 editor (Telia)	8	Information		Noted with TD 246
S3-000250	Support for multiple GEA in TS 24.008	Siemens Atea	11.1	Discussion		Includes CR
S3-000251	Review of TS 24.008	Siemens Atea	12.2	Discussion		Includes 2 proposed CRs to 24.008
S3-000252	CR to 03.20: GPRS Ciphering algorithm negotiation	Siemens Atea	11.1	Approval	S3-000286	Updated in TD 286
S3-000253	CR to 33.102: Authentication and key agreement (editorial)	Siemens Atea	13.3	Information		CR082. Delegates to check the need for restucturing proposed in the CR. R99 and/or R00 ? Postponed to SA3#13
S3-000254	CR to 33.102: Authentication and key agreement (minimal)	Siemens Atea	13.3	Approval	S3-000293	Revised in TD 293
S3-000255	CR to 33.102: Conversion functions for GSM-UMTS interoperation	Siemens Atea	13.3	Approval	S3-000294	Revised in TD294
S3-000256	CR to 33.102: 3G-3G Handover	Siemens Atea	13.3	Approval		CR085
S3-000257	CR to 33.102: 3G-2G and 2G-3G Handover for CS services	Siemens Atea	13.3	Approval		CR086 Postponed to SA3#13
S3-000258	CR to 33.102: Limitation and reduction of the effective cipher key length by the serving network	Siemens Atea	13.3	Approval	S3-000291	Revised in TD 291
S3-000259	CR to 33.102: Initialisation of synchronisation for ciphering and integrity protection	Siemens Atea	13.3	Approval	S3-000295	Revised in TD 295
S3-000260	LS from SMG2 to SMG10 on “double ciphering” in GSM/GPRS Dual Transfer Mode	SMG2	11.1	Discussion		P. Hpward to draft response for agreement after the meeting
S3-000261	CR to 33.102: Addition of another variant of sequence number generation	Nokia	13.3	Approval		CR089. Approved

Number	Title	Source	Agenda item	Document for	Replaced by Tdoc	Comments Status
S3-000262	CR to 33.102: Clarification of BEARER and DIRECTION parameters	Nokia	13.3	Approval		CR090 Approved. Corresponding CR to 33.105 to be provided (Nokia)
S3-000263	CR to 33.102: Inclusion of the radio bearer identity to the integrity mechanism	Nokia	13.3	Approval		CR091 Approved
S3-000264	LS from SA WG1 : Answer to LS New SIM toolkit feature: "Auto-answer & Mute-ringing	SA WG1	6.2	Discussion		Not accepted, response in TD270
S3-000265	Around Auto-answer	GemPlus	6.2	Discussion		Not accepted, response in TD270
S3-000266	Objectives and meeting schedule for Meeting#12	Chairman	2	Information		Noted
S3-000164	LS from SMG9 to SA WG3 (and SA WG1) on New SIM toolkit feature: "Auto-answer & Mute-ringing"	SMG9	6.2	Discussion		Not accepted, response in TD270
S3-000267	CN WG2 TD N2B000428 CR to 29.060	CN WG2	6.1	Information		To be considered for decision at meeting#13
S3-000268	CR to 33.102: Removal of enhanced user identity confidentiality	Siemens Atea	13.3	Approval		CR092. Approved
S3-000269	CR to 33.102: Removal of network domain security	Siemens Atea	13.3	Approval		CR093 Approved
S3-000270	Response Liaison to SMG9 on "Auto-Answer and Mute ringing"	SA WG3	6.2	Approval		Not presented. To be cobsidered at meeting#13
S3-000271	Minutes of GSM 2000 meeting.	C Brookson	6.4	Information		Noted
S3-000272	Global Challenge for Initial Registration	TIA TR-45.2 Security Focus Group Chair	10	Discussion		Noted. AHAG to forward further results of studies to SA WG3
S3-000273	Overview of 3GPP (Presentation Slides)	SA WG3 Vice Chair (S Puetz)	10	Presentation		Noted
S3-000274	TIA TR-45 and 3GPP2 Security (Presentation Slides)	Chair, TR-45 Adhoc Authentication Group	10	Presentation		Noted
S3-000275	3GPP Security/AKA - Requirements and development (Presentation Slides)	Siemens Atea	10	Presentation		Noted
S3-000276	The ESA Process (Presentation Slides)	Qualcomm Inc.	10	Presentation		Noted
S3-000277	CR095 to 29.060: GTP Security	Nortel		Information		To be considered for meeting#13
S3-000278	Proposal for the Release 2000 Features, Building Blocks and Work Tasks v.0.9	TSG SA WG2 IGC meeting	7	Information		Noted. Security Work Plan to be used as a basis for updating the tables.
S3-000279	Examples of Features, Building Blocks and Work Tasks	MCC	7	Presentation		Presented.
S3-000280	Practical aspects of the handling of 3GPP Work Program	MCC	7	Information		Noted.
S3-000281	DRAFT R2000 Project Plan for Security v0.0.2 (revised TD 244)	P Howard	9	Discussion	S3-000305	Discussed and revised in TD 305
S3-000282	Final document on the Evaluation of the 3GPP Confidentiality and Integrity algorithms	ETSI SAGE		Discussion		To be updated and considered for approval at next meeting
S3-000283	LS to CN WG4 on TR-45 Recommendations	SA WG3 (G Koien)		Approval		Withdrawn, Liaison with AHAG needed on their requirements
S3-000284	Invitation to SA WG3 Meeting #13 (Japan)	Chairman		Information		Noted

Number	Title	Source	Agenda item	Document for	Replaced by Tdoc	Comments Status
S3-000285	Requirements Specification for the GSM A5/3 Encryption Algorithm version 0.3 (rev of TD 227)	C Brookson	11.2	Information	S3-000303	Noted. P. Howard to produce a cover note to the A5/3 requirements specification
S3-000286	CR to 03.20: GPRS Ciphering algorithm negotiation (revised TD 252)	Siemens Atea	11.1	Approval		CR A022 Postponed to SA3#13
S3-000287	Proposed CR to 33.102 (REL 2000): Selective deletion of Authentication Vectors from the profile of a roaming subscriber	Siemens Atea	13.3	Discussion		33.102 v4.0.0 not yet created.
S3-000288	CR to 33.102: Clarification on ciphering and integrity protection at intersystem handover	Ericsson	13.3	Approval		CR080 Approved
S3-000289	CR to 33.102: Clarification on the HFN handling	Ericsson	13.3	Approval		CR096 Approved with changes
S3-000290	CR to 33.102: Clarification on the UIA and UEA selection	Ericsson	13.3	Approval		CR081 Postponed to SA3#13
S3-000291	CR to 33.102: Limitation and reduction of the effective cipher key length by the serving network	Siemens Atea	13.3	Approval		CR087 Postponed to SA3#13
S3-000292	CR to 33.102: Cipher and integrity key update once every 24 hours	Ericsson	10, 13.3	Discussion		CR094. Approved
S3-000293	CR to 33.102: Authentication and key agreement (minimal)	Siemens Atea	13.3	Approval		CR083 Approved
S3-000294	CR to 33.102: Conversion functions for GSM-UMTS interoperation	Siemens Atea	13.3	Approval		CR084 Approved
S3-000295	CR to 33.102: Initialisation of synchronisation for ciphering and integrity protection	Siemens Atea	13.3	Approval		CR088 Approved
S3-000296	LS to CN WG4: Evaluation of the impact on positive authentication reporting on network performance	SA WG3			S3-000308	Replaced by TD 308
S3-000297	Proposal on authentication vector generation algorithm for conformance testing	Ericsson				Disussed under 12.1
S3-000298	LS preseting an Invitation to S3 on joint meeting CN / S3 on security requirements for R'00	Chairman		Information		Joint meeting arranged 13-14 June, ETSI.
S3-000299	Proposed LS on A5/3	Vodafone Airtouch			S3-000307	Replaced by TD 307
S3-000300	Proposed LS on R00 working methods	Vodafone Airtouch				To send to SA WG2 with TD305 attached.
S3-000301	Update to S3-000281 on rejection of unencrypted calls	Vodafone Airtouch				Included with TD 301
S3-000302	CR to 33.102: Handling of emergency call	Ericsson		Approval		CR095 Approved
S3-000303	Requirements Specification for the GSM A5/3 Encryption Algorithm version 0.3 (rev of TD 227)	C Brookson	11.2	Information		Noted. To forward to SMG#31bis
S3-000304	Report to SMG Plenary for A5/3 algorithm	SA WG3			S3-000307	Included with TD 299 in TD307
S3-000305	DRAFT R2000 Project Plan for Security v0.0.3 (revised TD 281)	P Howard	9	Discussion		To be attached to TD 300 and sent to SA WG2
S3-000306	LS to SMG and CN WG1/SMG3 on GPRS ciphering	SA WG3		Approval		Approved. To be sent to SMG and CN WG1/SMG3
S3-000307	Liaison Statement on A5/3	SMG10		Approval		Approved Forwarded to SMG#31bis
S3-000308	LS to CN WG4: Evaluation of the impact on positive authentication reporting on network performance	SA WG3		Approval		Approved. To be forwarded to CN WG4

Number	Title	Source	Agenda item	Document for	Replaced by Tdoc	Comments Status
S3-000181	TR 33.900 V1.3.0					Noted. Comments to C Brookson
S3-000309	Liaison statement on HE initiated cancellation of AV in SN	SA WG3		Approval		Approved. To be sent to TR-45 AHAG

Annex B: List of attendees

Name			Company	e-mail	3GPP Member	
Mr.	Andersson	Stefan	ERICSSON L.M.	stefan.x.andersson@ecs.ericsson.se	ETSI	SE
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Mr.	Krister	Boman	ERICSSON L.M.		ETSI	SE
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Annex C: Status of specifications under SA WG3 and SMG 10 responsibility

C.1 SA WG3 specifications

Specification			Title		Editor**	Rel	Comment
TS	21.133	3.1.0	Security Threats and Requirements	April 99	Per Christoffersson	R99	
TS	22.022	3.0.1	Personalisation of GSM ME Mobile functionality specification - Stage 1	Oct 99		R99	Transfer>TSG#4, CR at TSG#5
TS	33.102	3.4.0	Security Architecture	Mar 00	Bart Vinck	R99	
TS	33.103	3.2.0	Security Integration Guidelines	Oct 99	Bart Vinck	R99	TSG#7: 3.2.0
TS	33.105	3.3.0	Cryptographic Algorithm requirements	June 99	Bart Vinck	R99	CR at TSG#5 TSG#7: 3.3.0
TS	33.106	3.1.0	Lawful interception requirements	Jun 00	Bart Vinck	R99	
TS	33.107	3.0.0	Lawful interception architecture and functions	Dec 99		R99	New at TSG#6 approved
TS	33.120	3.0.0	Security Objectives and Principles	April 99	Tim Wright	R99	
TR	33.900	1.2.0	Guide to 3G security	Mar 00		R99	New at TSG#6
TR	33.901	3.0.0	Criteria for cryptographic Algorithm design process	June 99	Vinck Bart	R99	3.1.0 ex SAGE
TR	33.908	3.0.0	Security Algorithms Group of Experts (SAGE); General report on the design, specification and evaluation of 3GPP standard confidentiality and integrity algorithms	Mar 00	M. Walker	R99	CR at TSG#4,CR at TSG#5 TSG#7: 3.4.0
TR	33.909	3.0.0	ETSI SAGE 3GPP Standards Algorithms Task Force: Report on the evaluation of 3GPP standard confidentiality and integrity algorithms	Jun 00	M. Walker	R99	TSG#7 SP-000039 : S3-000105=NP-000049
TS	35.203	3.1.0	Specification of the 3GPP confidentiality and integrity algorithms; Document 3: Implementors' test data		M. Walker	R99	TSG#7: refered to in 33.908: Is a reference in 33.908

** Editors need update.

C.2 SMG10 Specifications

Specification latest version		Title	Release	ETSI Number		ETSI WI ref
01.31	7.0.1	Fraud Information Gathering System (FIGS); Service requirements - Stage 0	Release 1998			RTR/SMG-100131Q7
01.31	8.0.0	Fraud Information Gathering System (FIGS); Service requirements - Stage 0	Release 1999			RTR/SMG-100131Q8
01.33	7.0.0	Lawful Interception requirements for GSM	Release 1998			
01.33	8.0.0	Lawful Interception requirements for GSM	Release 1999			
01.61	8.0.0	General Packet Radio Service (GPRS); GPRS ciphering algorithm requirements	Release 1997	TS	101 106	DTS/SMG-100161Q6
02.09	3.1.0	Security Aspects	Phase 1	GTS	02.09	DGTS/SMG-010209
02.09	4.5.0	Security Aspects	Phase 2	ETS	300 506	RE/SMG-010209PR2
02.09	5.2.0	Security Aspects	Phase 2+	ETS	300 920	RE/SMG-010209QR2
02.09	6.1.0	Security Aspects	Release 1997	EN	300 920	DEN/SMG-010209Q6R1
02.09	7.1.0	Security Aspects	Release 1998	EN	300 920	DEN/SMG-010209Q7R1
02.09	8.0.0	Security Aspects	Release 1999			DEN/SMG-010209Q8
02.31	7.1.1	Fraud Information Gathering System (FIGS) Service description - Stage 1	Release 1998	TS	101 107	RTS/SMG-100231Q7
02.31	8.0.0	Fraud Information Gathering System (FIGS) Service description - Stage 1	Release 1999			RTS/SMG-100231Q8
02.32	7.1.1	Immediate Service Termination (IST); Service description - Stage 1	Release 1998	TS	101 749	DTS/SMG-100232Q7
02.32	8.0.0	Immediate Service Termination (IST); Service description - Stage 1	Release 1999			DTS/SMG-100232Q8
02.33	7.3.0	Lawful Interception - Stage 1	Release 1998	TS	101 507	DTS/SMG-100233Q7
02.33	8.0.0	Lawful Interception - Stage 1	Release 1999			DTS/SMG-100233Q8
03.20	3.0.0	Security-related Network Functions	Phase 1 extension	GTS	03.20-EXT	RGTS/SMG-030320B
03.20	3.3.2	Security-related Network Functions	Phase 1	GTS	03.20	DGTS/SMG-030320
03.20	4.4.1	Security-related Network Functions	Phase 2	ETS	300 534	RE/SMG-030320PR
03.20	5.2.0	Security-related Network Functions	Release 1996			
03.20	6.1.0	Security-related Network Functions	Release 1997	TS	100 929	RTS/SMG-030320Q6R1
03.20	7.2.0	Security-related Network Functions	Release 1998	TS	100 929	RTS/SMG-030320Q7
03.20	8.0.0	Security-related Network Functions	Release 1999			RTS/SMG-030320Q8
03.31	7.0.0	Fraud Information Gathering System (FIGS); Service description - Stage 2	Release 1998			
03.31	8.0.0	Fraud Information Gathering System (FIGS); Service description - Stage 2	Release 1999			
03.33	7.1.0	Lawful Interception - stage 2	Release 1998	TS	101 509	DTS/SMG-100333Q7
03.33	8.0.0	Lawful Interception - stage 2	Release 1999			DTS/SMG-100333Q8
03.35	7.0.0	Immediate Service Termination (IST); Stage 2	Release 1998			DTS/SMG-100335Q7
03.35	8.0.0	Immediate Service Termination (IST); Stage 2	Release 1999			DTS/SMG-100335Q8
10.20	-	Lawful Interception requirements for GSM	Release 1999			DTS/SMG-101020Q8

Annex D: List of CRs to specifications under SA WG3 and SMG 10 responsibility

D.1 SA WG3 CRs at the Meeting (and by e-mail after meeting#11)

Spec	CR	Rev	Phase	Subject	Cat	Cur Vers	New Vers	Date	Source	WG	WG meeting	WG TD	WG status	Remarks
33.102	047	2	R99	Interoperation and intersystem handover/change between UTRAN and GSM BSS	C	3.3.1	3.4.0	21/02/2000	S3	S3	S3-11	S3-000208	agreed	Agreed by e-mail after meeting 10/03/00
33.102	050		R99	Refinement of Cipher key and integrity key lifetime	F	3.3.1	3.4.0	18/02/2000	S3	S3	S3-11	S3-000101	agreed	agreed by e-mail 09/03/00
33.102	064	2	R99	Distribution and Use of Authentication Data between VLRs/SGSNs	F	3.3.1	3.4.0	21/02/2000	S3	S3	S3-11	S3-000212	agreed	Agreed by e-mail after meeting 10/03/00
33.102	066	1	R99	Ciphering	C	3.3.1	3.4.0	21/02/2000	S3	S3	S3-11	S3-000220	agreed	Agreed by e-mail 10/03/00
33.102	067	1	R99	Data integrity	C	3.3.1	3.4.0	21/02/2000	S3	S3	S3-11	S3-000221	agreed	Agreed by e-mail 10/03/00
33.102	071	1	R99	Use of default IK at emergency call with no (U)SIM or when authentication has failed	F	3.3.1	3.4.0	22/02/2000	S3	S3	S3-11	S3-000178	agreed	Agreed by e-mail after meeting 09/03/00
33.102	074		R99	Clarification about CK and IK which are transmitted in clear over the Iu-interface	B	3.3.1	3.4.0	28/02/2000	S3	S3	S3-11	S3-000108	agreed	Agreed by e-mail after meeting 09/03/00
33.102	076		R99	Cipher key and integrity key lifetime	F	3.3.1	3.4.0	28/02/2000	S3	S3	S3-11	S3-000193	agreed	Agreed by e-mail after meeting 09/03/00
33.102	077		R99	Cipher key and integrity key setting	F	3.3.1	3.4.0	28/02/2000	S3	S3	S3-11	S3-000194	agreed	Agreed by e-mail after meeting 09/03/00
33.102	079	1	R99	Local Authenication and connection establishment	C	3.3.1	3.4.0	09/03/2000	S3	S3	S3-11	S3-000149	agreed	Agreed by e-mail after meeting 09/03/00
33.102	080		R99	Clarification on ciphering and integrity protection at intersystem handover	F	3.4.0	3.5.0	11/04/2000	S3	S3	S3-12	S3-000288	agreed	
33.102	081		R99	Clarification on the UIA and UEA selection	F	3.4.0		11/04/2000	S3	S3	S3-12	S3-000290	Postponed	Postponed to S3-13
33.102	082		R99	Authentication and key agreement (editorial)	D	3.4.0		11/04/2000	S3	S3	S3-12	S3-000253	Postponed	Postponed to S3-13
33.102	083		R99	Authentication and key agreement (minimal)	F	3.4.0	3.5.0	11/04/2000	S3	S3	S3-12	S3-000293	agreed	
33.102	084		R99	Conversion functions for GSM-UMTS interoperation	C	3.4.0	3.5.0	11/04/2000	S3	S3	S3-12	S3-000294	agreed	
33.102	085		R99	3G-3G Handover	C	3.4.0		11/04/2000	S3	S3	S3-12	S3-000256	Postponed	Postponed to S3-13
33.102	086		R99	3G-2G and 2G-3G Handover for CS services	F	3.4.0		11/04/2000	S3	S3	S3-12	S3-000257	Postponed	Postponed to S3-13

Spec	CR	Rev	Phase	Subject	Cat	Cur Vers	New Vers	Date	Source	WG	WG meeting	WG TD	WG status	Remarks
33.102	087		R99	Limitation and reduction of the effective cipher key length by the serving network	F	3.4.0		11/04/2000	S3	S3	S3-12	S3-000291	Postponed	Postponed to S3-13
33.102	088		R99	Initialisation of synchronisation for ciphering and integrity protection	C	3.4.0	3.5.0	11/04/2000	S3	S3	S3-12	S3-000295	agreed	
33.102	089		R99	Addition of another variant of sequence number generation	C	3.4.0	3.5.0	11/04/2000	S3	S3	S3-12	S3-000261	agreed	
33.102	090		R99	Clarification of BEARER and DIRECTION parameters	F	3.4.0	3.5.0	11/04/2000	S3	S3	S3-12	S3-000262	agreed	
33.102	091		R99	Inclusion of the radio bearer identity to the integrity mechanism	C	3.4.0	3.5.0	11/04/2000	S3	S3	S3-12	S3-000263	agreed	
33.102	092		R99	Removal of enhanced user identity confidentiality	F	3.4.0	3.5.0	11/04/2000	S3	S3	S3-12	S3-000268	agreed	
33.102	093		R99	Removal of network domain security	F	3.4.0	3.5.0	11/04/2000	S3	S3	S3-12	S3-000269	agreed	
33.102	094		R99	Cipher and integrity key update once every 24 hours	F	3.4.0	3.5.0	14/04/2000	S3	S3	S3-12	S3-000292	agreed	
33.102	095		R99	Handling of emergency call	F	3.4.0	3.5.0	14/04/2000	S3	S3	S3-12	S3-000302	agreed	
33.102	096		R99	Clarification on the HFN handling	F	3.4.0	3.5.0	14/04/2000	S3	S3	S3-12	S3-000289	agreed	

D.2 SMG10 CRs at the Meeting

Spec	CR	Rev	Phase	Subject	Cat	Cur Vers	New Vers	Date	Source	WG	WG meeting	WG TD	WG status	Remarks
03.20	A022		R99	GPRS Ciphering algorithm negotiation	C	8.0.0		11/04/2000	SMG10	10	S3-12	S3-000286	Postponed	Postponed to SA3_13

Annex E: List of Liaisons

E.1 Liaisons to the meeting

TD Number	Title	Source	Comment
S3-000164	LS from SMG9 to SA WG3 (and SA WG1) on New SIM toolkit feature: "Auto-answer & Mute-ringing"	SMG9	Not accepted, response in TD270. (See also TD 264)
S3-000217	Liaison response to S3's LS (S3-000190) on Functions of Key Distribution and Key Administration for MAP security	SA WG5	Noted
S3-000219	Reply to LS on "Introduction of rejection of non ciphered calls for GPRS"	CN WG1/SMG 3	Rejects CR to 04.08 in S3-000058. B. Vinck to draft an LS to CN WG1 and SMG on SMG10 GPRS ciphering agreements, based upon TD S3-000201 and TD S3-000205
S3-000223	LS on OPEN SERVICE ARCHITECTURE - SECURITY	SA WG2	All to check OSA Security and revisit at SA3#13
S3-000224	Answer to LS on Functions of Key Distribution and Key Administration for MAP security	SA WG2	Postponed to SA3#13 MAP security ad-hoc
S3-000226	Liaison statement to TSG-S WG3 on GTP Signalling Security	CN WG2	Postponed to SA3#13 MAP security ad-hoc
S3-000235	Liaison Statement to TSGs on Enhanced User Identity Confidentiality	TSG SA WG2	Noted.
S3-000237	DRAFT LS to GSM-A on Authentication Algorithm	3GPP TSG SA (drafting person)	Noted
S3-000260	LS from SMG2 to SMG10 on "double ciphering" in GSM/GPRS Dual Transfer Mode	SMG2	P. Hpward to draft response for agreement after the meeting
S3-000264	LS from SA WG1 : Answer to LS New SIM toolkit feature: "Auto-answer & Mute-ringing	SA WG1	Not accepted, response in TD270
S3-000298	LS preseting an Invitation to S3 on joint meeting CN / S3 on security requirements for R'00	Chairman	Joint meeting arranged 13-14 June, ETSI.

E.2 Liaisons from the meeting

TD Number	Title	Status	Comment
S3-000283	LS to CN WG4 on TR-45 Recommendations	Withdrawn	Liaison with AHAG needed on their requirements
S3-000300	Proposed LS on R00 working methods	Approved	To send to SA WG2 with TD305 attached.
S3-000306	LS to SMG and CN WG1/SMG3 on GPRS ciphering	Approved	To be sent to SMG and CN WG1/SMG3
S3-000307	Liaison Statement on A5/3	Approved	To be forwarded to SMG#31bis
S3-000308	LS to CN WG4: Evaluation of the impact on positive authentication reporting on network performance	Approved	To be forwarded to CN WG4
S3-000309	Liaison statement on HE initiated cancellation of AV in SN	Approved	To be sent to TR-45 AHAG

Annex F: List of Actions from the meeting

ACTION #12/1: All to check the OSA Security document TD S3-000223 and contribute any security problems or issues to the May 2000 meeting of SA WG3.

ACTION #12/2: C. Brookson to contact SMG10 WPD Chairman to ask him to produce a WI description sheet for Lawful Interception for Release 2000.

ACTION #12/3: Secretary: TD S3-000300 (with TD S3-000305 attached) to be sent to SA WG2.

ACTION #12/4: Chairman: TD S3-000309 to be sent to TR-45 AHAG.

ACTION #12/5: B. Vinck to draft the LS to CN WG1 and SMG on SMG10 GPRS ciphering agreements, based upon TD S3-000201 and TD S3-000205. (CC: T WG2)

ACTION #12/6: P. Howard to update the SMG10 work plan for GPRS encryption.

ACTION #12/7: S. Nguyen to produce a draft Stage 2 description document for rejection of unciphered GPRS calls for the May 2000 meeting.

ACTION #12/8: B. Vinck to draft a liaison to CN WG1 and SMG on changes to TS 24.008 needed for GEA/2 algorithm indication bits.

ACTION #12/9: P. Howard to draft a response to SMG2 that SMG10 do not foresee any problems with double ciphering of LLC data.

ACTION #12/10: P. Howard to produce a cover note to the A5/3 requirements specification explaining the specific requirements that are proposed in the document. This to be forwarded to SMG, SMG2, CN WG1, CN WG2 and SMG9.

ACTION #12/11: Lision to GSM Association and SMG to be created about support for increased key length work Item for R00.

ACTION #12/12: Chairman to check the urgency of the security work on GTP with CN WG2.

ACTION #12/13: TS 34.108 to be forwarded to M. Pope for distribution to the SA WG3 list to review and comment to the next SA WG3 meeting.

ACTION #12/14: B. Vinck to forward the proposed changes to CN WG1 collegues for discussion and action in CN WG1.

ACTION #12/15: P. Howard to set up e-mail discussion on open issues. All: to consider the open issues and make proposals to SA WG3 in time to provide proposals to CN WG1 on 24.008 (deadline for all changes to 24.008 and 33.102, Release 1999 specifications is June 2000).

ACTION #12/16: Delegates to check the need for restucturing proposed in the CR in TD S3-000253 for Release 1999 and/or Release 2000.

ACTION #12/17: Chairman to send the proposed dates for a joint meeting to relevant people.

Exhibit F

TSG-RAN meeting #12 RP-010283
Stockholm, Sweden, 12-15 June 2001

Title: **Approved Report of the 11th TSG-RAN meeting (Palm Springs, CA, USA, 13-16 March 2001)**
Document for: **Information**
Source: **3GPP support team**

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12 June 2001.

Executive summary

During TSG-RAN #11, a total of 279 documents were handled. For Release '99 403 CRs were submitted, most of which were approved (some after revision) and one TR (25.942 RF System Scenarios) that was approved. This was the first TSG-RAN plenary in which Release 4 CRs (123) were submitted. The CRs for finished WIs were approved. For Release 4 also 2 TSs (25.106 and 25.143) and 18 TRs were approved to version 4.0.0.

Elections were held in which three officials were elected (Francois Courau as Chairman and Don Zelmer and Eisuke Fukuda as Vice-Chairmen).

Two LSs from ITU-T caused some concern on possible inconsistencies with ITU-R. This would be brought up in TSG-SA.

A CR on beamforming was proposed by WG1 for Release 4, but after several revisions a version was approved for Release '99. A CR that had been controversial in WG2 (on integrity of UE security capabilities) caused a lengthy discussion. A revision was eventually approved. A CR on (temporary) regional requirements for test tolerances was approved on condition that a corrective CR would be drafted when the regulations in Japan were changed.

Recommendations were drafted to apply to corrections of Release '99 specifications with a view to backward compatibility.

The ITU-R Ad Hoc group proposed a procedure to enable TSG-RAN to provide necessary material to ITU-R WP 8F for incorporation o updated CDMA DS and TDD in Rec. M.1457 by October 2001. This was endorsed and the ITU-R Ad Hoc group was requested to come with proposals for submission at future TSG-RAN meetings.

Following various Release-related discussions, it was decided that the TSG-RAN WGs should focus on completion dates and quality of the work, not on Releases. Decisions on which Release to propose a WI for would be taken in TSG-RAN, to be discussed in TSG-SA.

It was decided to follow an approach in GSM for release-independency of application of UMTS in different frequency bands and propose this in TSG-SA.

The mandatoriness of CPCH for Release 4 was discussed. CPCH had not been finished yet and further discussion would in principle take place within the scope of Release 5.

Finished WIs Release 4:

- UTRA FDD Repeater Specification
- RRM optimization for Iur and Iub (some of the work tasks only)
- PS-Domain handover for real-time services
- RAB Quality of Service Negotiation over Iu
- RAB Quality of Service Renegotiation over Iu
- RAB Quality of Service Negotiation over Iu during relocation (NEW, approved and finished)
- QoS optimization for AAL type 2 connections over Iub and Iur interfaces
- Transport bearer modification procedure on Iub, Iur, and Iu (renamed from Migration to Modification procedure)
- Transcoder Free Operations in UTRAN

- Iub/Iur interfaces for UE positioning methods supported on the radio interface release 99
- UE positioning enhancements (IPDLs for TDD only)
- Radio access bearer support enhancement (Robust Header Compression only)
- NodeB Synchronisation for TDD
- DSCH power control improvement in soft handover
- Low Chip Rate TDD (feature)

New approved WIs:
- High speed downlink packet access (feature)
- MIMO (RAN#15, linked with HSDPA)
- Enhancement on the DSCH hard split mode (RAN#14)
- Enhancement of Broadcast and Introduction of Multicast Capabilities in RAN (RAN#14)
- Traffic Termination Point Swapping (RAN#14)
- Open SMLC-SRNC Interface within the UTRAN to support UTRAN Rel-4 positioning methods (RAN#14)
- UE positioning enhancements for 1.28 Mcps TDD (RAN#14)
- Node B Synchronisation for 1.28 Mcps TDD (RAN#14)
- UMTS 1900 (RAN#13)
- Gated DPCCH Transmission (RAN#13)
- RL Timing Adjustement (RAN#14)
- Separation of resource reservation and radio link activation (RAN#14)

New approved SIs:
- Mitigating the Effect of CPICH Interference at the UE (RAN#13)
- Fast Cell Selection (FCS) for HS-DSCH (RAN#14, linked with HSDPA)
- Improvement of RRM across RNS and RNS/BSS (RAN#13)
- Proposal to introduce the SIR measurement (Principle agreed)

It was decided that several Release '99 TRs would not be migrated to Release 4.

1 Opening of the meeting

Yukitsuna Furuya (Chairman) opened the meeting and Don Zelmer (T1) welcomed the delegates to Palm Springs on behalf of the North American Friends of 3GPP. Don Zelmer (T1) and Shannon Kolka (SK Group) explained the logistics of the meeting.

Yukitsuna Furuya (Chairman) also reminded the delegates of their obligations under the IPR policy.

2 Approval of the agenda

RP-010001 Proposed agenda (Chairman)
Yukitsuna Furuya (Chairman) proposed the agenda for the meeting.
Decision: The agenda was approved.

Election of chairpersons

The election process was spread out over several days during the meeting, but was summarised in this part of the meeting report.

A final call for candidates for the post of Chairman was made on Tuesday morning 13 March after the approval of the agenda. There were two candidates for chairman: Francois Courau (Alcatel) and Denis Fauconnier (Nortel Networks). The candidates introduced themselves.

A volunteer was needed to check the counting of the votes. Don Zelmer (Vice-Chairman) volunteered to perform this task.

The election resulted in the election of Francois Courau (Alcatel) for the position of TSG-RAN Chairman.

After the election, a final call was held for candidates for the two positions of TSG-RAN Vice-Chairman. Don Zelmer (Cingular) and Eisuke Fukuda (Fujitsu) were the candidates for TSG-RAN Vice-Chairman. Since there were two candidates for two positions, both candidates were confirmed in these positions.

Hans van der Veen (Secretary) thanked the departing officials and all candidates for the positions for their efforts in the past two years and for their future commitments, and presented a small present to each of them.

After this, the Chairmen and the available Vice-Chairmen of the WGs introduced themselves to the plenary and stated their commitment.

3 Approval of the meeting report of TSG-RAN Meeting #10

RP-010002 Draft Report of the 10th TSG-RAN meeting (Bangkok, Thailand, 6-8 December 2000) (Secretary)

RP-010003 Revised draft Report of the 10th TSG-RAN meeting (Bangkok, Thailand, 6-8 December 2000) (Secretary)

The revised meeting report of TSG-RAN #10 in RP-010003 had been distributed via the email reflector and was on the server. Compared to the original draft version, there was only an update of the meeting calendar. The meeting calendar would be updated again in the approved version.

Decision: The report was approved. The approved report would be available in RP-010004.

RP-010004 Approved Report of the 10th TSG-RAN meeting (Bangkok, Thailand, 6-8 December 2000) (Secretary)

This was the approved report of the TSG-RAN #10 meeting.

4 Liaisons from other groups

4.1 TSG-SA, TSG-T, TSG-CN, TSG-GERAN

4.1.1 TSG-SA and TSG-SA WGs

RP-010008 Draft Report of TSG-SA Idle mode Workshop (Helsinki, Finland, 7 - 8 February 2001) (WS Chairman)

Francois Courau (Vice-Chairman) presented this report.
Discussion: The Workshop's topic had mainly been PLMN selection and cell selection and had involved TSG-CN WG1, TSG-RAN WG2, TSG-SA and TSG-GERAN.
Decision: The report was noted. The necessary work had been done in TSG-RAN WG2.

RP-010009 (S2-002113, to TSG-RAN) LS on Provision of Open Interfaces within the GERAN & UMTS for LCS Support (TSG-SA WG2)

RP-010010 (S2-010373, to TSG-RAN) LS on Withdrawing the SA Work Item on open LCS interfaces (TSG-SA WG2)

Francois Courau (Vice-Chairman) presented this LS.
Discussion: There had been a proposed WI in TSG-SA (RP-010009), but as a result of a Workshop held in January in London, UK on LCS, it was decided that the WI should really be in TSG-RAN. Therefore the original WI was withdrawn (RP-010010). A proposal for a WI was available in RP-010081.
Decision: The LS was noted.

RP-010192 (S3-010136, to TSG-RAN) LS on UE ciphering capabilities (TSG-SA WG3)

Denis Fauconnier (TSG-RAN WG2 Chairman) presented this LS.
Discussion: The background was explained. A security risk had been identified that had been exploited in at least one country already. A CR to solve the security problem was proposed in RP-010199, but was contentious in WG2. The issue would be treated in agenda item 5.2.3 with other R'99 CRs for WG2.
Decision: The LS was noted.

RP-010011 (S5-010012, copy TSG-RAN) Response to LS (R3-010304) on Feedback on UTRAN OAM Procedures (TSG-SA WG5)

Martin Israelsson (TSG-RAN WG3 Chairman) presented this LS.
Discussion: This was a response to RP-010014/R3-010304. Furthermore, WG3 had responded to this LS in RP-010196/R3-010928.
Decision: The LS was noted. Work was ongoing in WG3.

4.1.2 TSG-T and TSG-T WGs

RP-010012 (TP-000257, to TSG-RAN) LS on Clarification of the work plan of TSG-T1 for Rel-4 and Rel-5 (TSG-T)

Francois Courau (Vice-Chairman) presented this LS.
Discussion: All WGs needed to look at this proposal. TSG-T WG1 would only create conformance tests if specifically requested to do so. There was concern that the proposed approach could easily lead to a lack of consistency for the testing. It was explained that TSG-T WG1 would take care of core specifications and that

this proposal was for specific issues. A small Ad Hoc group (with Francois Courau (Vice-Chairman) as Ad Hoc Chairman) would investigate the issue to propose a TSG-RAN response.
Decision: The LS was noted. The Chairmen would include the information in the Chairman's report to TSG-SA.

4.1.3 TSG-CN and TSG-CN WGs

There were no LSs from these groups.

4.1.4 TSG-GERAN and TSG-GERAN WGs

There were no LSs from these groups.

4.2 Others (non-RAN)

4.2.1 OP and PCG

There had not been an OP and PCG meeting since the last plenary meeting in Bangkok. The next meeting would take place in April.

4.2.2 ITU-T

RP-010193 Request for information for proposed ITU-T technical report being developed by the special study group on "IMT-2000 and beyond" (ITU-T SSG)

RP-010194 Request for information for proposed ITU-T recommendations being developed by the special study group on "IMT-2000 and beyond" (ITU-T SSG)
The discussion on these documents would need to take place in TSG-SA as co-ordination between the TSGs was necessary. Also, PCG should be involved in any possible response. It was also noted that reference to the radio dependent part of the ITU-T LS may lead to conflict with what is also referenced in the ITU-R RSPC.

4.2.4 Others

RP-010198 (BRAN22d115, to TSG-RAN) LS on HIPERACCESS (ETSI EP BRAN)
Yukitsuna Furuya (Chairman) presented this LS.
Discussion: This LS needed to be studied by WG3. WG3 would also provide information to EP BRAN.
Decision: The LS was noted.

4.3 TSG-RAN WGs

4.3.1 TSG-RAN WG1

RP-010195 (R1-010427, copy TSG-RAN) LS on Recommendations on HSDPA (TSG-RAN WG1)
Antti Toskala (TSG-RAN WG1 Chairman) presented this LS.
Discussion: The contents of this LS had already been taken into account in the TR on HSDPA (RP-010050, Agenda Item 6.6.4) and there was no further need for discussion on the LS.
Decision: The LS was noted.

4.3.2 TSG-RAN WG2

RP-010013 (R2-010740, to TSG-RAN) LS on Release 4 UE Support for CPCH (TSG-RAN WG2)
Joe Kwak (GBT) presented this LS.
Discussion: The discussion would take place on the basis of the documents in agenda item 6.11.
Decision: The LS was noted.

4.3.3 TSG-RAN WG3

RP-010014 (R3-010304, copy TSG-RAN) LS on Feedback on UTRAN OAM Procedures Work Item (TSG-RAN WG3)

RP-010196 (R3-010928, copy TSG-RAN) Response to LS (S5-010012) on UO&M Procedures Work Item (TSG-RAN WG3)
These documents were covered together with RP-010011 in agenda item 4.1.1.

4.3.4 TSG-RAN WG4

RP-010197 (R4-010451, to TSG-RAN) LS on 3GPP Vocabulary document TR 21.905 (TSG-RAN WG4)
Howard Benn (TSG-RAN WG4 Chairman) presented this LS.
Discussion: Section 2 was agreed. There was a discussion on the terminology "BS", "BTS", and "Node B".
Decision: The LS was noted. The discussion section was endorsed including the Annex. Comments on the terminology should be provided to Howard Benn (TSG-RAN WG4 Chairman). No input was provided. The LS would be forwarded to TSG-SA WG1.

5 Status Report and Approval of contributions - Release '99

Vocabulary documents

Tdoc	TR	Presented as version	Title	Result	Final version
n/a	25.990	n/a	TSG-RAN Vocabulary document	n/a	n/a
n/a	21.905	n/a	Vocabulary document	n/a	n/a

5.1 TSG-RAN WG1

5.1.1 Report from TSG-RAN WG1

RP-010056 Report from WG1 chairman to TSG-RAN (TSG-RAN WG1 Chairman)

RP-010057 Supplement (List of agreed CRs) to Report from WG1 chairman to TSG-RAN (TSG-RAN WG1 Chairman)
Antti Toskala (Chairman TSG-RAN WG1) presented this report (RP-010056) and the supplement of agreed CRs (RP-010057).
Presentation:
- General:
  - Release '99 CRs still reducing, down to 42 CRs, 23 for FDD;

  - Highest number of papers for High Speed Downlink Packet Access (HSDPA), TR completed for the feasibility study;
  - In the last meeting some Rel-5 related papers were not treated due intensive meeting on R'99 and Rel-4 issues;
- Release 4 CRs provided on:
  - Node B synchronisation for TDD, Report in RP-010073;
  - DSCH Power Control in soft handover, Report in RP 010078;
  - Low Chip rate (1.28 Mcps) TDD Physical Layer, Report in RP 010076, TR 25.928 in RP-010068 for approval as requested by TSG RAN#10;
  - UE Positioning enhancements (WG2 leading, to be reported with WG2), CRs on e.g. IPDL for TDD;
  - 1 CR related to beamforming, to be considered as part of RAN Technical Small Enhancements and Improvements WI;
- Release 5 progress:
  - Radio Link Performance Enhancements:
    - The deadline for the conclusions for new TX diversity methods for TSG RAN#12;
    - Work has proceeded on the simulation parameters;
    - If new methods are agreed, a TR will be created;
    - To be addressed in the next WG1;
  - Other topics discussed included:
    - Dynamic TFCI code word division in split mode;
    - On this topic feedback received from other WGs and item to be worked on further.

Discussion:

- It was stated that TSG-RAN WG1 was not negative about the idea of using OFDM for stand-alone for HSDPA, but about the inclusion in the current proposal for HSDPA;
- On Beamforming two CRs were produced, one for R'99 and one mentioned as for Rel-4; this would be discussed later when the CRs would be discussed;
- On DPCCH gating, it was clarified that not all the discussed issues were reflected in the Chairman's report: SSDT and outer loop power control; this would be discussed when discussing the Status Report on the WI.

Decision: The report was noted.

5.1.2 Discussions on decisions from TSG-RAN WG1

There was no input for this agenda item.

5.1.3 Approval of CRs from TSG-RAN WG1

CRs to TS 25.211: Physical channels and mapping of transport channels onto physical channels (FDD)

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010058	25.211	3.5.0	Agreed CRs	approved 1)	3.6.0
RP-010259	25.211	3.5.0	Proposed CR 095r3 to 25.211	withdrawn 2)	-
RP-010269	25.211	3.5.0	Proposed CR 095r3 to 25.211	withdrawn 2)	-
RP-010255	25.211	3.5.0	Proposed CR 095r3 to 25.211	approved 2) 3)	3.6.0

1) There were comments on the parameter in CR 096 to 25.211 on Uplink power control preamble. Multi-vendor operation should be supported. The CR was approved, but WG3 was tasked to study the multi-vendor aspects of this particular parameter and to report on this in the TSG-RAN #12 plenary meeting. UTRAN OAM procedures should be considered as an option when elaborating any solution, in order to be future-proof.

2) Three different revisions of CR 095 (all sourced: Nokia, Ericsson, Panasonic) were provided. The original CR had been proposed for agenda item 6.8 (TEI4). After offline discussions, the revisions in RP-010259 and RP-010269 were **withdrawn**.
3) There were possible clarifications on CPCH, but this could be corrected at a future occasion if necessary.
4) It was felt premature to remove any options on the combination of beamforming and closed/open loop power control. WG1 would discuss this further.

CRs to TS 25.213: Spreading and modulation (FDD)

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010059	25.213	3.4.0	Agreed CRs	approved	3.5.0

CRs to TS 25.214: FDD; physical layer procedures

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010060	25.214	3.5.0	Agreed CRs	approved 1) 2) 3)	3.6.0
RP-010218	25.214	3.5.0	Proposed CR 145r1	replaced 1)	3.6.0
RP-010254	25.214	3.5.0	Proposed CR 145r2	approved	3.6.0
RP-010224	25.214	3.5.0	Proposed CR 154r2	approved	3.6.0

1) CR 145 needed to be checked. After some offline discussion, it was **replaced** by CR 145r1 (source: Nokia) in RP-010218. Since some more wording needed to be changed, it was **replaced** by a new revision CR 145r2 (source: Nokia) in RP-010254.
2) CR 148 needed to be checked. After offline discussion it was agreed there was no problem. The CR was **approved**.
3) CR 154r1 needed to be checked. After some offline discussion, it was **replaced** by CR 154r2 (source: Ericsson, Philips, Nokia) in RP-010224.

CRs to TS 25.215: Measurements (FDD)

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010061	25.215	3.5.0	Agreed CRs	approved 1)	3.6.0

1) CR 081 was linked to CR 148 to 25.214. Based on the discussion on that CR (see above), this CR was also **approved**.

CRs to TS 25.221: Physical channels and mapping of transport channels onto physical channels (TDD)

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010062	25.221	3.5.0	Agreed CRs	approved	3.6.0

CRs to TS 25.222: Multiplexing and channel coding (TDD)

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010063	25.222	3.5.0	Agreed CRs	approved	3.6.0

CRs to TS 25.223: Spreading and modulation (TDD)

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010064	25.223	3.4.0	Agreed CRs	approved	3.5.0

CRs to TS 25.224: TDD; physical layer procedures

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010065	25.224	3.5.0	Agreed CRs	approved	3.6.0

CRs to TS 25.225: Measurements (TDD)

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010066	25.225	3.5.0	Agreed CRs	approved	3.6.0

CRs to TR 25.944: Channel coding and multiplexing examples

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010067	25.944	3.3.0	Agreed CRs	approved	3.4.0

5.2 TSG-RAN WG2

5.2.1 Report from TSG-RAN WG2

RP-010017 Report from WG2 chairman to TSG-RAN (TSG-RAN WG2 Chairman)

RP-010018 Supplement (List of agreed R'99 CRs) to Report from WG2 chairman to TSG-RAN (TSG-RAN WG2 Chairman)

Denis Fauconnier (Chairman TSG-RAN WG2) presented this report (RP-010017) and the supplement of agreed R'99 CRs (RP-010018).

Presentation:

- Release '99:
  - Most corrections are describing aspects which were insufficiently described or unclear;
  - Few actual radio interface modifications;
  - Incorporation of results of TSG-SA Workshop on Idle Mode;- Incorporation of results of TSG-SA Workshop on LCS Architecture;- Release '99 still occupying more than 50% of meeting time, and most of delegates activities;
  - Identified issue for next meetings:
    - Potentially more hard coded pre-configurations;
    - Request from operators for more pre-configurations => some may be added until June; joint activity with RAN WG1;
- Release 4:
  - All Release 4 Work Items under RAN WG2 responsibility are completed;
  - Some CRs on " Technical Enhancements and Improvements for Rel-4";
  - Other WIs:
    - Node B synchronisation;
    - Terminal power saving;
    - DSCH power control improvement in soft handover;
  - New WI proposed "Open SMLC-SRNC Interface within the UTRAN to support A-GPS Positioning";
  - Discussions on DPCCH gating:- When considering radio interface, CELL_FACH from Release '99 is superior to DPCCH gating from terminal saving point of view;
    - Proponents claim that DPCCH gating has important gains on Iub/Iur (signalling load and transition delay) compared to transitions to CELL_FACH;

  - LS was sent to WG3 to validate Iub /Iur aspects;- Response fromWG3 needed prior to continuation;
  - Proposed to be extended until June 2001;
- Proposed WI on Broadcast/multicast services was reviewed:
  - Low impacts expected in RAN specifications; Work should first proceed in TSG-SA WG1 for Service description followed by work in TSG-SA WG2 to define system aspects;- All specifications and reports were reviewed prior to be moved to Release 4:
  - Some editorial CRs were made;
  - All specifications and reports will be moved to release 4 except TR 25.925;
- Chairman's conclusion:
  - R'99 CRs are mostly clarifying uncomplete descriptions. Good progress on RRC, other protocols are stable;
  - Standard quality has already made significant progress. More needed to achieve interoperability level;
  - Release 4 was completed in time, but majority of delegates is still busy with Release '99. This now means more work with duplication of specifications, and maintenance of two releases;
  - Past work has been paying off, Release '99 quality improves, and stability is increasing. Please sustain efforts and keep experts active in WG2.

Discussion:
- It was explained that the status of RRC was stable, but it was also a big, thick document and for interoperability all had to be completely right. For that reason still more CRs could be expected;
- On HSDPA, TSG-RAN WG1 did not take any decision on which release MIMO should be in; no recommendation was made by either WG1 or WG2;
- On preconfigurations, there was a list from TSG-SA WG4 (related to codec configurations) that contained configurations that might be added, but no decisions had been taken on that;
- On the issue of mapping functions, there could be some degradation because of different granularity in WG2 and WG4; maybe new changes were needed; this would be communicated to WG2.

Decision: The report was noted.

5.2.2 Discussions on decisions from TSG-RAN WG2

RP-010199 Proposed CR 676r1 to 25.331 (R'99) on Checking the integrity of UE security capabilities (Nokia)

This CR was controversial in WG2 and TSG-SA WG3 had not responded to the WG2 LS, which is why it was brought in by Nokia.

Discussion: The question was whether there was really a need to make this change. This was something to be confirmed in the TSG-SA plenary (NOTE: later it was decided this would not be raised). The statement from TSG-SA WG3 was ambiguous. Also, there was an alternative solution, using a procedure already in the specification today. That solution had its own advantages and disadvantages compared to the Nokia proposal. Ericsson stated that this was actually a security threat in GSM only, and that the change was extremely late. The first step would be to see if it is acceptable at all to make a change, no matter whether there is a security risk or not. Then, if the answer to that was "yes", the next question was whether the proposed solution was acceptable. Vodafone raised the issue of interoperability, considering that the alternative solution did not have an issue with interoperability. In answer to this, Nokia claimed that there was no problem on interoperability with this CR. Ericsson stated that this CR was an optimisation that should not be done for R'99. It was also clarified that the same breach of security existed in TSG-GERAN and there was a worry about a possible approval of a different approach in TSG-GERAN in the future.

Decision: Ericsson expressed the opinion that it felt this kind of optimisation should not any longer be approved, but considering the discussion it would not stop consensus. Nevertheless, a revision was needed (unrelated to the discussion). This revision was made available as RP-010274.

RP-010200 Proposed CR 064r3 to 25.304 (R'99) on Equivalent PLMN codes (Telia)
As a result of the TSG-CN WG1 meeting held after the last TSG-RAN WG2 meeting, it was identified that a revision of this CR was needed. This is covered in the table for TS 25.304 below.

5.2.3 Approval of CRs from TSG-RAN WG2

CRs to TS 25.301: Radio Interface Protocol Architecture

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010019	25.301	3.6.0	Agreed CRs	approved 1)	3.7.0

1) CR 045 was correctly proposed as category F, and the "Editorial" in the title, and the "none" as consequence of not being approved was misleading. There was no problem with the content though, and therefore this CR was also **approved**.

CRs to TS 25.302: Services provided by the Physical Layer

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010020	25.302	3.7.0	Agreed CRs	approved	3.8.0

CRs to TS 25.303: Interlayer Procedures in Connected Mode

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010021	25.303	3.6.0	Agreed CRs	approved	3.7.0

CRs to TS 25.304: UE Procedures in Idle Mode and Procedures for Cell Reselection in Connected Mode

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010022	25.304	3.5.0	Agreed CRs	approved 1)	3.6.0
RP-010200	25.304	3.5.0	Proposed CR 064r3	approved	3.6.0

1) CR 064r2 was not in line with the status in TSG-CN WG1, which had met after the last WG2 meeting. Therefore, CR 064r2 was **replaced** by CR 064r3 (source: Telia, Nortel Networks) in RP-010200.

CRs to TS 25.305: Stage 2 Functional Specification of Location Services in UTRAN

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010023	25.305	3.4.0	Agreed CRs	approved	3.5.0

CRs to TS 25.306: UE Radio Access Capabilities

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010024	25.306	3.0.0	Agreed CRs	approved 1)	3.1.0

1) CR 001 might need to be reworded. After offline discussion, it was recognised that although the way the CR was written might be awkward, most of the TS was written in this way, and a lot of discussion had taken place in WG1 that might cause trouble if changes were made to the CR now. For these reasons, CR 001 was **approved**.

CRs to TS 25.321: MAC protocol specification

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010025	25.321	3.6.0	Agreed CRs	approved 1)	3.7.0

1) CR 066r3 needed to be reviewed. No problems were found. Therefore it was also **approved**.

CRs to TS 25.322: RLC Protocol Specification

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010026	25.322	3.5.0	Agreed CRs	approved	3.6.0

CRs to TS 25.323: Packet Data Convergence Protocol (PDCP) Specification

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010027	25.323	3.3.0	Agreed CRs	approved	3.4.0

CRs to TS 25.324: Broadcast/Multicast Control BMC

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010028	25.324	3.3.0	Agreed CRs	approved	3.4.0

CRs to TS 25.331: RRC Protocol Specification

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010029	25.331	3.5.0	Agreed CRs (1)	approved	3.6.0
RP-010030	25.331	3.5.0	Agreed CRs (2)	approved	3.6.0
RP-010031	25.331	3.5.0	Agreed CRs (3)	approved 1)	3.6.0
RP-010032	25.331	3.5.0	Agreed CRs (4)	approved	3.6.0
RP-010199	25.331	3.5.0	Proposed CR 676r1	replaced 2)	-
RP-010274	25.331	3.5.0	Proposed CR 676r2	approved 2)	3.6.0

1) CR 725 needed to be studied more. Although the reason for change contained a reference to CELL_FACH which should be removed, no problems were identified with the contents. With this change to the reason of change, it was **approved**.
2) See the discussion in agenda item 5.2.2.

CRs to TR 25.921: Guidelines and Principles for protocol description and error handling

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010033	25.921	3.2.0	Agreed CRs	approved	3.3.0

CRs to TR 25.922: Radio Resource Management Strategies

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010034	25.922	3.4.0	Agreed CRs	approved	3.5.0

CRs to TR 25.925: Radio Interface for Broadcast/Multicast Services

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010035	25.925	3.3.0	Agreed CRs	approved	3.4.0

CRs to TS 34.109: Terminal logical test interface; Special conformance testing functions

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010036	34.109	3.2.0	Agreed CRs	approved	3.3.0

5.3 TSG-RAN WG3

5.3.1 Report from TSG-RAN WG3

RP-010105 Report from WG3 chairman to TSG-RAN (TSG-RAN WG3 Chairman)
This document was replaced by R2-010204.

RP-010204 Report from WG3 chairman to TSG-RAN (TSG-RAN WG3 Chairman)

RP-010106 List of Agreed CRs from WG3 (MCC)
Martin Israelsson (Chairman TSG-RAN WG3) presented this report (RP-010105) and the supplement of agreed CRs (RP-010106).

Presentation:

- WG3 had mainly focused on R'99 correction and Rel-4 aspects;
- Around 200 CRs were proposed. 139 were R'99 CRs and 61 were Rel-4 CRs;
- Several Ad Hocs on Rel-4 aspects such as IP transport, Q2630.2 aspects and UE positioning were held;
- Most of Rel-4 WIs have been conducted to a satisfying level of completion except for:
  - RAB support enhancement;
  - Some Worktask of RRM Optimisation on Iur/Iub. Some of them were cancelled, others were proposed to be continued in Rel-5;
  - Improved support of inter-frequency/system measurements;
  - Hybrid ARQ;
  - Support for multiple CCTrCHs;
  - Improved common DL channel for CELL_FACH state;
  - Candidate enhancements for RL performance;
  - USTS (Iur/Iub aspects);
  - Highspeed DL packet access study;
  - IP Transport in UTRAN;

Discussion:

- The work task "PROCEDURE PARALLELISM ON IUB/IUR" had originally been an offshoot of a larger WI which had seemed a good idea at the time. On further investigation it was decided that there was no need for this work task;
- A CR on terminal power saving was missing from the document.

Decision: The report was noted.

5.3.2 Discussions on decisions from TSG-RAN WG3

There was no input for this agenda item.

5.3.3 Approval of CRs from TSG-RAN WG3

CRs to TS 25.401: UTRAN Overall Description

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010107	25.401	3.5.0	Agreed CRs	approved 1)	3.6.0

1) CR 020r1 contained a definition and should be forwarded to TSG-SA WG1 for information and incorporation in the vocabulary report TS 21.905.

CRs to TS 25.402: Synchronisation in UTRAN Stage 2

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010108	25.402	3.4.0	Agreed CRs	approved	3.5.0

CRs to TS 25.411: UTRAN Iu interface Layer 1

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010109	25.411	3.3.0	Agreed CRs	approved	3.4.0

CRs to TS 25.413: UTRAN Iu interface RANAP signalling

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010110	25.413	3.4.0	Agreed CRs (1)	approved 1)	3.5.0
RP-010111	25.413	3.4.0	Agreed CRs (2)	approved	3.5.0

1) CR 246 should be category F. With this change it was **approved**.

CRs to TS 25.414: UTRAN Iu interface data transport & transport signalling

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010112	25.414	3.6.0	Agreed CRs	approved	3.7.0

CRs to TS 25.415: UTRAN Iu interface user plane protocols

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010113	25.415	3.5.0	Agreed CRs	approved	3.6.0

CRs to TS 25.419: UTRAN Iu Interface: Service Area Broadcast Protocol SABP

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010114	25.419	3.3.0	Agreed CRs	approved	3.4.0

CRs to TS 25.420: UTRAN Iur Interface: General Aspects and Principles

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010115	25.420	3.2.0	Agreed CRs	approved	3.3.0

CRs to TS 25.421: UTRAN Iur Interface Layer 1

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010116	25.421	3.0.0	Agreed CRs	approved	3.1.0

CRs to TS 25.423: UTRAN Iur interface RNSAP signalling

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010117	25.423	3.4.0	Agreed CRs (1)	approved 1)	3.5.0
RP-010118	25.423	3.4.0	Agreed CRs (2)	approved	3.5.0

1) CR 304r1 was related to a CR in WG1 on TDD Tx Diversity that had not been agreed in WG1. Therefore this CR could not be approved at this meeting and was **postponed**.

CRs to TS 25.424: UTRAN Iur interface data transport & transport signalling for CCH data streams

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010119	25.424	3.5.0	Agreed CRs	approved	3.6.0

CRs to TS 25.425: UTRAN Iur interface user plane protocols for CCH data streams

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010120	25.425	3.3.0	Agreed CRs	approved	3.4.0

CRs to TS 25.426: UTRAN Iur and Iub interface data transport & transport signalling for DCH data streams

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010121	25.426	3.5.0	Agreed CRs	approved	3.6.0

CRs to TS 25.427: UTRAN Iur and Iub interface user plane protocols for DCH data streams

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010122	25.427	3.5.0	Agreed CRs	approved	3.6.0

CRs to TS 25.430: UTRAN Iub Interface: General Aspects and Principles

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010123	25.430	3.4.0	Agreed CRs	approved	3.5.0

CRs to TS 25.431: UTRAN Iub Interface Layer 1

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010124	25.431	3.0.0	Agreed CRs	approved	3.1.0

CRs to TS 25.433: NBAP specification

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010125	25.433	3.4.1	Agreed CRs (1)	approved	3.5.0
RP-010126	25.433	3.4.1	Agreed CRs (2)	approved	3.5.0

CRs to TS 25.434: UTRAN Iub interface data transport & transport signalling for CCH data streams

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010127	25.434	3.4.0	Agreed CRs	approved	3.5.0

CRs to TS 25.435: UTRAN Iub interface user plane protocols for CCH data streams

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010128	25.435	3.5.0	Agreed CRs	approved	3.6.0

CRs to TR 25.853: Delay Budget within the Access Stratum

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010129	25.853	3.0.0	Agreed CRs	approved	3.1.0

CRs to TR 25.931: UTRAN Functions, Examples on Signalling Procedures

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010130	25.931	3.2.0	Agreed CRs	approved 1)	3.3.0

1) CR 008r1 was a category B because it was an additional example. It should have TSG-RAN WG3 as source. With this change the CR was **approved**.

Reports from WG3 for information

Tdoc	Agreed as report	Presented as version	Title	Result	Final version
RP-010169	30.531	0.8.8	Workplan	noted	0.8.8

5.4 TSG-RAN WG4

5.4.1 Report from TSG-RAN WG4

RP-010084 Status Report for Release 99 specifications (TSG-RAN WG4 Chairman)
Howard Benn (Chairman TSG-RAN WG4) presented this report.
Presentation:
- Number and magnitude of corrections to the BTS and UE Release '99 specifications were reducing, and yet again significant progress has been made on the RRM documents;
- More corrections to the RRM documents should be expected at RAN #12;
- Operators present in the meeting continued to request more detailed simulations to study the effect of compressed mode. Simulations presented so far show a 15 – 75 % reduction in capacity when compressed mode is active, however no consensus was reached on the number of mobiles typically in compressed mode, this had a major effect on capacity loss. Further work to look at the distribution of mobiles had also been requested;

Discussion:
- WG4 felt it was not feasible to add requirements for the 500 km/hour case. It was proposed to inform TSG-SA WG1 about this and TSG-RAN was asked to endorse this.

Decision: The report was noted. The proposal on the 500 km/hour case was endorsed.

5.4.2 Discussions on decisions from TSG-RAN WG4

RP-010083 Regional requirements on Test Tolerances (ARIB)
Eisuke Fukuda (ARIB) presented this document.
Discussion: Because of the time required for a change in regulations in Japan, there would be a limited period where TSG-RAN WG4 specifications would not be in line with the regulations in Japan. Since in PCG it had been decided that the 3GPP specifications should always be a superset of all regional regulations,

it was requested to give guidance to TSG-RAN WG4 on agreeing a CR to cover the intermediate period. It was clarified that roaming of UEs that were type-approved in another region would be allowed in Japan, but that UEs to be sold in Japan should satisfy Japanese regulations. It was also stated that it was understood by the Japanese delegates that as soon as the Japanese government has changed its regulations, which it was in the process of doing, a corrective CR would be drafted to undo the changes that were needed temporarily. It was also stated that this issue was a different one from the reason for having one technical specification for the terminal covering all regional regulatory requirements, since it required a terminal to undergo two different tests for different regions. WG4 requested to have guidance from PCG on temporary requirements.
Decision: The document was noted.

RP-010250 Proposed CR to 25.141 on Regional requirements for Test Tolerances (ARIB)
This document was replaced by RP-010268.

RP-010268 Proposed CR to 25.141 on Regional requirements for Test Tolerances (ARIB)
Eisuke Fukuda (ARIB) presented this document.
Discussion: There should be a CR number.
Decision: The CR was approved. The CR number was CR 083.

5.4.3 Approval of CRs from TSG-RAN WG4

CRs to TS 25.101: UE Radio transmission and reception (FDD)

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010085	25.101	3.5.0	Agreed CRs	approved	3.6.0

CRs to TS 25.102: UE Radio transmission and reception (TDD)

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010086	25.102	3.5.0	Agreed CRs	approved	3.6.0

CRs to TS 25.104: BTS Radio transmission and reception (FDD)

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010087	25.104	3.5.0	Agreed CRs	approved	3.6.0

CRs to TS 25.105: BTS Radio transmission and reception (TDD)

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010088	25.105	3.5.0	Agreed CRs	approved	3.6.0

CRs to TS 25.113: Base station EMC

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010089	25.113	3.4.0	Agreed CRs	approved	3.5.0

CRs to TS 25.123: Requirements for support of Radio Resource Management (TDD)

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010090	25.123	3.4.0	Agreed CRs	approved 1)	3.5.0

1) CR 036 was for Release 4 and this CR had been included by accident. A decision on this CR was therefore not taken here. The decision on CR 036 could therefore be found in Agenda Item 6.6.7 (document RP-010101 on Node B Synchronisation).

CRs to TS 25.133: Requirements for support of Radio Resource Management (FDD)

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010091	25.133	3.4.0	Agreed CRs	approved	3.5.0

CRs to TS 25.141: Base station conformance testing (FDD)

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010092	25.141	3.4.1	Agreed CRs	approved 1)	3.5.0
RP-010268	25.141	3.4.1	Proposed CR 083	approved 2)	3.5.0

1) CR 074 had not been agreed in WG4 and was therefore **withdrawn**.
2) See discussion in agenda item 5.4.2.

CRs to TS 25.142: Base station conformance testing (TDD)

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010093	25.142	3.4.0	Agreed CRs	approved	3.5.0

CRs to TS 34.124: Electromagnetic compatibility (EMC) requirements for Mobile terminals and ancillary equipment

Tdoc	Related spec.	Current version	Title	Result	Final version
RP-010094	34.124	3.2.0	Agreed CRs	approved	3.3.0

Reports from WG4 for approva

Tdoc	Agreed as spec	Presented as version	Title	Result	Final version
RP-010220	25.942	2.3.2	RF System Scenarios	approved 1)	3.0.0

1) Omnitel was thanked heartily for taking good care of this document in the period when it was not yet under change control.

5.5 ITU Ad Hoc

RP-010185 Status Report (ITU-R Ad Hoc contact person)
Gary Jones (Voicestream) presented this report.
Discussion: Instead of providing 25.990 to ITU-R, 21.905 should be provided as this had replaced 25.990.
Decision: The report was noted.

RP-010186 Procedure to enable TSG RAN to provide necessary material to ITU-R WP 8F for incorporation of updated CDMA DS and TDD in Rec. M.1457 by Oct'01 (Ericsson, Nokia, TILab, VoiceStream)
Gary Jones (Voicestream) presented this report.

Discussion: This was the result of a long discussion over the past few months on how to handle updates to RSPC. Preliminary material had been provided by 3GPP2 and 3GPP (HSDPA, which ITU-R WP 8F would like to see a change of acronym for). A graphical time plan was included to assist TSG-RAN and the TSG-RAN WGs in the necessary preparations. It was planned that the ITU-R Ad Hoc group would draft the initial input to be provided shortly before TSG-RAN #12, to be commented by the WGs. A very similar procedure was proposed for the TSG-RAN #13 meeting in preparation for WP8F's meeting in Tokyo (10-16 October 2001). The intention of this procedure was to relieve the WGs from most of the overhead associated with the input that needs to be provided to ITU-R WP8F. It was asked how the action plan took into account the 3GPP-internal timing. Specifically, HSDPA was not the only WI, and it would not be finished in September. It was clarified that the importance was mainly to show progress to the outside world, that high-speed data was a focal point for ITU-R WP8F, but that other new features should also be shown to ITU-R. It was clarified that HSDPA was a SI for Release 4, and it would result in a number of Release 5 WIs such as Hybrid ARQ which might cause confusion. It was clarified that 5.X.1 (as referenced in the 3GPP Work Plan) would contain an overview (to be approved by 3GPP) and 5.X.2 would contain references. Concern was expressed about the timing constraints that seemed to be put on 3GPP by ITU-R. This was acknowledged, but it was clarified that the SG8 group in ITU-R only met once every two years, and that not complying with those time lines would mean a delay of two years.
Decision: The document was noted. The procedure contained in the document was approved. The ITU-R Ad Hoc Group was requested to come with a proposal for submission to ITU-R WP8F for future TSG-RAN meetings, on the understanding that "HSDPA - other aspects" would actually contain what was ready at the time. Nicola Magnani (TILab) was reconfirmed as ITU-R Ad Hoc contact person for the next two-year term.

6 Release 4 and beyond

Important:

It was decided in TSG-RAN that the TSG-RAN WGs should focus on completion dates and quality of the work, not on Releases. Decisions on which Release to propose a WI for would be taken in TSG-RAN, to be discussed in TSG-SA.

General

RP-010202 Work Plan - version March 9th (MCC)
This document was replaced by RP-010230.

RP-010230 Work Plan (MCC)
The document was for information.

RP-010201 MCC review of the Work Plan (MCC)
Hans van der Veen (Secretary) presented this document.
Discussion: On slide 10 (LCR TDD testing) it was commented that work had started already. It was also asked if it was possible that a WI was still in Release 4 even if it had not been finished yet. It was necessary to take a general decision on this in TSG-RAN and TSG-SA. On slide 8, for Terminal Power Saving, there were CRs that had been finished in WG3 which were not included in the presentation.
Decision: The document was noted. It was decided that for WIs the WGs shall concentrate on completion dates, not on Releases.

RP-010015 Work Item sheets - latest situation (Secretary)
This document was replaced by R2-010203.

RP-010203 Work Item sheets - latest situation (Secretary)
Decisions per Work Item:

1. *Low chip rate TDD option.*
   This WI had finished and would be moved to the "history" document.
2. *Base station classification.*
   The milestones might need to be changed (TSG-RAN #13 for FDD and TSG-RAN #12 for TDD).
3. *FDD Base station classification.*
   The milestones needed to be changed to TSG-RAN #13.
4. *TDD Base station classification.*
   The milestones needed to be changed to TSG-RAN #12.
5. *UE positioning in UTRA TDD.*
   Replaced by 34. and 35.
6. *UE positioning in UTRA FDD.*
   Replaced by 34. and 35.
7. *Hybrid ARQ II/III.*
   No changes were required to the WI sheet. Therefore the WI sheet was re-endorsed.
8. *NodeB Synchronisation for TDD.*
   The WI sheet would be moved to the "historic" document.
9. *UTRA FDD Repeater Specification.*
   Since this WI was considered complete and ready for Rel-4, the WI sheet would be moved to a separate document for "historic" reference. This would be done for all completed WIs
10. *QoS optimization for AAL type 2 connections over Iub and Iur interfaces.*
    The WI sheet would be moved to the "historic" document.
11. *Terminal power saving features.*
    The WI sheet would be revised for the next plenary, taking into account discussions to be held between WG1, WG2, WG3 in their co-located meeting in May.
12. *PS-Domain handover for real-time services.*
    The WI sheet would be moved to the "historic" document.
13. *RAB Quality of Service Negotiation/Renegotiation over Iu.*
    The WI sheet would be moved to the "historic" document.
14. *RRM optimizations for Iur and Iub.*
    This work item sheet would be provided for the "historic" document and a fresh WI sheet would be started to see this as a building block. A WI sheet would also be provided for the work task that was identified already.
15. *Radio access bearer support enhancement.*
    The ROHC part was finished and would be removed from the WI sheet (stored in the "historic" document). Completion date for the WI as a whole (building block) would be TSG-RAN #14. Completion dates for specific enhancements needed to be reviewed.
16. *Improvement of inter-frequency and inter-system measurements.*
    No changes were required to the WI sheet. Therefore the WI sheet was re-endorsed.
17. *Improved usage of downlink resource in FDD for CCTrCHs of dedicated type.*
    No changes were required to the WI sheet. Therefore the WI sheet was re-endorsed.
18. *IP Transport in UTRAN.*
    No decision on the need for revision of the WI sheet was taken due to lack of time. Delegates were urged to consider if the WI sheet needed to be changed and to provide an update if appropriate.
19. *Transcoder Free Operations in UTRAN*
    The WI sheet would be moved to the "historic" document, pending the result of the feature in TSG-CN.

20. *Evolution of the transport in the UTRAN.*
    No decision on the need for revision of the WI sheet was taken due to lack of time. Delegates were urged to consider if the WI sheet needed to be changed and to provide an update if appropriate.
21. *Radio Interface Improvement Feature.*
    No decision on the need for revision of the WI sheet was taken due to lack of time. Delegates were urged to consider if the WI sheet needed to be changed and to provide an update if appropriate.
22. *RAN Improvement Feature.*
    No decision on the need for revision of the WI sheet was taken due to lack of time. Delegates were urged to consider if the WI sheet needed to be changed and to provide an update if appropriate.
23. *UE Positioning.*
    No decision on the need for revision of the WI sheet was taken due to lack of time. Delegates were urged to consider if the WI sheet needed to be changed and to provide an update if appropriate.
24. *Void.*
    This Work Item was deleted in TSG-RAN #9.
25. *Void.*
    This Work Item was deleted in TSG-RAN #10.
26. *Low Chip Rate TDD Physical Layer.*
    This WI had finished and would be moved to the "history" document.
27. *Low chip rate TDD layer 2 and layer 3 protocol aspects.*
    This WI had finished and would be moved to the "history" document.
28. *Low Chip Rate TDD RF Radio Transmission/ Reception, System Performance Requirements and Conformance Testing.*
    This WI had finished and would be moved to the "history" document.
29. *Void.*
    This Work Item was deleted in TSG-RAN #10.
30. *Low Chip Rate TDD UE radio access Capability.*
    This WI had finished and would be moved to the "history" document.
31. *Low chip rate TDD UTRAN network Iub/Iur protocol aspects.*
    This WI had finished and would be moved to the "history" document.
32. *RAB Quality of Service Negotiation over Iu.*
    The WI sheet would be moved to the "historic" document.
33. *RAB Quality of Service Renegotiation over Iu.*
    The WI sheet would be moved to the "historic" document.
34. *Iub/Iur interfaces for UE positioning methods supported on the radio interface release 99.*
    The WI sheet would be moved to the "historic" document.
35. *UE positioning enhancements.*
    No decision on the need for revision of the WI sheet was taken due to lack of time. Delegates were urged to consider if the WI sheet needed to be changed and to provide an update if appropriate.
36. *RAN Technical Small Enhancements and Improvements.*
    This WI sheet was replaced by the general WI for all TSGs established during last TSG-SA meeting in Bangkok. Therefore no further action is required within TSG-RAN.
37. *DSCH power control improvement in soft handover.*
    The WI was finished and would be moved to the "historic" document.
38. *Migration to Modification procedure.*
    The name of this WI should be changed to "Transport bearer modification procedure on Iub, Iur, and Iu".
    The WI was finished and would be moved to the "historic" document.
39. *UMTS 1800.*
    The milestones needed to be changed to TSG-RAN #12.

40. *RAN work for Intra Domain Connection of RAN Nodes to Multiple CN Nodes*.
    No decision on the need for revision of the WI sheet was taken due to lack of time. Delegates were urged to consider if the WI sheet needed to be changed and to provide an update if appropriate.

RP-010016 Study Item sheets - latest situation (Secretary)
Decisions per Study Item:
1. *Radio link performance enhancements*.
   No changes were required to the WI sheet. Therefore the WI sheet was re-endorsed.
2. *High speed downlink packet access*.
   This would be moved to the "history" document.
3. *USTS*.
   The SI deadline was extended to TSG-RAN #12.
4. *Feasibility Study for Improved Common DL Channel for Cell-FACH State*.
   The SI deadline was extended to TSG-RAN #12.
5. *Feasibility Study of UE antenna efficiency test methods performance requirements*
   No decision on the need for revision of the SI sheet was taken due to lack of time. Delegates were urged to consider if the SI sheet needed to be changed and to provide an update if appropriate.

6.1 Radio Interface Improvement Feature (1)

6.1.1 Base station classification

6.1.1.1 FDD Base station classification

Status

RP-010217 Status Report WI "FDD Base station classification" (Rapporteur)
Antti Toskala (Rapporteur) presented this status report.
Discussion: The milestones needed to be shifted to TSG-RAN #13.
Decision: The status report was noted.

6.1.1.2 TDD Base stations classification

Status

RP-010172 Status Report WI "TDD Base station classification"& TR 25.952 (Rapporteur)
Antti Toskala (Rapporteur) presented this status report and TR.
Discussion: The milestones needed to be shifted to TSG-RAN #12.
Decision: The status report and TR were noted. A revised version of the status report that had been cleaned up editorially was provided for information in RP-010256.

RP-010256 Status Report WI "TDD Base station classification" (Rapporteur)
This document was provided for information.

6.1.2 UTRA FDD Repeater Specification

Status

RP-010102 Status Report WI "UTRA FDD Repeater Specification" (Rapporteur)
Ralf Michanikl (Mikom) presented this status report.
Decision: The status report was noted.

RP-010190 TR 25.956 v0.2.0 (TSG-RAN WG4)
Howard Benn (TSG-RAN WG4 Chairman) presented this TR.
Discussion: The document was proposed for approval and should have been v2.0.0. It was commented that editorially it was not quite ready for approval as there were references to company contributions and editorial comments that needed to be revised.
Decision: The TR was **approved** as v4.0.0.

RP-010103 TS 25.106 v2.0.0 (TSG-RAN WG4)
Alf Ahlström (Allgon) presented this TS.
Decision: The TS was **approved** as v4.0.0.

RP-010104 TS 25.143 v2.0.0 (TSG-RAN WG4)
Ralf Michanikl (Mikom) presented this TS.
Discussion: The front page of the cover sheet contained an error (it was a TS, not a TR), but the TS itself was correct in this respect.
Decision: The TS was **approved** as v4.0.0.

CRs for this Work Item

Tdoc	Related WG	Title	Result
RP-010098	WG4	Agreed CRs	approved 1)

1) The title was proposed to be different in Release '99 and Release 4. This needed to be checked. After checking it turned out that this was not a problem. The changes to the version numbering were a mistake and should not be taken literally. None of this was a problem for approving the CR.

6.1.3 UMTS 1800

Status

RP-010095 Status Report WI "UMTS 1800" (Rapporteur)
Howard Benn (Rapporteur) presented this status report.
Discussion: The CRs were the same as in RP-010096. There was some discussion in general on the acceptability of delaying WIs beyond the deadline of the Release. In general, there was reluctance to accept this, because it would set a precedent. In document RP-010219 a possible solution for different frequency bands was proposed that would be a way out (for this particular WI). After having discussed and accepted that proposal (see RP-010219 below), it was stated that a completion date of TSG-RAN #12 was unrealistic, because there were several other issues to be taken into account (such as co-existence). In response to this, it was said that specifications and deployment should be kept separate and that an early target date would help to get all requirements clear as quickly as possible. In response to that it was stated that rushing the work would not be helpful, as regulators would base their regulations on the outcome as they had done in the past

and basing it on too-hurried work would only impede work in the future. It was stated that what was mentioned in section 3.2 (work not completed) on simulations being difficult to be achieved, there was still a strong requirement for this work to be performed.
Decision: The status report was noted. Taking into account RP-010219, choice 2) was taken (the CRs were postponed). The milestones would be changed to TSG-RAN #12.

RP-010219 Operating Frequency Band as a Release independent work item (Motorola, Nokia, Alcatel, Nortel, Ericsson)
Howard Benn (Rapporteur) presented this document.
Discussion: This document drew on experience in GSM, which was now available to operate in a multitude of frequency bands. The type of problem that was of concern to operators in allocating a release to a terminal had been solved in GSM by this method, which made the operating frequency band independent of a release.
Decision: The document was noted. TSG-RAN decided that this was an appropriate way forward and would inform TSG-SA via the TSG-RAN Chairman's report and inform PCG via the management report.

RP-010082 Expanding UMTS Co-existence WI to Include PCS1900 Band Operation (AT&T Wireless Services, Cingular)
Shailender Timiri (AT&T Wireless Services) presented this document.
Discussion: It was acceptable to the proponents and the Rapporteur of UMTS 1800 to keep this issue separate and provide a separate WI proposal. It was clarified that actually the 1900 band was already supported in Release '99 and that the work urgently needed to be finished.
Decision: The document was noted. A WI proposal would be drafted and handled later (see RP-010234 in agenda item 6.11). A note was needed in R'99 specifications to indicate that this work was only partially complete in R'99. It was confirmed that as a result of earlier discussion on R2-010219, two release-independent frequency bands needed to be added for the signalling in WG2.

CRs for this Study Item

Tdoc	Related WG	Title	Result
RP-010096	WG4	Agreed CRs	postponed 1)

1) The **principles** used in the CRs were **endorsed** (including the numbers that had already been agreed in WG4). This meant that TSG-RAN was happy with the work WG4 had done, and encouraged further work in the same direction, but at the same time it did not mean that WG4 was prohibited from correcting the CRs and coming with revisions.

6.1.4 Study Item: Feasibility study of UE antenna efficiency test methods performance requirements

Status

RP-010232 Status Report SI "UE antenna efficiency test methods performance requirements" (Allgon)
Alf Ahlström (Allgon) presented this status report.
Decision: The status report was noted.

6.2 RAN Improvement Feature

6.2.1 RRM optimizations for Iur and Iub

Status

RP-010142 Status Report WI "RRM optimizations for Iur and Iub" (Rapporteur)
Martin Israelsson (TSG-RAN WG3 Chairman) presented this status report.
Discussion: This was a collection of independent work tasks. Three of these were proposed for inclusion in Rel-4, three to be deleted and one to be studied further.
Decision: The status report was noted. The WI would be continued as a building block, with separate work tasks to be provided on separate WI sheets. Fresh WI sheets would be provided for this in RP-010272 and RP-010273.

RP-010272 Revised WI sheet for WI "RRM optimization for Iur and Iub" for Release 4 (Rapporteur)

RP-010273 Revised WI sheet for WI "RRM optimization for Iur and Iub" for Release 5 (Rapporteur)
These documents were the WI sheets from RP-010142.

RP-010143 TR 25.935 (Rapporteur)
Martin Israelsson (TSG-RAN WG3 Chairman) presented this TR.
Decision: The TR was **approved** as v4.0.0.

CRs for this Work Item

Tdoc	Related WG	Title	Result
RP-010160	WG3	Agreed CRs	approved

6.2.2 PS-Domain Handover for real-time services

Status

RP-010131 Status Report WI "PS-Domain handover for real-time services" (Rapporteur)
Martin Israelsson (TSG-RAN WG3 Chairman) presented this status report.
Decision: The status report was noted.

RP-010238 Cover Sheet for TR 25.936 (MCC)

RP-010132 TR 25.936 (Rapporteur)
Martin Israelsson (TSG-RAN WG3 Chairman) presented this TR.
Discussion: The cover sheet was missing and was provided later (this was also the case for other WG3 TRs).
Decision: The TR was **approved** as v4.0.0.

CRs for this Work Item

Tdoc	Related WG	Title	Result
RP-010155	WG3	Agreed CRs	approved

6.2.3 RAB Quality of Service Negotiation/Renegotiation over Iu

6.2.3.1 RAB Quality of Service Negotiation over Iu

Status

RP-010134 Status Report WI "RAB Quality of Service Negotiation over Iu" (Rapporteur)
Martin Israelsson (TSG-RAN WG3 Chairman) presented this status report.
Discussion: There was an LS from TSG-SA WG2 that had not yet been seen. In that LS there appeared to be a formal request to delay this WI. The LS was provided as RP-010252. After some discussion it was felt that the only thing that could be done was to tell TSG-SA WG2 that the work is finished from TSG-RAN point of view.
Decision: The status report was noted. The completion from the TSG-RAN point of view would be highlighted to TSG-SA. Approval of the CRs would be conditionally.

RP-010252 LS from TSG-SA WG2 to TSG-RAN WG3 asking for delay of RAN QoS WI to Rel-5 (TSG-RAN WG3 Chairman)
Martin Israelsson (TSG-RAN WG3 Chairman) presented this LS.
Decision: The document was noted.

RP-010242 Cover Sheet for TR 25.946 (MCC)

RP-010135 TR 25.946 (Rapporteur)
Martin Israelsson (TSG-RAN WG3 Chairman) presented this TR.
Decision: The TR was **approved** as v4.0.0.

CRs for this Work Item

Tdoc	Related WG	Title	Result
RP-010156	WG3	Agreed CRs	approved 1)

1) These were actually CRs to **three different** WIs (QoS Negotiation, QoS Re-negotiation, and a third proposed WI that still needed to be handled later). After the relevant WI (see RP-010168 in agenda item 6.2.3.3) had been approved, CR 274r1 to 25.413 was **approved**.

6.2.3.2 RAB Quality of Service Re-negotiation over Iu

Status

RP-010136 Status Report WI "RAB Quality of Service Renegotiation over Iu" (Rapporteur)
Martin Israelsson (TSG-RAN WG3 Chairman) presented this status report.
Decision: The status report was noted.

RP-010239 Cover Sheet for TR 25.851 (MCC)

RP-010137 TR 25.851 (Rapporteur)
Martin Israelsson (TSG-RAN WG3 Chairman) presented this TR.
Decision: The TR was **approved** as v4.0.0.

CRs for this Work Item

Tdoc	Related WG	Title	Result
RP-010156	WG3	Agreed CRs	see 6.2.3.1 1)
RP-010157	WG3	Agreed CRs	withdrawn 1)

1) The CRs for both RAB QoS Negotiation and Renegotiation were provided in RP-010156 (see agenda item 6.2.3.1). Therefore document RP-010157 was withdrawn.

6.2.3.3 Proposed related WI "RAB Quality of Service Negotiation over Iu during relocation"

RP-010168 Proposed WI "RAB Quality of Service Negotiation over Iu during relocation" (TSG-RAN WG3)
Martin Israelsson (TSG-RAN WG3 Chairman) presented this WI proposal.
Discussion: The work for this proposed WI had already been finished by TSG-RAN WG3.
Decision: The WI was approved. The WI sheet was endorsed.

RP-010133 Status Report WI "RAB Quality of Service Negotiation over Iu during relocation" (Rapporteur)
Martin Israelsson (TSG-RAN WG3 Chairman) presented this status report.
Decision: The status report was noted.

CRs for this Work Item

Tdoc	Related WG	Title	Result
RP-010156	WG3	Agreed CRs	see 6.2.3.1 1)

1) The CR for this new WI had been included with those for both RAB QoS Negotiation and Renegotiation, all of which were provided in RP-010156 (see agenda item 6.2.3.1).

6.3 Evolution of the transport in the UTRAN

6.3.1 IP Transport in UTRAN

Status

RP-010144 Status Report WI "IP Transport in UTRAN" (Rapporteur)
Martin Israelsson (TSG-RAN WG3 Chairman) presented this status report.
Discussion: There were no CRs, this was a mistake.
Decision: The status report was noted. The change of dates for completion was also noted.

RP-010145 TR 25.933 (Rapporteur)
Martin Israelsson (TSG-RAN WG3 Chairman) presented this TR.
Discussion: The TR was for information.
Decision: The TR was **noted**.

CRs for this Work Item

Tdoc	Related WG	Title	Result
RP-010161	WG3	Agreed CRs	withdrawn

6.3.2 QoS optimization for AAL type 2 connections over Iub and Iur interfaces

Status

RP-010146 Status Report WI "QoS optimization for AAL type 2 connections over Iub and Iur interfaces" (Rapporteur)
Martin Israelsson (TSG-RAN WG3 Chairman) presented this status report.
Discussion: For the PDF format, documents RP-010146 and RP-010147 had been switched.
Decision: The status report was noted.

RP-010244 Cover Sheet for TR 25.934 (MCC)

RP-010147 TR 25.934 (Rapporteur)
Martin Israelsson (TSG-RAN WG3 Chairman) presented this TR.
Discussion: The PDF file contained the wrong TR and cover sheet, but the zip-file was correct..
Decision: The TR was **approved** as v4.0.0.

CRs for this Work Item

Tdoc	Related WG	Title	Result
RP-010162	WG3	Agreed CRs	approved

6.3.3 Migration to Modification procedure

Status

RP-010148 Status Report WI "Migration to Modification procedure" (Rapporteur)
Martin Israelsson (TSG-RAN WG3 Chairman) presented this status report.
Discussion: The name of this WI had been changed to "Transport bearer modification procedure on Iub, Iur, and Iu" as it was felt that better described the WI.
Decision: The status report was noted.

RP-010237 Cover Sheet for TR 25.954 (MCC)

RP-010149 TR 25.954 (Rapporteur)
Martin Israelsson (TSG-RAN WG3 Chairman) presented this TR.
Decision: The TR was **approved** as v4.0.0.

CRs for this Work Item

Tdoc	Related WG	Title	Result
RP-010163	WG3	Agreed CRs	approved

6.4 Transcoder Free Operations in UTRAN

Status

RP-010138 Status Report WI "Transcoder Free Operations in UTRAN" (Rapporteur)
Martin Israelsson (TSG-RAN WG3 Chairman) presented this status report.

Decision: The status report was noted.

RP-010236 Cover Sheet for TR 25.953 (MCC)

RP-010139 TR 25.953 (Rapporteur)
Martin Israelsson (TSG-RAN WG3 Chairman) presented this TR.
Decision: The TR was **approved** as v4.0.0.

CRs for this Work Item

Tdoc	Related WG	Title	Result
RP-010158	WG3	Agreed CRs	approved

6.5 UE Positioning

6.5.1 Iub/Iur interfaces for UE positioning methods supported on the radio interface Release '99

Status

RP-010140 Status Report WI "Iub/Iur interfaces for UE positioning methods supported on the radio interface release 99" (Rapporteur)
Martin Israelsson (TSG-RAN WG3 Chairman) presented this status report.
Discussion: The assumptions were confirmed to be correct by the WG1 and WG4 Chairmen.
Decision: The status report was noted.

RP-010243 Cover Sheet for TR 25.850 (MCC)

RP-010141 TR 25.850 (Rapporteur)
Martin Israelsson (TSG-RAN WG3 Chairman) presented this TR.
Decision: The TR was **approved** as v4.0.0.

CRs for this Work Item

Tdoc	Related WG	Title	Result
RP-010159	WG3	Agreed CRs	approved
RP-010099	WG4	Agreed CRs	approved

6.5.2 UE positioning enhancements

Status

RP-010045 Status Report WI "UE positioning enhancements" (Rapporteur)
Armin Sitte (Rapporteur) presented this status report.
Discussion: It was clarified that IPDLs for FDD was already in Release '99. It was asked why several different methods were needed. It was clarified that the different methods correspond to different scenarios. All positioning methods were optional for the UE, although there might be regulatory requirements in certain regions mandating the use of a certain method. If you want to provide a particular Location Service, a particular method may be needed. It was also stated that in WG1 RTD methods were provided for Release 4.

The issue of measurement accuracy was a concern for WG4 as long as the call requirements on positioning accuracy were not clear. It was clarified that it was already possible to provide positioning and that what was studied was improvements. After offline discussion, it was decided that this WI could be considered closed, but that the UE Positioning Ad Hoc needed to address the issues that had caused discussion. It was stated that all solutions where transmission was interrupted should be studied by WG4 for their performance impact.
Decision: The status report was noted.

RP-010046TR 25.847 v2.0.0 (TSG-RAN WG2)
Armin Sitte (Rapporteur) presented this TR.
Decision: The TR was **approved** as v4.0.0.

CRs for this Work Item

Tdoc	Related WG	Title	Result
RP-010040	WG2	Agreed CRs	approved
RP-010072	WG1	Agreed CRs	approved

6.6 Radio Interface Improvement Feature (2)

6.6.1 Improved usage of downlink resource in FDD for CCTrCHs of dedicated type

Status

No work had been done, but it had already been decided that this would not be proposed for inclusion in Release 4.

6.6.2 Radio access bearer support enhancement

Status

RP-010047Status Report WI "Radio access bearer support enhancement" (Rapporteur)
Denis Fauconnier (TSG-RAN WG2 Chairman) presented this status report.
Discussion: The completion date for the work in WG3 had not been discussed. This was a basket WI with several independent enhancements with different completion dates.
Decision: The status report was noted.

RP-010048TR 25.844 v2.0.0 (TSG-RAN WG2)
Denis Fauconnier (TSG-RAN WG2 Chairman) presented this TR.
Discussion: The only issue that might be reported to TSG-SA is the issue of tests for an IETF protocol inside a 3GPP protocol. This issue will be reported to TSG-SA for the co-ordination aspects.
Decision: The TR was **approved** as v4.0.0.

CRs for this Work Item

Tdoc	Related WG	Title	Result
RP-010039	WG2	Agreed CRs	approved

6.6.3 Hybrid ARQ II/III

Status

No work had been done, except in the scope of the SI HSDPA. It would not be proposed for inclusion in Release 4.

6.6.4 Study item: High speed downlink packet access

Status

RP-010049 Status Report SI "High speed downlink packet access" (Rapporteur)
Denis Fauconnier (TSG-RAN WG2 Chairman) presented this status report.
Decision: The status report was noted.

RP-010050 TR 25.950 v2.0.0 (TSG-RAN WG2)
Denis Fauconnier (TSG-RAN WG2 Chairman) presented this TR.
Discussion: It was clarified that there had not yet been a conclusion on the need for dynamic TTI in WG1. It was stated that it would be useful for operators if HSDPA could be used for streaming; this had been concluded positively in TSG-RAN WG2. It was clarified also that the TR concluded on the use of AMC, but not on any particular "QAM". It was clarified that the performance conclusion in the WG1 TR was valid whether 64 QAM was selected or not. It was also clarified with respect to the architectural impacts, that minimal impact was foreseen for Iur and Iub (flow control changes were foreseen, and fast cell selection was not part of that conclusion). Ciphering was done in RLC and RLC was not affected. It was recommended to approve the clauses until and including clause 13 (excluding clause 14, the recommendation), then to treat other documents on HSDPA and then to review the recommendation.
Decision: The TR was **approved** as v4.0.0. This did not mean that TSG-RAN was bound by the recommendations from WG1 and WG2.

RP-010191 TR 25.848 v1.0.0 (TSG-RAN WG1)
Antti Toskala (TSG-RAN WG1 Chairman) presented this TR.
Discussion: Section 8 was empty, but it was clarified that there had been study into backwards compatibility aspects and no causes for concern had been found. It was explained that the benefit of Hybrid ARQ could be found in the report. Although the TR was presented for information, it became clear that it was better to approve the TR at this meeting.
Decision: The TR was **approved** as v4.0.0.

RP-010229 HSDPA study item: the way forward (Lucent Technologies, Nortel Networks)
Said Tatesh (Lucent Technologies) presented this document.
Decision: The document was noted. An early morning discussion would be held on the way forward for HSDPA. See RP-010262, RP-010267 and RP-010227.

RP-010247 Development of solutions for High Speed Downlink Packet Access (TIM/Telecom Italia Lab, Omnitel/Vodafone, Telefonica, Sonera, VoiceStream, Telia AB, AT&T Wireless Services)
This document was replaced by R2-010249.

RP-010249 Development of solutions for High Speed Downlink Packet Access (TIM/Telecom Italia Lab, Omnitel/Vodafone, Telefonica, Sonera, VoiceStream, Telia AB, Telekom Austria, Cingular, Blu)

Andrea De Pasquale (Omnitel) presented this document.
Decision: The document was noted. An early morning discussion would be held on the way forward for HSDPA. See RP-010262, RP-010267 and RP-010227.

RP-010262 Proposed WIs for "HSDPA" (Motorola, Nokia, Ericsson, Vodafone Group, Mannesmann Mobilfunk)

Howard Benn (Ad Hoc Secretary) presented this WI proposal.
Discussion: There had been an early morning Ad Hoc session on the various proposals for HSDPA. There was a proposal to change the name, but no consensus. It would therefore be kept as "HSDPA" for now. Also some additional WIs/SIs were identified to be part of "HSDPA".
Decision: The WIs were approved. The WI sheets was endorsed. The list of identified topics for the WGs would serve as a starting point, but it was agreed that the work was not restricted to that. Also, it was agreed to include the WI "MIMO" (RP-010267) and the SI "Fast Cell Selection" (RP-010227). The name could be readdressed again at TSG-RAN #12 if necessary.

RP-010251 Proposed WI "MIMO" (Lucent Technologies)

This document was withdrawn.

RP-010267 Proposed WI "MIMO" (Lucent Technologies)

Ian Corden (Lucent Technologies) presented this WI proposal.
Discussion: This was agreed to be a WI for later than Release 5. [SECRETARY's NOTE: This WI was also supported by Nokia and Cingular].
Decision: The WI was approved for later than Release 5. The WI sheet was endorsed.

RP-010227 Proposed SI "Fast Cell Selection (FCS) for HS-DSCH" (Motorola)

Howard Benn (Ad Hoc Secretary) presented this SI proposal.
Discussion: The document said work item, but it was proposed as study item. It was proposed that WG2 would lead this SI, but after discussion decided to leave it as WG1. It would be a joint effort between the two WGs though.
Decision: The SI was approved. The SI sheet was endorsed.

RP-010228 Proposed SI "Fast Cell Selection (FCS) for HS-DSCH" (Motorola)

This document was withdrawn.

RP-010213 Proposed SI "MIMO techniques for HSDPA" (Motorola, Nokia)

This document was withdrawn.

6.6.5 Study item: Feasibility Study for Improved Common DL Channel for Cell-FACH State

Status

RP-010051 Status Report SI "Feasibility Study for Improved Common DL Channel for Cell-FACH State" (Rapporteur)
Joe Kwak (Rapporteur) presented this status report.
Decision: The status report was noted.

6.6.6 Terminal power saving features

Status

RP-010079 Status Report WI "Terminal power saving features" (Rapporteur)
This document was replaced by RP-010233.

RP-010233 Status Report WI "Terminal power saving features" (Rapporteur)
Antti Toskala (TSG-RAN WG1 Chairman) presented this status report.
Discussion: It was proposed to discuss this issue between WG1, WG2 and WG3 in the co-located meeting in Pusan (May 2001). In WG2 it had been explained that the terminal power saving could be indirect. In order to verify this, WG3 needed to study this before WG2 could conclude on the WI. Significant work was also still needed in WG4.
Decision: The status report was noted. The proposal to discuss in May 2001 was approved. It was decided that it was not realistic to put this WI in Release 4. The WI and the WI sheet needed to be reviewed to reflect that power saving is no longer the main goal. TSG-RAN #12 was not a realistic target date, instead TSG-RAN #13 could be a target date for completion. This would be further discussed in the joint meeting of the WGs.

RP-010069 TR 25.840 v2.3.0 (TSG-RAN WG1)
Decision: Because of the above discussion, the TR was **noted**.

RP-010246 Cover Sheet for TR 25.938 (MCC)

RP-010152 TR 25.938 (Rapporteur)
Decision: Because of the above discussion, the TR was **noted**.

CRs for this Work Item

Tdoc	Related WG	Title	Result
RP-010165	WG3	Agreed CRs	postponed

6.6.7 NodeB Synchronisation for TDD

Status

RP-010077 Status Report WI "NodeB Synchronisation for TDD" (Rapporteur)
Antti Toskala (TSG-RAN WG1 Chairman) presented this status report.

Decision: The status report was noted.

RP-010245 Cover Sheet for TR 25.838 (MCC)

RP-010153 TR 25.838 (Rapporteur)
Antti Toskala (TSG-RAN WG1 Chairman) presented this TR.
Decision: The TR was **approved** as v4.0.0.

CRs for this Work Item

Tdoc	Related WG	Title	Result
RP-010073	WG1	Agreed CRs	approved
RP-010041	WG2	Agreed CRs	approved
RP-010166	WG3	Agreed CRs	approved
RP-010101	WG4	Agreed CRs	approved

6.6.8 Improvement of inter-frequency and inter-system measurements

Status

No work had been done, but it had already been decided that this would not be proposed for inclusion in Release 4.

6.6.9 DSCH power control improvement in soft handover

Status

RP-010078 Status Report WI "DSCH power control improvement in soft handover" (Rapporteur)
Antti Toskala (TSG-RAN WG1 Chairman) presented this status report.
Discussion: It was first proposed to keep the WI for future releases since some new work had been identified. However, since a separate WI sheet had already been proposed this WI could be closed.
Decision: The status report was noted.

RP-010241 Cover Sheet for TR 25.849 (MCC)

RP-010154 TR 25.849 (Rapporteur)
Antti Toskala (TSG-RAN WG1 Chairman) presented this TR.
Decision: The TR was **approved** as v4.0.0.

CRs for this Work Item

Tdoc	Related WG	Title	Result
RP-010074	WG1	Agreed CRs	approved
RP-010042	WG2	Agreed CRs	approved
RP-010167	WG3	Agreed CRs	approved

6.6.10 Study item: Radio link performance enhancements

Status

There had been no relevant progress on this SI.

6.6.11 Study item: USTS

Status

RP-010080 Status Report SI "USTS" (Rapporteur)
Antti Toskala (TSG-RAN WG1 Chairman) presented this status report.
Discussion: There had been no discussion on this topic in TSG-RAN WG3 due to a lack of time. For this reason WG3 preferred to extend the feasibility study.
Decision: The status report was noted. The SI was extended to TSG-RAN #12. From WG1 point of view it had been concluded that this was a feasible technology. WG3 was asked to study the issue at its next WG3 meeting. It was also decided that WG1 could continue working on further details without this SI being formally approved by TSG-RAN as a WI, as soon as feedback from WG3 was needed.

RP-010171 Revised WI sheet for SI "USTS" (Rapporteur)
Because of the status of work in WG3, this WI sheet was noted.

RP-010070 TR 25.854 v1.0.0 (TSG-RAN WG1)
Decision: The TR was **noted**.

6.7 Low chip rate TDD option

RP-010076 Status Report WIs " DSCH power control improvement in soft handover and Low Chip Rate TDD Physical Layer" (Rapporteur)
Antti Toskala (TSG-RAN WG1) presented this status report.
Decision: The status report was noted.

RP-010068 TR 25.928 v2.0.0 (TSG-RAN WG1)
Mirko Aksentijevic (Nokia) presented this TR.
Decision: The TR was **approved** as v4.0.0.

6.7.1 Low Chip Rate TDD Physical Layer

Status

See RP-010076 in agenda item 6.7

CRs for this Work Item

Tdoc	Related WG	Title	Result
RP-010071	WG1	Agreed CRs	approved

6.7.2 Low chip rate TDD layer 2 and layer 3 protocol aspects

Status

RP-010052 Status Report WI "Low Chip Rate TDD layer 2 and layer 3 protocol aspects" (Rapporteur)
Jingyu Wang (CATT) presented this status report.
Decision: The status report was noted.

CRs for this Work Item

Tdoc	Related WG	Title	Result
RP-010037	WG2	Agreed CRs	approved

6.7.3 Low Chip Rate TDD UE radio access Capability

Status

RP-010053 Status Report WI "Low Chip Rate TDD UE radio access Capability" (Rapporteur)
Jingyu Wang (CATT) presented this status report.
Decision: The status report was noted.

CRs for this Work Item

Tdoc	Related WG	Title	Result
RP-010038	WG2	Agreed CRs	approved

6.7.4 Low chip rate TDD UTRAN network Iub/Iur protocol aspects

Status

RP-010150 Status Report WI "Low Chip Rate TDD UTRAN network Iub/Iur protocol aspects" (Rapporteur)
Yihua Jiang (CATT) presented this status report.
Decision: The status report was noted.

RP-010240 Cover Sheet for TR 25.937 (MCC)

RP-010151 TR 25.937 (Rapporteur)
Achim von Brandt (Siemens) presented this TR.
Decision: The TR was **approved** as v4.0.0.

CRs for this Work Item

Tdoc	Related WG	Title	Result
RP-010164	WG3	Agreed CRs	approved

6.7.5 Low chip Rate TDD RF Radio Transmission/ Reception, System Performance Requirements and Conformance Testing

Status

RP-010054 Status Report WI "Low Chip Rate TDD RF Radio Transmission/ Reception, System Performance Requirements and Conformance Testing" (Rapporteur)
Daijun Zhang (CATT) presented this status report.
Decision: The status report was noted.

RP-010055 TR 25.945 v2.4.0 (TSG-RAN WG4)
Daijun Zhang (CATT) presented this status report.
Decision: The TR was **approved** as v4.0.0.

CRs for this Work Item

Tdoc	Related WG	Title	Result
RP-010097	WG4	Agreed CRs	approved

6.8 RAN Technical Small Enhancements and Improvements

CRs for this Work Item

Tdoc	Related WG	Title	Result
RP-010075	WG1	Agreed CRs	replaced 1)
RP-010043	WG2	Agreed CRs	approved
RP-010189	WG3	Agreed CRs	approved
RP-010100	WG4	Agreed CRs	approved 2) 3)

1) This CR was not a small change and involved at least two WGs (WG1 and WG4). There was more work that was needed to be done. It was questioned if there was a point in employing both beamforming and Tx Diversity. This had not been discussed. After discussion the CR was **revised** to CR 095r2 to 25.211 **for Release '99** (see agenda item 5.1.3; source: Nokia).
2) The category of the first three CRs and also of CR 047 to 25.102 should be Category B, but there was no problem with the contents and they were **approved**.
3) The title of CR 063 to 25.104 was wrong and should be "RACH performance requirements". With this change that CR was **approved**.

6.9 WIs discussed at TSG-SA #10

6.9.1 Intra Domain Connection of RAN Nodes to Multiple CN Nodes: Overall System Architecture

A Release '99 CR had been approved already for RAN WG2 (the radio interface had been agreed to be Release '99). TSG-RAN WG3 still needed to discuss this issue, but had been waiting for results from TSG-SA WG2. The completion date was for further discussion, but WG3 assumed it to be this year.

6.9.2 Open SMLC-SRNC Interface within the UTRAN to support A-GPS Positioning

RP-010081 Proposed WI "Open SMLC-SRNC Interface within the UTRAN to support A-GPS Positioning" (Qualcomm)

This document was replaced by RP-010235.

RP-010235 Proposed WI "Open SMLC-SRNC Interface within the UTRAN to support A-GPS Positioning" (Qualcomm)

Vince Jolley (Qualcomm) presented this WI proposal.

Discussion: There was a lot of information that was not appropriate for the WI sheet. It was asked how this could be a Rel-4 WI where the proposed finalisation date was TSG-RAN #12. Good quality specifications were foreseen for TSG-RAN #12 and there was high importance for the operators. Most of the work had already been done. There was no impact on other specifications whether this was a June Release 4 or June Release 5 item. It was clarified that the situation was similar to UE positioning, where Stage 2 was completed in Release '99 and the interfaces in Release 4. The CRs for Stage 2 had been finished and were proposed for approval this week.

Decision: The WI was approved. The information that was not appropriate would be deleted and the sentence referring to Rel-4 removed. With these changes, the WI sheet was endorsed. The Stage 3 would not be in Release 4. [SECRETARY's NOTE: The latter decision (that Stage 3 would not be in Release 4) was taken according to the (Vice-)Chairman and several delegates. However, it was the proponent's understanding that the decision had been not to mention a Release to TSG-SA]. It would be reported to TSG-SA that this WI was extremely important to operators, with the planned completion date. The revised WI sheet was provided in RP-010270.

RP-010270 Proposed WI "Open SMLC-SRNC Interface within the UTRAN to support A-GPS Positioning" (Qualcomm)

Decision: The WI sheet was endorsed.

RP-010225 Proposed Positioning Calculation Application Part (PCAP) Specification (Qualcomm Europe)

This document was for information.

CRs for this Work Item

Tdoc	Related WG	Title	Result
RP-010044	WG2	Agreed CRs	approved 1)

1) It was decided that the notation for the architecture (name of the stand-alone entity) could be revised to make it more generic.

[SECRETARY's NOTE: After a lengthy discussion in TSG-SA, it was decided that Stage 1, Stage 2, Stage 3 for all WIs need to be kept together in the same release and that completion of Stage 3 for a WI indicates the release. It was also decided that no exception would be made for this WI. As a consequence the approved CR resulted in a **Release 5** version of TS 25.305.]

6.9.3 WB-AMR in RAN

Paolo Usai (TSG-SA WG4 Secretary) clarified that, so far, no work had been identified for TSG-RAN.

6.10 Report and discussion from Workshop on UTRAN Evolution

RP-010005 Draft Report of the TSG-RAN UTRAN Evolution Workshop (Helsinki, Finland, 5-6 February 2001) (Secretary)

RP-010006 Revised draft Report of the TSG-RAN UTRAN Evolution Workshop (Helsinki, Finland, 5-6 February 2001) (Secretary)

The revised meeting report of the TSG-RAN Workshop on UTRAN Evolution in RP-010006 had been distributed via the email reflector and was on the server.

Decision: The report was approved. The approved report would be available in RP-010007.

RP-010007 Approved Report of the TSG-RAN UTRAN Evolution Workshop (Helsinki, Finland, 5-6 February 2001) (Secretary)

This was the approved report of the TSG-RAN UTRAN Evolution Workshop.

RP-010214 Summary of e-mail discussions on UTRAN Architecture Enhancements (Convenor for e-mail discussions)

Antti Toskala (Convenor for e-mail discussions) presented this document.

Discussion: There was a proposal for an SI in RP-010208.

Decision: The document was noted.

6.11 Others

RP-010177 Mitigating the Effect of CPICH Interference at the UE (Intel Corp.)

Shimon Moshavi (Intel Corp.) presented this document.

Discussion: The issue had been discussed in WG1 and WG4 and WG4 seemed to be the most relevant WG. It was asked whether this would be mandatory (there was no reference to 25.306 to include it as a capability). There was no view on this at this moment. It was also remarked that there are many ways to improve the performance; this was only one of them. TSG-RAN #13 was also seen as very optimistic.

Decision: The document was noted.

RP-010176 Proposed WI "Mitigating the Effect of CPICH Interference at the UE" (Intel Corp.)

This document was replaced by RP-010231.

RP-010231 Proposed WI "Mitigating the Effect of CPICH Interference at the UE" (Intel Corp.)

Shimon Moshavi (Intel Corp.) presented this document.

Discussion: The issue was discussed on the basis of RP-010177.

Decision: The proposal was approved as a Study Item, to be led by TSG-RAN WG4. A revision of the WI (SI) sheet was needed. This was made available in RP-010260.

RP-010260 Proposed SI "Mitigating the Effect of CPICH Interference at the UE" (Intel Corp.)

Shimon Moshavi (Intel Corp.) presented this document.

Discussion: There were a few editorials to be made. Also the wording about the complexity needed to be updated and also the title would need to be generalised a bit more.

Decision: The SI sheet would be changed by WG4 if necessary, to be confirmed in the next TSG-RAN plenary meeting.

RP-010173 Justification for UE Support for CPCH in Release 4 (GBT)
Joe Kwak (GBT) presented this document.
Discussion: Splitting a Release '99 UE capability into two Release 4 UE capabilities was not acceptable for TSG-RAN WG1 for interoperability/backwards compatibility reasons. It was pointed out that RRC signalling could be used to indicate CPCH support. A CR to split CPCH capability into two capabilities in the RRC specification was not provided, however. After discussion it appeared that there was no need for this split as there was understood to be no unambiguity. It was also commented that CPCH was not complete, and that it was far from clear how it could be used in the network. Even if pending CRs in WG4 were to be agreed, the case of dealing with more than one cell in the network had not been resolved. [NOTE: CPCH is like RACH, and handover is not applied to such transient, contention channels]. It was clarified that all earlier techniques that had been thought to be very important in the past had all been optional, and that the market had decided on which ones were useful. The same should be applied to CPCH. In response to the question on the status of the CR, it was explained that in WG2 no consensus could be reached on this CR (actually no agreement on the CR had been asked for in WG2). A request to clarify the principle concerning when to indicate "yes" and when to indicate "no" in the tables in 25.306 was made. The clarification given was that the tables in 25.306 were filled in by consensus. Clarifications were provided several times but were not felt to be sufficient by the claimer.
Decision: The document was noted. Since CPCH had not been finished yet in WG4 it was decided to discuss this CR again in WG2 when the feature would be fully completed. In principle this discussion would take place within the scope of Release 5. Because of the lack of consensus, it was decided that more time was needed to try and obtain a consensus. The CR was **not** approved.

RP-010222 Traffic characteristics of various 3G non real time services (GBT)
This document was for information.

RP-010174 UE Support for CPCH in Release 4 (GBT)
This document was withdrawn.

RP-010258 Presentation for Traffic characteristics of various 3G non real time services (GBT)
Kourosh Parsa (GBT) presented this document.
Decision: The document was noted.

RP-010221 Impact of packet mode (CPCH) capacity gain on 3G deployment of non real time services (SBC Technology, GBT)
This document was for information.

RP-010257 Presentation for Impact of Packet Mode Capacity Gain on 3G deployment of non real time services (GBT, ADL, SBC Technology Resources)
Kourosh Parsa (GBT) presented this document.
Discussion: It was commented that the capacity gains were unbelievable and that more information was needed to validate these figures. It was stated that it was not surprising that an efficient packet-switched technique was much faster than a slow circuit-switched one. It was also stated that the reason fast packet switching had not been used before in mobile cellular networks was the problem of contention resolution, but that CPCH had provided a solution to this problem.
Decision: The document was noted.

RP-010223 CPCH financial benefits to 3G service providers/network operators (Arthur D.Little, GBT)
This document was replaced by RP-010263.

RP-010263 CPCH financial benefits to 3G service providers/network operators (Arthur D.Little, GBT)
Joe Kwak (GBT) presented this document.
Discussion: This was a technical specification group, so no questions or comments on financial issues were handled.
Decision: The document was noted.

RP-010175 RAN Ways Forward for CPCH (GBT)
This document was withdrawn.

RP-010248 Proposal to introduce the SIR measurement (TIM/Telecom Italia Lab, Telefonica, Mobilkom Austria, AT&T Wireless Services, Blu)
Giovanni Romano (TILab) presented this document.
Discussion: This was proposed to be a SI.
Decision: The document was noted. The proposal was endorsed. A SI sheet would be presented in WG4.

RP-010187 Proposed WI "Node B Resource Model improvements" (Alcatel)
This document was replaced by RP-010253.

RP-010253 Proposed WI "Node B Resource Model improvements" (Alcatel)
Philippe Sehier (Alcatel) presented this WI proposal.
Discussion: There had been offline comments to say that WG3 could handle this as TEI.
Decision: The WI's topic was endorsed. The WI sheet was withdrawn. WG3 would handle the proposal in the form of TEI CRs after presentation of justification.

RP-010188 Proposed WI "Signalling of Iub bearer requirements over Iur" (Alcatel)
Francois Courau (Alcatel) presented this WI proposal.
Discussion: It was explained that this tries to solve a known problem within Release '99.
Decision: The WI's topic was endorsed. The WI sheet was withdrawn. WG3 would handle the proposal in the form of TEI CRs if agreement could be reached.

RP-010170 Proposed WI "Enhancement on the DSCH hard split mode" (Samsung)
This document was replaced by RP-010205.

RP-010205 Proposed WI "Enhancement on the DSCH hard split mode" (Samsung, LG Electronics)
Jin-Weon Chang (Samsung) presented this WI proposal.
Discussion: The need for different TRs in different WGs could be discussed in the WGs.
Decision: The WI was approved. The WI sheet was endorsed.

RP-010207 Proposed WI "Enhancement of Broadcast and Introduction of Multicast Capabilities in RAN" (Nokia, Hutchison 3G, Omnitel/Vodafone)
Antti Toskala (Nokia) presented this WI proposal.
Discussion: The time schedule seemed too optimistic. It would be changed to TSG-RAN #13 and TSG-RAN #14. It was not clear if the Stage 1 was done already. The scope was perhaps too narrow.

Decision: The WI was approved conditionally, pending approval of a feature in TSG-SA. The WI sheet was endorsed in principle, although revision might be necessary. TSG-SA would be notified of the proposal and asked for guidance.

RP-010212 Presentation for proposed WI "Enhancement of Broadcast and Introduction of Multicast Capabilities in RAN" (Nokia)

This document was for information.

RP-010208 Proposed SI "Open CRMS-RNS Interface to support Common Radio Resource Management" (Nokia)

This document was replaced by RP-010275.

RP-010275 Proposed SI "Open CRMS-RNS Interface to support Common Radio Resource Management" (Nokia)

Antti Toskala (Nokia) presented this SI proposal.
Discussion: This was a proposal resulting from the e-mail discussion following the UTRAN Evolution Workshop in Helsinki. The dates would be shifted by one TSG. However, it was stated that the study should focus on the problem, not on the particular solution mentioned. The objective was to improve the RRM, and the title of the SI would be "Improvement of RRM across RNS and RNS/BSS".
Decision: The SI was approved with the new title. The SI sheet would be reviewed by WG3.

RP-010209 Proposed WI "Traffic Termination Point Swapping" (Nokia)

Antti Toskala (Nokia) presented this WI proposal.
Decision: The WI was approved. The WI sheet was endorsed.

RP-010210 Proposed WI "Open SMLC-SRNC Interface within the UTRAN to support UTRAN Rel'4 positioning methods" (Nokia, Hutchison 3G)

Antti Toskala (Nokia) presented this WI proposal.
Discussion: The dates would be shifted by one TSG (TSG-RAN #14 can be kept).
Decision: With this change, the WI was approved. The WI sheet was endorsed.

RP-010215 Proposed WI "UE positioning enhancements for 1.28 Mcps TDD" (CWTS/CATT)

Guiliang Yang (CATT) presented this WI proposal.
Discussion: There was a question whether there was a need for alignment with the previously approved WI from Nokia.
Decision: The WI was approved. The WI sheet was endorsed.

RP-010216 Proposed WI "Node B Synchronisation for 1.28 Mcps TDD" (CWTS/CATT)

Guiliang Yang (CATT) presented this WI proposal.
Discussion: It needed to be checked if existing Node B Synchronisation was applicable, but initial view was that it might not be the case.
Decision: The WI was approved. The WI sheet was endorsed.

RP-010234 Proposed WI "UMTS 1900" (Cingular, AT&T WS, Motorola, Nortel Networks, Nokia, Ericsson, VoiceStream Wireless)

Don Zelmer (Cingular) presented this WI proposal.

Discussion: The WI sheet would need to be updated as soon as the new TS number was known for the TS on UMTS bands not bound to release (see discussion in agenda item 6.1.3). It was stated that a meeting on UMTS 1900 issues would be held in early May in Seattle. More details would follow on the reflector.
Decision: The WI was approved. The WI sheet was endorsed.

RP-010261 Proposed WI "RL Timing Adjustement" (Ericsson, Nokia, Philips, Qualcomm)
Per Beming (Ericsson) presented this WI proposal.
Decision: The WI was approved. The WI sheet was endorsed.

RP-010266 Proposed WI "Gated DPCCH Transmission" (Samsung)
Jin-Weon Chang (Samsung) presented this WI proposal.
Discussion: This followed discussion in agenda item 6.6.6.
Decision: The WI was approved. The WI sheet was endorsed.

RP-010271 Proposed WI "Separation of resource reservation and radio link activation" (Ericsson)
Per Beming (Ericsson) presented this WI proposal.
Discussion: This was left over from RRM optimization from Release 4.
Decision: The WI was approved. The WI sheet was endorsed.

6.12 Overall RAN work plan

RP-010277 Creation of Release 4 versions of the TSG RAN WG1 specifications (TSG-RAN WG1 Chairman)
Hans van der Veen (Secretary) presented this document.
Discussion: All WG1 TSs needed to be moved to Release 4, but this was not true for all TRs. TR 25.833 was proposed not to be moved to Release 4.
Decision: The document was noted. The overview of all TSs and TRs not proposed for Release 4 was provided below.

RP-010184 Release 4 specs expected to be created in March 2001 (MCC)
Hans van der Veen (Secretary) presented this document.
Discussion: An explicit decision was needed on which TSs and TRs from Release '99 needed to be transferred to Release 4. It was easier to decide which ones should **not** be moved.
Decision: The document was noted. It was decided that of the **approved** TSs and TRs in TSG-RAN, the following ones would **not** be moved to Release 4:

25.925 (WG2)
25.941 (WG4)
25.990 (TSG-RAN)

In addition, the following **non-approved** TSs and TRs were **not** intended for Release 4:

25.831 (WG3)
25.833 (WG1)
30.504 (WG4)
30.531 (WG3)

Finally, for the **non-approved** (dormant) 25.924 the situation was not yet clear.

7 Technical co-ordination among WGs

There was no input for this agenda item.

8 Output to other groups

8.1 TSG-SA

RP-010264 Proposed LS Operating Frequency Band as a Release independent work item (Motorola)
Howard Benn (Motorola) presented this LS.
Decision: The LS was approved and would be sent as RP-010278. The TS number for the required new TS would be 25.307, under the responsibility of WG2.

RP-010278 LS (to TSG-SA) on Operating Frequency Band as a Release independent work item (TSG-RAN)
Decision: The LS was approved.

8.2 ITU-R

There was no input for this agenda item.

8.3 Other

RP-010265 Draft response (to EP BRAN; copy TSG-RAN WG3) to LS (BRAN22d115) on HIPERACCESS (TSG-RAN WG3 Chairman)
Martin Israelsson (TSG-RAN WG3 Chairman) presented this LS.
Decision: The LS was approved and would be sent as RP-010279.

RP-010279 Response (to EP BRAN; copy TSG-RAN WG3) to LS (BRAN22d115) on HIPERACCESS (TSG-RAN)
Decision: The LS was approved.

9 Summary of Release 4

Due to lack of time, no summary of Release 4 was made.

10 Project management

RP-010206 Ensuring backward compatibility for Release '99 Specifications (NTT DoCoMo, Hutchison 3G UK, Japan Telecom, Omnitel/Vodafone, Telia, Telefonica, TIM/TILAB, Vodafone Group Plc, Alcatel, Ericsson, Fujitsu, Motorola, NEC, Nokia, Panasonic)

This document was replaced by RP-010226.

RP-010226 Ensuring backward compatibility for Release '99 Specifications (NTT DoCoMo, Hutchison 3G UK, Japan Telecom, Omnitel/Vodafone, Telia, Telefonica, TIM/TILAB, Vodafone Group Plc, Alcatel, Ericsson, Fujitsu, Lucent Technologies, Motorola, NEC, Nokia, Panasonic)

Seizo Onoe (NTT DoCoMo) presented this document.
Discussion: The behaviour of the interface also affected the backward compatibility. It was clarified also that decisions should always be on a case-by-case basis, taking into account the backwards compatibility. Also, sometimes it was preferable to delete an incomplete feature from an older release and introduce it fully working in a following release rather than leave the incomplete feature in the older release. It was also pointed out that backward compatibility for Release 4 was not advisable yet.
Decision: The document was replaced by RP-010276.

RP-010211 RRC and backwards compatibility (Nokia)

Antti Toskala (Nokia) presented this document.
Discussion: It was not very clear what the timing in the first bullet on inconsistency was aiming at. This would be left to TSG-RAN WG2, by asking it to apply the principles, but pragmatically on a case-by-case basis. Also, these principles were for Release '99, not yet for Release 4.
Decision: The document was replaced by RP-010276.

RP-010276 Recommendations applying to corrections of Release 99 specifications (Drafting group (NTT DoCoMo, Alcatel, Ericsson, Nokia, Nortel Networks))

Denis Fauconnier (TSG-RAN WG2 Chairman) presented this document.
Decision: The document was approved. The document would be presented by the TSG-RAN WG Chairmen in their next WG meeting. MCC would ensure a standard phrase for backwards compatibility based on the existing one in WG3 would be used in all TSG-RAN WGs.

RP-010178 CR 014 to TR 21.900 (MCC)

This document was provided for information.

RP-010179 CR 004 to TS 21.101 (MCC)

This document was provided for information.

RP-010180 TS 21.102 v2.0.0 (MCC)

This document was provided for information.

RP-010181 TS 41.102 v2.0.0 (MCC)

This document was provided for information.

RP-010182 Specs status list prior to TSGs#11 (MCC)
This document was provided for information.

RP-010183 Spec numbers and titles (MCC)
This document was provided for information.

11 Any Other Business

There was no input for this agenda item.

12 Closing of meeting

Yukitsuna Furuya (Chairman) thanked the delegates for their attendance at the long meeting and the hosts for the facilities provided. He also thanked the delegates for co-operation in the last two years. TSG-RAN had achieved great accomplishment, mostly due to the work of the delegates in the TSG-RAN WGs. The TSG-RAN WG chairmen had been instrumental in the co-ordination. He also thanked the Vice-Chairmen Francois Courau and Don Zelmer and the Secretary, Hans van der Veen for the support. He explained that he had learned a lot about standardisation.

Francois Courau (Vice-Chairman) thanked Yukitsuna Furuya (Chairman) for the work which has been done under his chairmanship which led to completion (almost) of Release '99 and also for allowing a smooth handover possible.

For future meetings, see Annex D.

Annex A: List of delegates

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ATTENDEE	REPRESENTED ORGANISATION	CTRY	E-MAIL
1. Mr. James A. Davis	TRA	US	JDAVIS@MAILEX.TRA.com
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Annex B: List of documents

Doc.No.	Title	Source	Ag.It.	Comments
RP-010001	Proposed agenda	Chairman	2	
RP-010002	Draft Report of the 10th TSG-RAN meeting (Bangkok, Thailand, 6-8 December 2000)	Secretary	3	
RP-010003	Revised draft Report of the 10th TSG-RAN meeting (Bangkok, Thailand, 6-8 December 2000)	Secretary	3	
RP-010004	Approved Report of the 10th TSG-RAN meeting (Bangkok, Thailand, 6-8 December 2000)	Secretary	3	
RP-010005	Draft Report of the TSG-RAN UTRAN Evolution Workshop (Helsinki, Finland, 5-6 February 2001)	Secretary	6.10	
RP-010006	Revised draft Report of the TSG-RAN UTRAN Evolution Workshop (Helsinki, Finland, 5-6 February 2001)	Secretary	6.10	
RP-010007	Approved Report of the TSG-RAN UTRAN Evolution Workshop (Helsinki, Finland, 5-6 February 2001)	Secretary	6.10	
RP-010008	Draft Report of TSG-SA Idle mode Workshop (Helsinki, Finland, 7 - 8 February 2001)	WS Chairman	4.1	
RP-010009	(S2-002113, to TSG-RAN) LS on Provision of Open Interfaces within the GERAN & UMTS for LCS Support	TSG-SA WG2	4.1	
RP-010010	(S2-010373, to TSG-RAN) LS on Withdrawing the SA Work Item on open LCS interfaces	TSG-SA WG2	4.1	
RP-010011	(S5-010012, copy TSG-RAN) Response to LS (R3-010304) on Feedback on UTRAN OAM Procedures	TSG-SA WG5	4.1	
RP-010012	(TP-000257, to TSG-RAN) LS on Clarification of the work plan of TSG-T1 for Rel-4 and Rel-5	TSG-T	4.1	
RP-010013	(R2-010740, to TSG-RAN) LS on Release 4 UE Support for CPCH	TSG-RAN WG2	4.3	
RP-010014	(R3-010304, copy TSG-RAN) LS on Feedback on UTRAN OAM Procedures Work Item	TSG-RAN WG3	4.3	
RP-010015	Work Item sheets - latest situation	Secretary	6	R2-010203
RP-010016	Study Item sheets - latest situation	Secretary	6	
RP-010017	Report from WG2 chairman to TSG-RAN	TSG-RAN WG2 Chairman	5.2.1	
RP-010018	Supplement (List of agreed R'99 CRs) to Report from WG2 chairman to TSG-RAN	TSG-RAN WG2 Chairman	5.2.1	
RP-010019	CRs (R'99) to TS 25.301	TSG-RAN WG2	5.2.3	
RP-010020	CRs (R'99) to TS 25.302	TSG-RAN WG2	5.2.3	
RP-010021	CRs (R'99) to TS 25.303	TSG-RAN WG2	5.2.3	
RP-010022	CRs (R'99) to TS 25.304	TSG-RAN WG2	5.2.3	
RP-010023	CRs (R'99) to TS 25.305	TSG-RAN WG2	5.2.3	
RP-010024	CRs (R'99) to TS 25.306	TSG-RAN WG2	5.2.3	
RP-010025	CRs (R'99) to TS 25.321	TSG-RAN WG2	5.2.3	
RP-010026	CRs (R'99) to TS 25.322	TSG-RAN WG2	5.2.3	
RP-010027	CRs (R'99) to TS 25.323	TSG-RAN WG2	5.2.3	
RP-010028	CRs (R'99) to TS 25.324	TSG-RAN WG2	5.2.3	
RP-010029	CRs (R'99) to TS 25.331 (1)	TSG-RAN WG2	5.2.3	
RP-010030	CRs (R'99) to TS 25.331 (2)	TSG-RAN WG2	5.2.3	
RP-010031	CRs (R'99) to TS 25.331 (3)	TSG-RAN WG2	5.2.3	
RP-010032	CRs (R'99) to TS 25.331 (4)	TSG-RAN WG2	5.2.3	
RP-010033	CRs (R'99) to TR 25.921	TSG-RAN WG2	5.2.3	
RP-010034	CRs (R'99) to TR 25.922	TSG-RAN WG2	5.2.3	

Doc.No.	Title	Source	Ag.It.	Comments
RP-010035	CRs (R'99) to TR 25.925	TSG-RAN WG2	5.2.3	
RP-010036	CRs (R'99) to TS 34.109	TSG-RAN WG2	5.2.3	
RP-010037	CRs (Rel-4) for WI "Low Chip Rate TDD layer 2 and layer 3 protocol aspects"	TSG-RAN WG2	6.7.2	
RP-010038	CRs (Rel-4) for WI "Low Chip Rate TDD UE radio access Capability"	TSG-RAN WG2	6.7.3	
RP-010039	CRs (Rel-4) for WI "Radio access bearer support enhancement"	TSG-RAN WG2	6.6.2	
RP-010040	CRs (Rel-4) for WI "UE positioning enhancements"	TSG-RAN WG2	6.5.2	
RP-010041	CRs (Rel-4) for WI "NodeB Synchronisation for TDD"	TSG-RAN WG2	6.6.7	
RP-010042	CRs (Rel-4) for WI "DSCH power control improvement in soft handover"	TSG-RAN WG2	6.6.9	
RP-010043	CRs (Rel-4) for WI "RAN Technical Small Enhancements and Improvements"	TSG-RAN WG2	6.8	
RP-010044	CRs (Rel-4) for WI "Open Location Service in UMTS and GERAN"	TSG-RAN WG2	6.9.2	
RP-010045	Status report WI "UE positioning enhancements"	Rapporteur	6.5.2	
RP-010046	TR 25.847 v2.0.0	TSG-RAN WG2	6.5.2	
RP-010047	Status report WI "Radio access bearer support enhancement"	Rapporteur	6.6.2	
RP-010048	TR 25.844 v2.0.0	TSG-RAN WG2	6.6.2	
RP-010049	Status report SI "High speed downlink packet access"	Rapporteur	6.6.4	
RP-010050	TR 25.950 v2.0.0	TSG-RAN WG2	6.6.4	
RP-010051	Status report SI "Feasibility Study for Improved Common DL Channel for Cell-FACH State"	Rapporteur	6.6.5	
RP-010052	Status report WI "Low Chip Rate TDD layer 2 and layer 3 protocol aspects"	Rapporteur	6.7.2	
RP-010053	Status report WI "Low Chip Rate TDD UE radio access Capability"	Rapporteur	6.7.3	
RP-010054	Status report WI "Low Chip Rate TDD RF Radio Transmission/ Reception, System Performance Requirements and Conformance Testing"	Rapporteur	6.7.5	
RP-010055	TR 25.945 v2.4.0	TSG-RAN WG4	6.7.5	
RP-010056	Report from WG1 chairman to TSG-RAN	TSG-RAN WG1 Chairman	5.1.1	
RP-010057	Supplement (List of agreed CRs) to Report from WG1 chairman to TSG-RAN	TSG-RAN WG1 Chairman	5.1.1	
RP-010058	CRs (R'99) to TS 25.211	TSG-RAN WG1	5.1.3	
RP-010059	CRs (R'99) to TS 25.213	TSG-RAN WG1	5.1.3	
RP-010060	CRs (R'99) to TS 25.214	TSG-RAN WG1	5.1.3	
RP-010061	CRs (R'99) to TS 25.215	TSG-RAN WG1	5.1.3	
RP-010062	CRs (R'99) to TS 25.221	TSG-RAN WG1	5.1.3	
RP-010063	CRs (R'99) to TS 25.222	TSG-RAN WG1	5.1.3	
RP-010064	CRs (R'99) to TS 25.223	TSG-RAN WG1	5.1.3	
RP-010065	CRs (R'99) to TS 25.224	TSG-RAN WG1	5.1.3	
RP-010066	CRs (R'99) to TS 25.225	TSG-RAN WG1	5.1.3	
RP-010067	CRs (R'99) to TR 25.944	TSG-RAN WG1	5.1.3	
RP-010068	TR 25.928 v2.0.0	TSG-RAN WG1	6.7	
RP-010069	TR 25.840 v2.3.0	TSG-RAN WG1	6.6.6	
RP-010070	TR 25.854 v1.0.0	TSG-RAN WG1	6.6.11	
RP-010071	CRs (Rel-4) for WI "Low Chip Rate TDD Physical Layer"	TSG-RAN WG1	6.7.1	
RP-010072	CRs (Rel-4) for WI "UE positioning enhancements"	TSG-RAN WG1	6.5.2	
RP-010073	CRs (Rel-4) for WI "NodeB Synchronisation for TDD"	TSG-RAN WG1	6.6.7	
RP-010074	CRs (Rel-4) for WI "DSCH power control improvement in soft handover"	TSG-RAN WG1	6.6.9	
RP-010075	CRs (Rel-4) for WI "RAN Technical Small Enhancements and Improvements"	TSG-RAN WG1	6.8	

Doc.No.	Title	Source	Ag.It.	Comments
RP-010076	Status report WI "Low Chip Rate TDD and Low Chip Rate TDD Physical Layer"	Rapporteur	6.7.1	
RP-010077	Status report WI "NodeB Synchronisation for TDD"	Rapporteur	6.6.7	
RP-010078	Status report WI "DSCH power control improvement in soft handover"	Rapporteur	6.6.9	
RP-010079	Status report WI "Terminal power saving features"	Rapporteur	6.6.6	RP-010233
RP-010080	Status report SI "USTS"	Rapporteur	6.6.11	
RP-010081	Proposed WI "Open SMLC-SRNC Interface within the UTRAN to support A-GPS Positioning"	Qualcomm	6.9.2	RP-010235
RP-010082	Expanding UMTS Co-existence WI to Include PCS1900 Band Operation	AT&T Wireless Services, Cingular	6.1.3	
RP-010083	Regional requirements on Test Tolerances	ARIB	5.4.2	
RP-010084	Status report for Release 99 specifications	TSG-RAN WG4 Chairman	5.4.1	
RP-010085	CRs (R'99) to TS 25.101	TSG-RAN WG4	5.4.3	
RP-010086	CRs (R'99) to TS 25.102	TSG-RAN WG4	5.4.3	
RP-010087	CRs (R'99) to TS 25.104	TSG-RAN WG4	5.4.3	
RP-010088	CRs (R'99) to TS 25.105	TSG-RAN WG4	5.4.3	
RP-010089	CRs (R'99) to TS 25.113	TSG-RAN WG4	5.4.3	
RP-010090	CRs (R'99) to TS 25.123	TSG-RAN WG4	5.4.3	
RP-010091	CRs (R'99) to TS 25.133	TSG-RAN WG4	5.4.3	
RP-010092	CRs (R'99) to TS 25.141	TSG-RAN WG4	5.4.3	
RP-010093	CRs (R'99) to TS 25.142	TSG-RAN WG4	5.4.3	
RP-010094	CRs (R'99) to TR 34.124	TSG-RAN WG4	5.4.3	
RP-010095	Status report WI "UMTS 1800"	Rapporteur	6.1.3	
RP-010096	CRs (Rel-4) for WI "UMTS 1800"	TSG-RAN WG4	6.1.3	
RP-010097	CRs (Rel-4) for WI "Low Chip Rate TDD RF Radio Transmission/ Reception, System Performance Requirements and Conformance Testing"	TSG-RAN WG4	6.7.5	
RP-010098	CRs (Rel-4) for WI "UTRA FDD Repeater Specification"	TSG-RAN WG4	6.1.2	
RP-010099	CRs (Rel-4) for WI "Iub/Iur interfaces for UE positioning methods supported on the radio interface release 99"	TSG-RAN WG4	6.5.1	
RP-010100	CRs (Rel-4) for WI "RAN Technical Small Enhancements and Improvements"	TSG-RAN WG4	6.8	
RP-010101	CRs (Rel-4) for WI "NodeB Synchronisation for TDD"	TSG-RAN WG4	6.6.7	
RP-010102	Status report WI "UTRA FDD Repeater Specification"	Rapporteur	6.1.2	
RP-010103	TS 25.106 v2.0.0	TSG-RAN WG4	6.1.2	
RP-010104	TS 25.143 v2.0.0	TSG-RAN WG4	6.1.2	
RP-010105	Report from WG3 chairman to TSG-RAN	TSG-RAN WG3 Chairman	5.3.1	RP-010204
RP-010106	List of Agreed CRs from WG3	MCC	5.3.3	
RP-010107	CRs (R'99) to TS 25.401	TSG-RAN WG3	5.3.3	
RP-010108	CRs (R'99) to TS 25.402	TSG-RAN WG3	5.3.3	
RP-010109	CRs (R'99) to TS 25.411	TSG-RAN WG3	5.3.3	
RP-010110	CRs (R'99) to TS 25.413 (1)	TSG-RAN WG3	5.3.3	
RP-010111	CRs (R'99) to TS 25.413 (2)	TSG-RAN WG3	5.3.3	
RP-010112	CRs (R'99) to TS 25.414	TSG-RAN WG3	5.3.3	
RP-010113	CRs (R'99) to TS 25.415	TSG-RAN WG3	5.3.3	
RP-010114	CRs (R'99) to TS 25.419	TSG-RAN WG3	5.3.3	
RP-010115	CRs (R'99) to TS 25.420	TSG-RAN WG3	5.3.3	
RP-010116	CRs (R'99) to TS 25.421	TSG-RAN WG3	5.3.3	
RP-010117	CRs (R'99) to TS 25.423 (1)	TSG-RAN WG3	5.3.3	

Doc.No.	Title	Source	Ag.It.	Comments
RP-010118	CRs (R'99) to TS 25.423 (2)	TSG-RAN WG3	5.3.3	
RP-010119	CRs (R'99) to TS 25.424	TSG-RAN WG3	5.3.3	
RP-010120	CRs (R'99) to TS 25.425	TSG-RAN WG3	5.3.3	
RP-010121	CRs (R'99) to TS 25.426	TSG-RAN WG3	5.3.3	
RP-010122	CRs (R'99) to TS 25.427	TSG-RAN WG3	5.3.3	
RP-010123	CRs (R'99) to TS 25.430	TSG-RAN WG3	5.3.3	
RP-010124	CRs (R'99) to TS 25.431	TSG-RAN WG3	5.3.3	
RP-010125	CRs (R'99) to TS 25.433 (1)	TSG-RAN WG3	5.3.3	
RP-010126	CRs (R'99) to TS 25.433 (2)	TSG-RAN WG3	5.3.3	
RP-010127	CRs (R'99) to TS 25.434	TSG-RAN WG3	5.3.3	
RP-010128	CRs (R'99) to TS 25.435	TSG-RAN WG3	5.3.3	
RP-010129	CRs (R'99) to TR 25.853	TSG-RAN WG3	5.3.3	
RP-010130	CRs (R'99) to TR 25.931	TSG-RAN WG3	5.3.3	
RP-010131	Status report WI "PS-Domain handover for real-time services"	Rapporteur	6.2.2	
RP-010132	TR 25.936	Rapporteur	6.2.2	
RP-010133	Status report WI "RAB Quality of Service Negotiation over Iu during relocation"	Rapporteur	6.11	
RP-010134	Status report WI "RAB Quality of Service Negotiation over Iu"	Rapporteur	6.2.3.1	
RP-010135	TR 25.946	Rapporteur	6.2.3.1	
RP-010136	Status report WI "RAB Quality of Service Renegotiation over Iu"	Rapporteur	6.2.3.2	
RP-010137	TR 25.851	Rapporteur	6.2.3.2	
RP-010138	Status report WI "Transcoder Free Operations in UTRAN"	Rapporteur	6.4	
RP-010139	TR 25.953	Rapporteur	6.4	
RP-010140	Status report WI "Iub/Iur interfaces for UE positioning methods supported on the radio interface release 99"	Rapporteur	6.5.1	
RP-010141	TR 25.850	Rapporteur	6.5.1	
RP-010142	Status report WI "RRM optimizations for Iur and Iub"	Rapporteur	6.2.1	
RP-010143	TR 25.935	Rapporteur	6.2.1	
RP-010144	Status report WI "IP Transport in UTRAN"	Rapporteur	6.3.1	
RP-010145	TR 25.933	Rapporteur	6.3.1	
RP-010146	Status report WI "QoS optimization for AAL type 2 connections over Iub and Iur interfaces"	Rapporteur	6.3.2	
RP-010147	TR 25.934	Rapporteur	6.3.2	
RP-010148	Status report WI "Migration to Modification procedure"	Rapporteur	6.3.3	
RP-010149	TR 25.954	Rapporteur	6.3.3	
RP-010150	Status report WI "Low Chip Rate TDD UTRAN network Iub/Iur protocol aspects"	Rapporteur	6.7.4	
RP-010151	TR 25.937	Rapporteur	6.7.4	
RP-010152	TR 25.938	Rapporteur	6.6.6	
RP-010153	TR 25.838	Rapporteur	6.6.7	
RP-010154	TR 25.849	Rapporteur	6.6.9	
RP-010155	CRs (Rel-4) to TR 25.936	Rapporteur	6.2.2	
RP-010156	CRs (Rel-4) to TR 25.946	Rapporteur	6.2.3.1	
RP-010157	CRs (Rel-4) to TR 25.851	Rapporteur	6.2.3.2	withdrawn
RP-010158	CRs (Rel-4) to TR 25.953	Rapporteur	6.4	
RP-010159	CRs (Rel-4) to TR 25.850	Rapporteur	6.5.1	
RP-010160	CRs (Rel-4) to TR 25.935	Rapporteur	6.2.1	
RP-010161	CRs (Rel-4) to TR 25.933	Rapporteur	6.3.1	withdrawn
RP-010162	CRs (Rel-4) to TR 25.934	Rapporteur	6.3.2	
RP-010163	CRs (Rel-4) to TR 25.954	Rapporteur	6.3.3	

Doc.No.	Title	Source	Ag.It.	Comments
RP-010164	CRs (Rel-4) to TR 25.937	Rapporteur	6.7.4	
RP-010165	CRs (Rel-4) to TR 25.938	Rapporteur	6.6.6	
RP-010166	CRs (Rel-4) to TR 25.838	Rapporteur	6.6.7	
RP-010167	CRs (Rel-4) to TR 25.849	Rapporteur	6.6.9	
RP-010168	Proposed WI "RAB Quality of Service Negotiation over Iu during relocation"	TSG-RAN WG3	6.11	
RP-010169	TR 30.531 v0.8.8	MCC	5.4.3	
RP-010170	Proposed WI "Enhancement on the DSCH hard split mode"	Samsung	6.11	RP-010205
RP-010171	Revised WI sheet for SI "USTS"	Rapporteur	6.6.11	
RP-010172	Status Report WI "TDD Base station classification" & TR 25.952	Rapporteur	6.1.1.2	
RP-010173	Justification for UE Support for CPCH in Release 4	GBT	6.11	
RP-010174	UE Support for CPCH in Release 4	GBT	6.11	
RP-010175	RAN Ways Forward for CPCH	GBT	6.11	withdrawn
RP-010176	Proposed WI "Mitigating the Effect of CPICH Interference at the UE"	Intel Corp.	6.11	RP-010231
RP-010177	Mitigating the Effect of CPICH Interference at the UE	Intel Corp.	6.11	
RP-010178	CR 014 to TR 21.900	MCC	10	
RP-010179	CR 004 to TS 21.101	MCC	10	
RP-010180	TS 21.102 v2.0.0	MCC	10	
RP-010181	TS 41.102 v2.0.0	MCC	10	
RP-010182	Specs status list prior to TSGs#11	MCC	10	
RP-010183	Spec numbers and titles	MCC	10	
RP-010184	Release 4 specs expected to be created in March 2001	MCC	6.12	
RP-010185	Status Report	ITU-R Ad Hoc contact person	5.5	
RP-010186	Procedure to enable TSG RAN to provide necessary material to ITU-R WP 8F for incorporation of updated CDMA DS and TDD in Rec. M.1457 by Oct'01	Ericsson, Nokia, TILab, VoiceStream	5.5	
RP-010187	Proposed WI "Node B Resource Model improvements"	Alcatel	6.11	RP-010253
RP-010188	Proposed WI "Signalling of Iub bearer requirements over Iur"	Alcatel	6.11	
RP-010189	CRs (Rel-4) for WI "RAN Technical Small Enhancements and Improvements"	TSG-RAN WG3	6.8	
RP-010190	TR 25.956 v0.2.0	TSG-RAN WG4	6.1.2	
RP-010191	TR 25.848 v1.0.0	TSG-RAN WG1	6.6.4	
RP-010192	(S3-010136, to TSG-RAN) LS on UE ciphering capabilities	TSG-SA WG3	4.1	
RP-010193	Request for information for proposed ITU-T technical report being developed by the special study group on "IMT-2000 and beyond"	ITU-T SSG	4.2	
RP-010194	Request for information for proposed ITU-T recommendations being developed by the special study group on "IMT-2000 and beyond"	ITU-T SSG	4.2	
RP-010195	(R1-010427, copy TSG-RAN) LS on Recommendations on HSDPA	TSG-RAN WG1	4.3	
RP-010196	(R3-010928, copy TSG-RAN) Response to LS (S5-010012) on UO&M Procedures Work Item	TSG-RAN WG3	4.3	
RP-010197	(R4-010451, to TSG-RAN) LS on 3GPP Vocabulary document TR 21.905	TSG-RAN WG4	4.3	
RP-010198	(BRAN22d115, to TSG-RAN) LS on HIPERACCESS	ETSI EP BRAN	4.2	
RP-010199	Proposed CR 676r1 to 25.331 (R'99) on Checking the integrity of UE security capabilities	Nokia	5.2.3	RP-010274
RP-010200	Proposed CR 064r3 to 25.304 (R'99) on Equivalent PLMN codes	Telia	5.2.3	
RP-010201	MCC review of the Work Plan	MCC	6	
RP-010202	Work Plan - version March 9th	MCC	6	RP-010230
RP-010203	Work Item sheets - latest situation	Secretary	6	
RP-010204	Report from WG3 chairman to TSG-RAN	TSG-RAN WG3 Chairman	5.3.1	

Doc.No.	Title	Source	Ag.It.	Comments
RP-010205	Proposed WI "Enhancement on the DSCH hard split mode"	Samsung, LG Electronics	6.11	
RP-010206	Ensuring backward compatibility for Release 99 specifications	NTT DoCoMo, Hutchison 3G UK, Japan Telecom, Omnitel/Vodafone, Telia, Telefonica, TIM/TILAB, Vodafone Group Plc, Alcatel, Ericsson, Fujitsu, Motorola, NEC, Nokia, Panasonic	10	RP-010226
RP-010207	Proposed WI "Enhancement of Broadcast and Introduction of Multicast Capabilities in RAN"	Nokia, Hutchison 3G, Omnitel/Vodafone	6.11	
RP-010208	Proposed SI "Open CRMS-RNS Interface to support Common Radio Resource Management"	Nokia	6.11	RP-010275
RP-010209	Proposed WI "Traffic Termination Point Swapping"	Nokia	6.11	
RP-010210	Proposed WI "Open SMLC-SRNC Interface within the UTRAN to support UTRAN Rel'4 positioning methods"	Nokia, Hutchison 3G	6.11	
RP-010211	RRC and backwards compatibility	Nokia	10	
RP-010212	Presentation for proposed WI "Enhancement of Broadcast and Introduction of Multicast Capabilities in RAN"	Nokia	6.11	
RP-010213	Proposed SI "MIMO techniques for HSDPA"	Motorola, Nokia	6.11	
RP-010214	Summary of e-mail discussions on UTRAN Architecture Enhancements	Convenor for e-mail discussions	6.10	
RP-010215	Proposed WI "UE positioning enhancements for 1.28 Mcps TDD"	CWTS/CATT	6.11	
RP-010216	Proposed WI "Node B Synchronisation for 1.28 Mcps TDD"	CWTS/CATT	6.11	
RP-010217	Status report WI "FDD Base station classification"	Rapporteur	6.1.1.1	
RP-010218	Proposed CR 145r1 to 25.214	Nokia	5.1.3	RP-010254
RP-010219	Operating Frequency Band as a Release independent work item	Motorola, Nokia, Alcatel, Nortel, Ericsson	6.1.3	
RP-010220	TR 25.942 v2.4.2	TSG-RAN WG4	5.4.3	
RP-010221	Impact of packet mode (CPCH) capacity gain on 3G deployment of non real time services	SBC Technology, GBT	6.11	
RP-010222	Traffic characteristics of various 3G non real time services	GBT	6.11	
RP-010223	CPCH financial benefits to 3G service providers/network operators	Arthur D.Little, GBT	6.11	RP-010263
RP-010224	Proposed CR 154r2 to 25.214	Ericsson, Philips, Nokia	5.1.3	
RP-010225	Proposed Positioning Calculation Application Part (PCAP) Specification	Qualcomm Europe	6.9.2	
RP-010226	Ensuring backward compatibility for Release 99 specifications	NTT DoCoMo, Hutchison 3G UK, Japan Telecom, Omnitel/Vodafone, Telia, Telefonica, TIM/TILAB, Vodafone Group Plc, Alcatel, Ericsson, Fujitsu, Lucent Technologies, Motorola, NEC, Nokia, Panasonic	10	
RP-010227	Proposed SI "Fast Cell Selection (FCS) for HS-DSCH"	Motorola	6.6.4	
RP-010228	Proposed SI "Fast Cell Selection (FCS) for HS-DSCH"	Motorola	6.6.4	withdrawn
RP-010229	HSDPA study item: the way forward	Lucent Technologies, Nortel Networks	6.6.4	
RP-010230	Work Plan	MCC	6	
RP-010231	Proposed WI "Mitigating the Effect of CPICH Interference at the UE"	Intel Corp.	6.11	
RP-010232	Status report SI "UE antenna efficiency test methods performance requirements"	Allgon	6.1.4	
RP-010233	Status report WI "Terminal power saving features"	Rapporteur	6.6.6	

Doc.No.	Title	Source	Ag.It.	Comments
RP-010234	Proposed WI "UMTS 1900"	Cingular, AWS, Motorola, Nortel Networks, Nokia, Ericsson, VoiceStream Wireless	6.11	
RP-010235	Proposed WI "Open SMLC-SRNC Interface within the UTRAN to support A-GPS Positioning"	Qualcomm	6.9.2	RP-010235
RP-010236	Cover Sheet for TR 25.953	MCC	6.4	
RP-010237	Cover Sheet for TR 25.954	MCC	6.3.3	
RP-010238	Cover Sheet for TR 25.936	MCC	6.2.2	
RP-010239	Cover Sheet for TR 25.851	MCC	6.2.3.2	
RP-010240	Cover Sheet for TR 25.937	MCC	6.7.4	
RP-010241	Cover Sheet for TR 25.849	MCC	6.6.9	
RP-010242	Cover Sheet for TR 25.946	MCC	6.2.3.1	
RP-010243	Cover Sheet for TR 25.850	MCC	6.5.1	
RP-010244	Cover Sheet for TR 25.934	MCC	6.3.2	
RP-010245	Cover Sheet for TR 25.838	MCC	6.6.7	
RP-010246	Cover Sheet for TR 25.938	MCC	6.6.6	
RP-010247	Development of solutions for High Speed Downlink Packet Access	TIM/Telecom Italia Lab, Omnitel/Vodafone, Telefonica, Sonera, VoiceStream, Telia AB, AT&T Wireless Services	6.6.4	RP-010249
RP-010248	Proposal to introduce the SIR measurement	TIM/Telecom Italia Lab, Telefonica, Mobilkom Austria, AT&T Wireless Services, Blu	6.11	
RP-010249	Development of solutions for High Speed Downlink Packet Access	TIM/Telecom Italia Lab, Omnitel/Vodafone, Telefonica, Sonera, VoiceStream, Telia AB, Telekom Austria, Cingular, Blu	6.6.4	
RP-010250	Proposed CR to 25.141 on Regional requirements for Test Tolerances	ARIB	5.4.3	RP-010268
RP-010251	Proposed WI "MIMO"	Lucent Technologies	6.6.4	RP-010267
RP-010252	LS from TSG-SA WG2 to TSG-RAN WG3 asking for delay of RAN QoS WI to Rel-5	TSG-RAN WG3 Chairman	6.2.3.1	
RP-010253	Proposed WI "Node B Resource Model improvements"	Alcatel	6.11	
RP-010254	Proposed CR 145r2 to 25.214	Nokia	5.1.3	
RP-010255	Proposed CR 095r2 to 25.211	Nokia	6.8	
RP-010256	Status Report WI "TDD Base station classification"	Rapporteur	6.1.1.2	
RP-010257	Impact of Packet Mode Capacity Gain on 3G deployment of non real time services	GBT, ADL, SBC Technology Resources	6.11	
RP-010258	Traffic characteristics of various 3G non real time services	GBT	6.11	
RP-010259	Proposed CR 095r3 to 25.211	Nokia, Ericsson, Panasonic	5.1.2	RP-010269
RP-010260	Proposed SI "Mitigating the Effect of CPICH Interference at the UE"	Intel Corp.	6.11	
RP-010261	Proposed WI "RL Timing Adjustement"	Ericsson, Nokia, Philips, Qualcomm	6.11	
RP-010262	Proposed WI "HSDPA"	Motorola, Nokia, Ericsson, Vodafone Group, Mannesmann Mobilfunk	6.6.4	
RP-010263	CPCH financial benefits to 3G service providers/network operators	Arthur D.Little, GBT	6.11	

Doc.No.	Title	Source	Ag.It.	Comments
RP-010264	Proposed LS (to TSG-SA) on Operating Frequency Band as a Release independent work item	Motorola	8	RP-010278
RP-010265	Draft response (to EP BRAN; copy TSG-RAN WG3) to LS (BRAN22d115) on HIPERACCESS	TSG-RAN WG3 Chairman	8	RP-010279
RP-010266	Proposed WI "Gated DPCCH Transmission"	Samsung	6.11	
RP-010267	Proposed WI "MIMO"	Lucent Technologies	6.6.4	
RP-010268	Proposed CR to 25.141 on Regional requirements for Test Tolerances	ARIB	5.4.3	
RP-010269	Proposed CR 095r3 to 25.211	Nokia, Ericsson, Panasonic	5.1.2	
RP-010270	Proposed WI "Open SMLC-SRNC Interface within the UTRAN to support A-GPS Positioning"	Qualcomm	6.9.2	
RP-010271	Proposed WI "Separation of resource reservation and radio link activation"	Ericsson	6.11	
RP-010272	Revised WI sheet for WI "RRM optimization for Iur and Iub" for Release 4	Rapporteur	6.1.2	
RP-010273	Revised WI sheet for WI "RRM optimization for Iur and Iub" for Release 5	Rapporteur	6.1.2	
RP-010274	Proposed CR 676r2 to 25.331 (R'99) on Checking the integrity of UE security capabilities	Nokia	5.2.3	
RP-010275	Proposed SI "Open CRMS-RNS Interface to support Common Radio Resource Management"	Nokia	6.11	
RP-010276	Recommendations applying to corrections of Release 99 specifications	Drafting group (NTT DoCoMo, Alcatel, Ericsson, Nokia, Nortel Networks)	10	
RP-010277	Creation of Release 4 versions of the TSG RAN WG1 specifications	TSG-RAN WG1 Chairman	6.12	
RP-010278	LS (to TSG-SA) on Operating Frequency Band as a Release independent work item	TSG-RAN	8	
RP-010279	Response (to EP BRAN; copy TSG-RAN WG3) to LS (BRAN22d115) on HIPERACCESS	TSG-RAN	8	

Annex C: Status table of CRs

Spec	CR	Rev	Cat	Phase	Doc-1st-Level	Doc-2nd-Level	Subject	Status-1st-Level	Version-New	WG-Responsible
25.101	86		F	R99	RP-010085	R4-010091	CR to 25.101 for Test Tolerances	approved	3.6.0	R4
25.101	87		F	R99	RP-010085	R4-010149	Proposed CR to TS 25.101 on subclause 3.2 Abbreviations	approved	3.6.0	R4
25.101	88		F	R99	RP-010085	R4-010196	Correction of version number of the ITU-R Recommendation SM.329	approved	3.6.0	R4
25.101	89		F	R99	RP-010085	R4-010337	REL 99 Corrections	approved	3.6.0	R4
25.101	90		F	R99	RP-010085	R4-010350	Tx power during measurement on Rx characteristics	approved	3.6.0	R4
25.101	91		F	R99	RP-010085	R4-010412	Removal of square brackets and TBDs from TS 25.101	approved	3.6.0	R4
25.101	92		F	R99	RP-010085	R4-010439	Correction of Definition of multi-code OCNS signal	approved	3.6.0	R4
25.101	93		F	R99	RP-010085	R4-010461	Performance requirement for 250km/h	approved	3.6.0	R4
25.101	94		F	R99	RP-010085	R4-010351	TS25.101 Rel 99 Clarification of UARFCN (channel number)	approved	3.6.0	R4
25.101	95		B	Rel-4	RP-010096	R4-010466	REL 4 Document restructure and changes	postponed		R4
25.101	96		F	Rel-4	RP-010100	R4-010281	Performance requirements BCH	approved	4.0.0	R4
25.101	97		F	Rel-4	RP-010100	R4-010413	Performance requirements for paging channel	approved	4.0.0	R4
25.101	98		F	Rel-4	RP-010100	R4-010454	Performance requirements for Acquisition Indicator channel	approved	4.0.0	R4
25.102	41		F	R99	RP-010086	R4-010037	Relationship between Minimum Requirements and Test Tolerances.	approved	3.6.0	R4
25.102	42		F	R99	RP-010086	R4-010153	Requirements for out-of-synchronisation handling of output power during DTX	approved	3.6.0	R4
25.102	43		F	R99	RP-010086	R4-010164	UE Power Control Accuracy	approved	3.6.0	R4
25.102	44		F	R99	RP-010086	R4-010197	Correction of version number of the ITU-R Recommendation SM.329	approved	3.6.0	R4
25.102	45		B	Rel-4	RP-010097	R4-010423	UTRA (UE) TDD; Radio transmission and Reception	approved	4.0.0	R4
25.102	46		B	Rel-4	RP-010100	R4-010254	Service Mapping for 2 Mbps	approved	4.0.0	R4
25.102	47		B	Rel-4	RP-010100	R4-010252	UE Performance Requirements for 2 Mbps	approved	4.0.0	R4
25.104	55		F	R99	RP-010087	R4-010092	CR to 25.104 for Test Tolerances	approved	3.6.0	R4
25.104	56		F	R99	RP-010087	R4-010339	Correction of reference to SM.329-8 in TS 25.104	approved	3.6.0	R4
25.104	57		F	R99	RP-010087	R4-010424	Receiver Blocking requirement for co-existence with GSM/DCS and co-located base stations - revised.	approved	3.6.0	R4
25.104	58		F	R99	RP-010087	R4-010385	UL Performance requirement in fast fading	approved	3.6.0	R4
25.104	59		F	R99	RP-010087	R4-010420	Performance requirement for 250km/h	approved	3.6.0	R4
25.104	60		F	R99	RP-010087	R4-010262	Definition of EVM / PCDE measurement period	approved	3.6.0	R4
25.104	61		F	R99	RP-010087	R4-010433	Inclusion of environmental requirements	approved	3.6.0	R4
25.104	62		B	Rel-4	RP-010096	R4-010447	TS25.104 REL 4 - Document structure	postponed		R4
25.104	63		B	Rel-4	RP-010100	R4-010384	RACH performance requirements	approved	4.0.0	R4
25.105	48		F	R99	RP-010088	R4-010424	Receiver Blocking requirement for co-existence with GSM/DCS and co-located base stations.	approved	3.6.0	R4
25.105	49		F	R99	RP-010088	R4-010038	Relationship between Minimum Requirements and Test Tolerances.	approved	3.6.0	R4
25.105	50		F	R99	RP-010088	R4-010376	Correction of reference to SM.329-8 in TS25.105	approved	3.6.0	R4
25.105	51		F	R99	RP-010088	R4-010459	BS EVM definition	approved	3.6.0	R4

25.105	52		B	Rel-4	RP-010097	R4-010291	UTRA (BS) TDD; Radio transmission and Reception	approved	4.0.0	R4
25.113	10		B	Rel-4	RP-010097	R4-010292	Base station electromagnetic compatibility (EMC) for 1.28Mcps TDD	approved	4.0.0	R4
25.113	11		B	Rel-4	RP-010098	R4-010409	Text proposal for EMC for Repeater	approved	4.0.0	R4
25.113	8		F	R99	RP-010089	R4-010246	Correction to the description of the radiated spurious emission test method	approved	3.5.0	R4
25.113	9		F	R99	RP-010089	R4-010333	Alignment of TS25.113 with CISPR 22 standard	approved	3.5.0	R4
25.123	35		F	R99	RP-010090	R4-010039	Deletion of cell-selection requirements	approved	3.5.0	R4
25.123	36		B	Rel-4	RP-010101	R4-010045	NodeB Synchronisation Measurements performance requirements	approved	4.0.0	R4
25.123	37		F	R99	RP-010090	R4-010295	Corrections in idle mode and corresponding test cases.	approved	3.5.0	R4
25.123	38		F	R99	RP-010090	R4-010362	Section 8 changes	approved	3.5.0	R4
25.123	39		F	R99	RP-010090	R4-010363	Section 9 Changes	approved	3.5.0	R4
25.123	40		F	R99	RP-010090	R4-010389	Correction of the cell-reselection and handover requirements in connected mode.	approved	3.5.0	R4
25.123	41		F	R99	RP-010090	R4-010390	Change and completion of the cell-reselection requirements in CELL-FACH state.	approved	3.5.0	R4
25.123	42		F	R99	RP-010090	R4-010377	Change of the cell-reselection requirements.	approved	3.5.0	R4
25.123	43		F	R99	RP-010090	R4-010452	Extension of reporting range for UTRAN UL measurements	approved	3.5.0	R4
25.123	44		B	Rel-4	RP-010097	R4-010443	Requirements for Support of Radio Resources Management (TDD) for 1.28Mcps TDD	approved	4.0.0	R4
25.123	45		F	Rel-4	RP-010099	R4-010446	UE/UTRAN GPS Timing of Cell Frames for UP	approved	4.0.0	R4
25.133	66		F	R99	RP-010091	R4-010014	General idle mode requirements	approved	3.5.0	R4
25.133	67		F	R99	RP-010091	R4-010025	Removal of Signalling Delay Requirements	approved	3.5.0	R4
25.133	68		F	R99	RP-010091	R4-010172	FDD/GSM handover	approved	3.5.0	R4
25.133	69		F	R99	RP-010091	R4-010173	Revised Correction of hard handover delay requirements	approved	3.5.0	R4
25.133	70		F	R99	RP-010091	R4-010181	Cell-Reselection, Measurements of inter-frequency TDD cells	approved	3.5.0	R4
25.133	71		F	R99	RP-010091	R4-010217	Correction of number of events that should be handled by the UE	approved	3.5.0	R4
25.133	72		F	R99	RP-010091	R4-010224	Revised limitations to the usage of compressed mode patterns	approved	3.5.0	R4
25.133	73		F	R99	RP-010091	R4-010469	Measurements on FDD and TDD in Cell-FACH state	approved	3.5.0	R4
25.133	74		F	R99	RP-010091	R4-010467	Measurements on GSM in Cell-FACH state	approved	3.5.0	R4
25.133	75		F	R99	RP-010091	R4-010468	Cell re-selection in Cell-FACH state	approved	3.5.0	R4
25.133	76		F	R99	RP-010091	R4-010453	General Measurement Requirements in CELL_DCH State	approved	3.5.0	R4
25.133	77		F	R99	RP-010091	R4-010456	GSM Measurements	approved	3.5.0	R4
25.133	78		F	R99	RP-010091	R4-010455	Cell reselection performance	approved	3.5.0	R4
25.133	79		F	R99	RP-010091	R4-010331	CPICH Ec/Io mapping	approved	3.5.0	R4
25.133	80		F	R99	RP-010091	R4-010255	UTRAN transport channel BLER measurement	approved	3.5.0	R4
25.133	81		F	R99	RP-010091	R4-010256	UTRAN physical channel BER measurement	approved	3.5.0	R4
25.133	82		F	R99	RP-010091	R4-010298	Test case for FDD/TDD cell re-selection .	approved	3.5.0	R4
25.133	83		F	R99	RP-010091	R4-010320	Requirements for event triggered reporting in fading conditions	approved	3.5.0	R4
25.133	84		F	R99	RP-010091	R4-010392	Modification of soft handover requirements	approved	3.5.0	R4
25.133	85		F	R99	RP-010091	R4-010460	Clarifications of TDD measurements and the use of compressed mode pattern for TDD measurements.	approved	3.5.0	R4
25.133	86		F	R99	RP-010091	R4-010450	UE transmit TIming	approved	3.5.0	R4
25.133	87		F	R99	RP-010091	R4-010393	Correction of the FDD/TDD handover requirement in connected mode.	approved	3.5.0	R4
25.133	88		F	Rel-4	RP-010099	R4-010322	UE/UTRAN GPS Timing of Cell Frames for LCS	approved	4.0.0	R4

25.141	083		F	R99	RP-010250		Regional requirements on Test Tolerance	revised		R4
25.141	083		F	R99	RP-010268		Regional requirements on Test Tolerance	approved	3.5.0	R4
25.141	66		F	R99	RP-010092	R4-010424	Correction of blocking test. Alignment with CR to 25.104.	approved	3.5.0	R4
25.141	67		F	R99	RP-010092	R4-010385	UL Performance requirement in fast fading	approved	3.5.0	R4
25.141	68		F	R99	RP-010092	R4-010420	Test description for Case 4(250km/h)	approved	3.5.0	R4
25.141	69		F	R99	RP-010092	R4-010215	Proposed CR to 25.141 on Spectrum Emissions Mask	approved	3.5.0	R4
25.141	70		F	R99	RP-010092	R4-010079	Correction to PICH frame structure	approved	3.5.0	R4
25.141	71		F	R99	RP-010092	R4-010237	Addition of S-CCPCH containing PCH into test models	approved	3.5.0	R4
25.141	72		F	R99	RP-010092	R4-010321	UTRAN Received total wideband power	approved	3.5.0	R4
25.141	73		F	R99	RP-010092	R4-010340	Correction of reference to SM.329-8 in TS 25.141	approved	3.5.0	R4
25.141	74		F	R99	RP-010092	R4-010341	Corrections to Blocking and Rx Spurious emissions tests in TS 25.141	withdrawn		R4
25.141	75		F	R99	RP-010092	R4-010430	Rx spurious emissions measurement bandwidth in 25.141	approved	3.5.0	R4
25.141	76		F	R99	RP-010092	R4-010434	Conditions for BS conformance testing (FDD)	approved	3.5.0	R4
25.141	77		F	R99	RP-010092	R4-010437	CR to 25.141 for Test Tolerances	approved	3.5.0	R4
25.141	78		F	R99	RP-010092	R4-010266	CR to 25.141 for Test Tolerances in TX tests	approved	3.5.0	R4
25.141	79		F	R99	RP-010092	R4-010263	Definition of EVM	approved	3.5.0	R4
25.141	80		F	R99	RP-010092	R4-010438	Addition of CPICH to Test Model 4 for EVM measurement	approved	3.5.0	R4
25.141	81		F	R99	RP-010092	R4-010440	Re-introduction of the SCH period into the EVM / PCDE measurements	approved	3.5.0	R4
25.141	82		F	R99	RP-010092	R4-010470	Implementation of Test Tolerances (Receiver part)	approved	3.5.0	R4
25.142	47		F	R99	RP-010093	R4-010424	Correction of blocking test. Alignment with CR to 25.105.	approved	3.5.0	R4
25.142	48		F	R99	RP-010093	R4-010313	Handling of Test Tolerances - Clause 8 "Performance requirements"	approved	3.5.0	R4
25.142	49		F	R99	RP-010093	R4-010378	Correction of the version number of Recommendation ITU-R SM.329 used as a reference for spurious emissions specifications	approved	3.5.0	R4
25.142	50		F	R99	RP-010093	R4-010459	BS EVM definition	approved	3.5.0	R4
25.142	51		F	R99	RP-010093	R4-010386	Handling of Test Tolerances - Clause 5 "General test conditions and declarations"	approved	3.5.0	R4
25.142	52		F	R99	RP-010093	R4-010387	Handling of Test Tolerances - Clause 6 "Transmitter characteristics"	approved	3.5.0	R4
25.142	53		F	R99	RP-010093	R4-010388	Handling of Test Tolerances - Clause 7 "Receiver characteristics"	approved	3.5.0	R4
25.142	54		F	R99	RP-010093	R4-010314	Handling of Test Tolerances - Annexes	approved	3.5.0	R4
25.142	55		F	R99	RP-010093	R4-010426	Conditions for BS conformance testing (TDD)	approved	3.5.0	R4
25.142	56		B	Rel-4	RP-010097	R4-010294	BS Conformance test for 1.28Mcps TDD	approved	4.0.0	R4
25.201	006	1	B	Rel-4	RP-010071	R1-010377	Inclusion of 1.28Mcps TDD in TS 25.201	approved	4.0.0	R1
25.211	091	-	F	R99	RP-010058	R1-010034	DSCH reading indication	approved	3.6.0	R1
25.211	092	1	F	R99	RP-010058	R1-010368	Clarification of the S-CCPCH frame carring paging information	approved	3.6.0	R1
25.211	093	1	F	Rel-4	RP-010075	R1-010347	Application of beamforming and combination of beamforming with TX-diversity on UTRA FDD downlink	revised		R1
25.211	095	1	F	R99	RP-010058	R1-010346	Phase Reference for Secondary CCPCH carrying FACH	approved	3.6.0	R1
25.211	095	2	F	R99	RP-010259		Phase Reference for Secondary CCPCH carrying FACH	withdrawn		R1
25.211	095	3	F	R99	RP-010255		Phase Reference for Secondary CCPCH carrying FACH	approved	3.6.0	R1
25.211	095	3	F	R99	RP-010269		Phase Reference for Secondary CCPCH carrying FACH	withdrawn		R1
25.211	096	-	F	R99	RP-010058	R1-010359	Uplink power control preamble	approved	3.6.0	R1
25.213	038	-	F	R99	RP-010059	R1-010247	Clarification of channelization codes when SF=512	approved	3.5.0	R1

25.213	039	1	F	R99	RP-010059	R1-010348	Clarification of the scrambling code of a power control preamble	approved	3.5.0	R1
25.214	142	1	F	R99	RP-010060	R1-010112	Uplink power control in compressed mode	approved	3.6.0	R1
25.214	144	-	F	R99	RP-010060	R1-010052	Removal of the power balancing algorithm from TS 25.214	approved	3.6.0	R1
25.214	145	-	F	R99	RP-010060	R1-010053	Clarification of Nid parameter – when SSDT and uplink compressed mode are in operation	revised		R1
25.214	145	1	F	R99	RP-010254		Clarification of Nid parameter – when SSDT and uplink compressed mode are in operation	approved	3.6.0	R1
25.214	145	1	F	R99	RP-010218	R1-010053r	Clarification of Nid parameter – when SSDT and uplink compressed mode are in operation	approved	3.6.0	R1
25.214	146	-	F	R99	RP-010060	R1-010085	Clarification of closed loop transmit diversity mode 1 and mode 2 operation during compressed mode	approved	3.6.0	R1
25.214	148	1	F	R99	RP-010060	R1-010352	Clarification of UE SIR estimation	approved	3.6.0	R1
25.214	149	1	B	Rel-4	RP-010074	R1-010414	DSCH Power Control Improvement in soft handover	approved	4.0.0	R1
25.214	150	1	F	R99	RP-010060	R1-010357	Clarification of the order of SSDT signalling in 2 bit FBI	approved	3.6.0	R1
25.214	154	1	F	R99	RP-010060	R1-010359	Uplink power control preamble	revised		R1
25.214	154	2	F	R99	RP-010224	R1-010359	Uplink power control preamble	approved	3.6.0	R1
25.214	155	-	F	R99	RP-010060	R1-010279	Correction of limited power raise	approved	3.6.0	R1
25.214	156	-	F	R99	RP-010060	R1-010282	Clarification of initialisation procedure	approved	3.6.0	R1
25.214	158	-	F	R99	RP-010060	R1-010285	Definition of power control step size for algorithm 2	approved	3.6.0	R1
25.214	161	1	F	R99	RP-010060	R1-010353	Correction of the UE behaviour in SSDT mode	approved	3.6.0	R1
25.214	163	-	F	R99	RP-010060	R1-010419	Correction on downlink synchronisation primitives	approved	3.6.0	R1
25.215	079	2	F	R99	RP-010061	R1-010107	Correction of the observed time difference to GSM measurement	approved	3.6.0	R1
25.215	081	-	F	R99	RP-010061	R1-010071	Removal of UE SIR measurement	approved	3.6.0	R1
25.215	082	1	F	R99	RP-010061	R1-010340	Correction of GSM reference	approved	3.6.0	R1
25.215	083	-	F	R99	RP-010061	R1-010294	Correction of GPS Timing measurement	approved	3.6.0	R1
25.215	085	-	B	Rel-4	RP-010072	R1-010411	RTD measurement in UTRAN for FDD	approved	4.0.0	R1
25.215	086	-	F	R99	RP-010061	R1-010419	Correction on transport channel BLER	approved	3.6.0	R1
25.221	033	2	F	R99	RP-010062	R1-010350	Correction to SCH section	approved	3.6.0	R1
25.221	037	1	F	R99	RP-010062	R1-010019	Bit Scrambling for TDD	approved	3.6.0	R1
25.221	039	1	F	R99	RP-010062	R1-010111	Corrections of PUSCH and PDSCH	approved	3.6.0	R1
25.221	040	-	F	R99	RP-010062	R1-010021	Alteration of SCH offsets to avoid overlapping Midamble	approved	3.6.0	R1
25.221	041	-	F	R99	RP-010062	R1-010022	Clarifications & Corrections for TS25.221	approved	3.6.0	R1
25.221	042	2	B	Rel-4	RP-010073	R1-010381	Introduction of the Physical Node B Synchronization Channel	approved	4.0.0	R1
25.221	043	1	B	Rel-4	RP-010071	R1-010371	Inclusion of 1.28Mcps TDD in TS 25.221	approved	4.0.0	R1
25.221	044	-	C	Rel-4	RP-010072	R1-010226	Correction of beacon characteristics due to IPDLs	approved	4.0.0	R1
25.221	045	1	F	R99	RP-010062	R1-010379	Corrections on the PRACH and clarifications on the midamble generation and the behaviour in case of an invalid TFI combination on the DCHs	approved	3.6.0	R1
25.221	046	-	F	R99	RP-010062	R1-010265	Clarification of TFCI transmission	approved	3.6.0	R1
25.221	048	-	F	R99	RP-010062	R1-010341	Corrections to Table 5.b “Timeslot formats for the Uplink”	approved	3.6.0	R1
25.222	051	1	F	R99	RP-010063	R1-010019	Bit Scrambling for TDD	approved	3.6.0	R1
25.222	054	1	F	R99	RP-010063	R1-010242	Corrections & Clarifications for TS25.222	approved	3.6.0	R1
25.222	055	1	B	Rel-4	RP-010071	R1-010372	Inclusion of 1.28Mcps TDD in TS 25.222	approved	4.0.0	R1
25.223	015	1	F	R99	RP-010064	R1-010020	Code specific phase offsets for TDD	approved	3.5.0	R1

25.223	016	-	B	Rel-4	RP-010073	R1-010202	Cell synchronisation codes for R'4 Node B sync over air interface in UTRA TDD	approved	4.0.0	R1
25.223	017	1	B	Rel-4	RP-010071	R1-010373	Inclusion of 1.28Mcps TDD in TS 25.223	approved	4.0.0	R1
25.224	036	-	F	R99	RP-010065	R1-010153	DTX and Special Burst Scheduling	approved	3.6.0	R1
25.224	037	1	F	R99	RP-010065	R1-010351	RACH random access procedure	approved	3.6.0	R1
25.224	044	2	B	Rel-4	RP-010073	R1-010383	Layer 1 procedure for Node B synchronisation	approved	4.0.0	R1
25.224	045	-	F	R99	RP-010065	R1-010016	Introduction of closed-loop Tx diversity for the PDSCH and DTX for the PUSCH/PDSCH	approved	3.6.0	R1
25.224	046	2	F	R99	RP-010065	R1-010358	Corrections of TDD power control sections	approved	3.6.0	R1
25.224	047	1	B	Rel-4	RP-010071	R1-010374	Inclusion of 1.28Mcps TDD in TS 25.224	approved	4.0.0	R1
25.224	048	1	B	Rel-4	RP-010072	R1-010389	Idle periods for IPDL location method	approved	4.0.0	R1
25.224	050	-	F	R99	RP-010065	R1-010209	Use of a special burst in reconfiguration	approved	3.6.0	R1
25.224	053	-	F	R99	RP-010065	R1-010252	Known TFCI for the TDD special burst	approved	3.6.0	R1
25.225	022	-	B	Rel-4	RP-010073	R1-010013	Measurements for Node B synchronisation	approved	4.0.0	R1
25.225	023	-	F	R99	RP-010066	R1-010107	Correction of the observed time difference to GSM measurement	approved	3.6.0	R1
25.225	024	1	B	Rel-4	RP-010071	R1-010375	Inclusion of 1.28Mcps TDD in TS 25.225	approved	4.0.0	R1
25.225	025	-	B	Rel-4	RP-010072	R1-010229	RTD measurement in UTRAN for UP-TDD	approved	4.0.0	R1
25.301	042		B	Rel-4	RP-010037	R2-010164	1.28Mcps TDD	approved	4.0.0	R2
25.301	043	1	F	R99	RP-010019	R2-010527	Correction for RACH/CPCH	approved	3.7.0	R2
25.301	044	2	F	R99	RP-010019	R2-010723	Correction to Signalling Radio Bearer	approved	3.7.0	R2
25.301	045	1	F	R99	RP-010019	R2-010528	Editorial update for Release'99	approved	3.7.0	R2
25.301	046		F	R99	RP-010019	R2-010481	Removal of FAUSCH	approved	3.7.0	R2
25.301	047	1	F	R99	RP-010019	R2-010529	Removal of ODMA channels	approved	3.7.0	R2
25.301	048	1	F	R99	RP-010019	R2-010668	UE Model Channel numbering	approved	3.7.0	R2
25.301	049		F	R99	RP-010019	R2-010602	Renaming of Dynamic Transport Channel Type Switching	approved	3.7.0	R2
25.301	050		F	R99	RP-010019	R2-010657	Removal of payload unit concept	approved	3.7.0	R2
25.302	084	2	F	R99	RP-010020	R2-010234	Additional physical channel combination for FDD downlink to allow COUNT-C-SFN difference measurement	approved	3.8.0	R2
25.302	087		F	R99	RP-010020	R2-010106	In & Out of Sync Indications per CCTrCH in TDD	approved	3.8.0	R2
25.302	088		F	R99	RP-010020	R2-010107	Correction & Clarification to TDD RACH Model and Primitives	approved	3.8.0	R2
25.302	089	1	F	R99	RP-010020	R2-010217	Alignment of measurements provided by the physical layer	approved	3.8.0	R2
25.302	090	2	B	Rel-4	RP-010037	R2-010564	1.28Mcps TDD	approved	4.0.0	R2
25.302	092	1	F	R99	RP-010020	R2-010535	Physical channel combinations in TDD	approved	3.8.0	R2
25.302	093	1	B	Rel-4	RP-010041	R2-010737	Measurements for Node B synchronisation	approved	4.0.0	R2
25.302	094		F	R99	RP-010020	R2-010533	Measurement model clarifications	approved	3.8.0	R2
25.302	095		F	R99	RP-010020	R2-010575	Removal of DPCCH Gating from Release 99	approved	3.8.0	R2
25.302	096	1	F	R99	RP-010020	R2-010672	Clarification of simultaneous operation of DRAC and CTCH	approved	3.8.0	R2
25.303	041	1	F	R99	RP-010021	R2-010218	Text corrections	approved	3.7.0	R2
25.303	042		F	R99	RP-010021	R2-010144	SRNS relocation	approved	3.7.0	R2
25.303	043		B	Rel-4	RP-010037	R2-010467	1.28Mcps TDD	approved	4.0.0	R2
25.303	044		F	R99	RP-010021	R2-010676	Clean-up	approved	3.7.0	R2
25.304	055	1	F	R99	RP-010022	R2-010215	Usage of HCS Parameters in Cell Reselection	approved	3.6.0	R2

25.304	056		F	R99	RP-010022	R2-010115	Clarification of usage of "Initial UE-Id" for SCCPCH selection	approved	3.6.0	R2
25.304	057	1	B	Rel-4	RP-010037	R2-010166	Support of 1.28Mcps TDD	approved	4.0.0	R2
25.304	058		F	R99	RP-010022	R2-010212	Clarification of paging occasion	approved	3.6.0	R2
25.304	059	1	F	R99	RP-010022	R2-010530	Correction in Any Cell Selection State	approved	3.6.0	R2
25.304	061		F	R99	RP-010022	R2-010439	Correction to the definition of a suitable cell	approved	3.6.0	R2
25.304	062		F	R99	RP-010022	R2-010450	Correction to discontinuous reception in TDD	approved	3.6.0	R2
25.304	063	1	F	R99	RP-010022	R2-010561	Correction of PI calculation for Paging DRX	approved	3.6.0	R2
25.304	064	2	F	R99	RP-010022	R2-010680	Equivalent PLMN codes	revised		R2
25.304	064	3	F	R99	RP-010200		Equivalent PLMN codes	approved	3.6.0	R2
25.304	065		F	R99	RP-010022	R2-010656	High quality cell in PLMN selection	approved	3.6.0	R2
25.304	066		F	R99	RP-010022	R2-010677	Clean-up	approved	3.6.0	R2
25.305	040		F	R99	RP-010023	R2-010077	Correction to Assistance Data Delivery procedure	approved	3.5.0	R2
25.305	041	1	F	R99	RP-010023	R2-010228	Clarification of assisted GPS related parameters	approved	3.5.0	R2
25.305	042		F	R99	RP-010023	R2-010145	Clarification of paging initiation	approved	3.5.0	R2
25.305	044	4	B	Rel-5	RP-010044	R2-010692	Support of Stand-Alone A-GPS SMLC over an open interface	approved	5.0.0	R2
25.305	045	1	F	R99	RP-010023	R2-010629	Editorial Corrections	approved	3.5.0	R2
25.305	046	1	F	R99	RP-010023	R2-010630	Clarification of Timing Assistance	approved	3.5.0	R2
25.305	047		F	R99	RP-010023	R2-010418	Clarification of Integrity Monitor Function	approved	3.5.0	R2
25.305	048	1	C	Rel-4	RP-010040	R2-010644	Introduction of IPDLs for TDD	approved	4.0.0	R2
25.306	001		F	R99	RP-010024	R2-010523	Downlink rate matching limitation	approved	3.1.0	R2
25.306	003	1	B	Rel-4	RP-010038	R2-010510	1.28Mcps TDD	approved	4.0.0	R2
25.306	005		F	R99	RP-010024	R2-010372	Miscellaneous corrections and editorial clean-up	approved	3.1.0	R2
25.306	006	1	C	Rel-4	RP-010043	R2-010572	DSCH related updates for UE capabilities for the UE Radio Access Capability parameter combinations	approved	4.0.0	R2
25.306	007		F	R99	RP-010024	R2-010432	Maximum number of AM entity	approved	3.1.0	R2
25.306	008	1	F	R99	RP-010024	R2-010649	Clarification of maximum number of TF	approved	3.1.0	R2
25.306	010	1	F	R99	RP-010024	R2-010689	Removal of the RLC PU concept	approved	3.1.0	R2
25.306	011	1	B	Rel-4	RP-010039	R2-010762	Addition of ROHC	approved	4.0.0	R2
25.321	061		F	R99	RP-010025	R2-010096	Removal of FAUSCH	approved	3.7.0	R2
25.321	064		B	Rel-4	RP-010037	R2-010168	1.28Mcps TDD	approved	4.0.0	R2
25.321	066	3	F	R99	RP-010025	R2-010687	TFC selection algorithm correction	postponed		R2
25.321	067	3	F	R99	RP-010025	R2-010685	Miscellaneous corrections	approved	3.7.0	R2
25.321	068	2	F	R99	RP-010025	R2-010686	Clarification on Traffic Volume Measurement Procedure	approved	3.7.0	R2
25.321	070	1	F	R99	RP-010025	R2-010607	Clarification on parameters of the primitives	approved	3.7.0	R2
25.322	097	1	F	R99	RP-010026	R2-010647	Clarification on LIST SUFI and RLIST SUFI	approved	3.6.0	R2
25.322	098	1	F	R99	RP-010026	R2-010611	Corrections and clarifications for SDU discard without explicit signalling	approved	3.6.0	R2
25.322	099	1	F	R99	RP-010026	R2-010613	Tr mode operation	approved	3.6.0	R2
25.322	100	1	F	R99	RP-010026	R2-010612	Timer based discard with explicit signalling	approved	3.6.0	R2
25.322	101		F	R99	RP-010026	R2-010342	Annex updates	approved	3.6.0	R2
25.322	103		F	R99	RP-010026	R2-010351	Clarification on MRW SUFI and SDU discard procedure	approved	3.6.0	R2
25.322	104	1	F	R99	RP-010026	R2-010618	General clarification on SN arithmetic comparison	approved	3.6.0	R2

25.322	105	2	F	R99	RP-010026	R2-010682	General clarification on RLC header and PDU header	approved	3.6.0	R2
25.322	106	1	F	R99	RP-010026	R2-010615	Clarification on the primitives between RLC and higher layers	approved	3.6.0	R2
25.322	107	1	F	R99	RP-010026	R2-010616	Clarification on the model of AM entity	approved	3.6.0	R2
25.322	109	2	F	R99	RP-010026	R2-010683	Clarification on UMD transfer procedure	approved	3.6.0	R2
25.322	110	1	F	R99	RP-010026	R2-010617	RLC status transmission in CELL_PCH and URA_PCH	approved	3.6.0	R2
25.322	111		F	R99	RP-010026	R2-010376	Re-establishment description	approved	3.6.0	R2
25.322	112	1	F	R99	RP-010026	R2-010619	Clarifications on the RESET and RESET ACK PDU sizes	approved	3.6.0	R2
25.322	113	1	F	R99	RP-010026	R2-010620	Editorial corrections and clarifications	approved	3.6.0	R2
25.322	114	1	F	R99	RP-010026	R2-010655	Clarifications on the RLC-AM-DATA-Conf primitive	approved	3.6.0	R2
25.322	116		F	R99	RP-010026	R2-010449	Removal of the payload unit concept	approved	3.6.0	R2
25.322	118	2	F	R99	RP-010026	R2-010721	Padding Blocks and TFC Selection pre-empting	approved	3.6.0	R2
25.323	017	2	B	Rel-4	RP-010039	R2-010763	Robust Header Compression	approved	4.0.0	R2
25.323	018	1	F	R99	RP-010027	R2-010684	Editorial Corrections	approved	3.4.0	R2
25.323	019	1	F	R99	RP-010027	R2-010706	Updates necessary for Rel-4 specification	approved	3.4.0	R2
25.324	007		F	R99	RP-010028	R2-010401	Corrections	approved	3.4.0	R2
25.331	642	2	F	R99	RP-010029	R2-010599	RL Failure in cell update procedure	approved	3.6.0	R2
25.331	645	1	F	R99	RP-010029	R2-010543	Clarification on COUNTER CHECK	approved	3.6.0	R2
25.331	646	2	F	R99	RP-010029	R2-010704	Traffic Volume Measurement corrections	approved	3.6.0	R2
25.331	650	2	F	R99	RP-010029	R2-010596	Reserved TFCI for the TDD Special Burst	approved	3.6.0	R2
25.331	653		F	R99	RP-010029	R2-010363	Correction to description of RRC state transitions	approved	3.6.0	R2
25.331	657		F	R99	RP-010029	R2-010378	RLC re-establish correction	approved	3.6.0	R2
25.331	658	1	F	R99	RP-010029	R2-010546	Removal of RLC logical channel mapping indicator	approved	3.6.0	R2
25.331	659		F	R99	RP-010029	R2-010380	New paging and establishment cause “Unknown”	approved	3.6.0	R2
25.331	660	1	F	R99	RP-010029	R2-010549	Miscellaneous procedure corrections	approved	3.6.0	R2
25.331	661		F	R99	RP-010029	R2-010382	Corrections to compressed mode pattern sequence handling	approved	3.6.0	R2
25.331	662		F	R99	RP-010029	R2-010383	Inter-system change clarifications	approved	3.6.0	R2
25.331	663	1	F	R99	RP-010029	R2-010675	RLC status transmission in CELL_PCH and URA_PCH	approved	3.6.0	R2
25.331	665	1	F	R99	RP-010029	R2-010551	Clarification of RB information parameter values for SRB0	approved	3.6.0	R2
25.331	666		F	R99	RP-010029	R2-010387	Encoding for RRC- container	approved	3.6.0	R2
25.331	667	2	F	R99	RP-010029	R2-010595	Update of message extension and encoding descriptions	approved	3.6.0	R2
25.331	668	4	F	R99	RP-010032	R2-010724	Introduction of default pre-defined configurations	approved	3.6.0	R2
25.331	669	2	F	R99	RP-010029	R2-010673	Security corrections	approved	3.6.0	R2
25.331	670		F	R99	RP-010029	R2-010398	Clarifications on Blind Handover Support	approved	3.6.0	R2
25.331	671	1	F	R99	RP-010029	R2-010663	Missing descriptions of UE actions	approved	3.6.0	R2
25.331	672	2	F	R99	RP-010029	R2-010716	Corrections on UE Positioning information	approved	3.6.0	R2
25.331	674	1	F	R99	RP-010029	R2-010573	Security related corrections to SRNS	approved	3.6.0	R2
25.331	675	2	F	R99	RP-010032	R2-010771	Downlink power offsets	approved	3.6.0	R2
25.331	676	2	F	R99	RP-010274		Checking the integrity of UE security capabilities	approved	3.6.0	R2
25.331	678	1	F	R99	RP-010030	R2-010594	Clarification to Secondary CCPCH info	approved	3.6.0	R2
25.331	679	1	F	R99	RP-010030	R2-010557	Miscellaneous corrections	approved	3.6.0	R2
25.331	680		F	R99	RP-010030	R2-010412	Removal of Layer 3 filtering for RACH	approved	3.6.0	R2

25.331	681	2	F	R99	RP-010030	R2-010558	Correction of compressed mode parameters	approved	3.6.0	R2
25.331	682		F	R99	RP-010030	R2-010414	Removal of immediate cell evaluation	approved	3.6.0	R2
25.331	683	1	C	Rel-4	RP-010042	R2-010738	Modification of "SSDT Information" IE parameters to indicate if SSDT is used in the UL only	approved	4.0.0	R2
25.331	684	2	F	R99	RP-010030	R2-010719	Scheduling of SIB 15.2 and SIB 15.3	approved	3.6.0	R2
25.331	685	1	F	R99	RP-010030	R2-010559	Correction to ECN modules	approved	3.6.0	R2
25.331	686	1	F	R99	RP-010030	R2-010536	Improvement of the description of timing advance for TDD	approved	3.6.0	R2
25.331	687		F	R99	RP-010030	R2-010423	Correction on timing advance and allocation for shared channels	approved	3.6.0	R2
25.331	688	1	F	R99	RP-010030	R2-010560	Clarification on SF 1 signalling	approved	3.6.0	R2
25.331	689	1	F	R99	RP-010030	R2-010494	Correction to power control in TDD	approved	3.6.0	R2
25.331	690		F	R99	RP-010030	R2-010426	Midamble - Channelisation code association for TDD	approved	3.6.0	R2
25.331	691		F	R99	RP-010030	R2-010427	Network requested reporting for physical shared channel allocation	approved	3.6.0	R2
25.331	692	1	B	Rel-4	RP-010041	R2-010495	Idle allocation for Node B synchronisation	approved	4.0.0	R2
25.331	693		F	R99	RP-010030	R2-010433	System Information	approved	3.6.0	R2
25.331	694	1	F	R99	RP-010030	R2-010669	Clarification on Transport Channel Identity	approved	3.6.0	R2
25.331	696	1	F	R99	RP-010030	R2-010565	Editorial Correction	approved	3.6.0	R2
25.331	698	2	F	R99	RP-010030	R2-010544	Correction to add coding of intra domain NAS node selector	approved	3.6.0	R2
25.331	700	1	F	R99	RP-010030	R2-010537	Corrections to system information block characteristics in TDD	approved	3.6.0	R2
25.331	701	2	F	R99	RP-010030	R2-010570	ASN.1 corrections	approved	3.6.0	R2
25.331	702	2	F	R99	RP-010030	R2-010593	Measurement related corrections	approved	3.6.0	R2
25.331	703	1	F	R99	RP-010031	R2-010571	Clarifications on TFC Control procedure	approved	3.6.0	R2
25.331	704	2	F	R99	RP-010031	R2-010670	Association of PLMN ID to neighbour cells	approved	3.6.0	R2
25.331	705	1	F	R99	RP-010031	R2-010690	TFCS Selection Guidelines	approved	3.6.0	R2
25.331	706	1	B	Rel-4	RP-010037	R2-010701	Physical channel configuration information elements for 1.28 Mcps TDD	approved	4.0.0	R2
25.331	707	2	B	Rel-4	RP-010037	R2-010702	Changes to Measurement Related Signalling and Introduction of Cell (Re)selection Parameters for 1.28Mcps TDD	approved	4.0.0	R2
25.331	708	1	B	Rel-4	RP-010037	R2-010591	Introduction of RACH Parameters for 1.28 Mcps TDD	approved	4.0.0	R2
25.331	709		B	Rel-4	RP-010037	R2-010471	Introduction of UE radio access capability Parameters for 1.28 Mcps TDD	approved	4.0.0	R2
25.331	710		F	R99	RP-010031	R2-010474	Special Burst Scheduling During DTX in TDD	approved	3.6.0	R2
25.331	711	1	F	R99	RP-010031	R2-010577	Radio Link Failure Criteria in TDD	approved	3.6.0	R2
25.331	712	1	F	R99	RP-010031	R2-010578	Correction & Clarification to TDD RACH Subchannels	approved	3.6.0	R2
25.331	713	1	F	R99	RP-010031	R2-010581	Number of retransmission of RRC CONNECTION REQUEST	approved	3.6.0	R2
25.331	714		F	R99	RP-010031	R2-010579	Uplink Frequency Notification	approved	3.6.0	R2
25.331	715		F	R99	RP-010031	R2-010582	Clarification of Radio Bearer Mapping for DCH/DSCH Transport Channels	approved	3.6.0	R2
25.331	716		F	R99	RP-010031	R2-010583	Correction of mismatches between tabular and ASN.1	approved	3.6.0	R2
25.331	717		F	R99	RP-010031	R2-010584	Correction to discontinuous reception in TDD	approved	3.6.0	R2
25.331	718		F	R99	RP-010031	R2-010585	Power control preamble	approved	3.6.0	R2
25.331	719		F	R99	RP-010031	R2-010586	Maximum number of AM entity	approved	3.6.0	R2
25.331	720	1	F	R99	RP-010031	R2-010717	Real-time Integrity Broadcast	approved	3.6.0	R2
25.331	721	3	F	R99	RP-010031	R2-010695	Moving Real-time Integrity description to different chapter	approved	3.6.0	R2
25.331	722	1	C	Rel-4	RP-010040	R2-010639	Introduction of IPDLs for TDD	approved	4.0.0	R2
25.331	723	1	F	R99	RP-010031	R2-010671	Removal of the payload unit concept	approved	3.6.0	R2

25.331	724		F	R99	RP-010031	R2-010674	Security related corrections to SRNS	approved	3.6.0	R2
25.331	725		F	R99	RP-010031	R2-010699	Periodic PLMN selection correction	approved	3.6.0	R2
25.331	726	1	B	Rel-4	RP-010039	R2-010764	ROHC updates to RRC	approved	4.0.0	R2
25.401	020	1	F	R99	RP-010107	R3-010196	UTRAN definitions	approved	3.6.0	R3
25.401	021	1	F	R99	RP-010107	R3-010195	Clarification of the definition of Co-ordinated DCHs	approved	3.6.0	R3
25.401	022		F	R99	RP-010107	R3-010142	Editorial Correction on protocol model in 25.401	approved	3.6.0	R3
25.401	023	1	B	Rel-4	RP-010164	R3-010709	The impacts on TS 25.401 for supporting low chip rate TDD	approved	4.0.0	R3
25.402	013	2	F	R99	RP-010108	R3-010203	Proposed CR to correct timing diagram on Node Synchronisation	approved	3.5.0	R3
25.402	014	3	B	Rel-4	RP-010164	R3-010997	The impacts on TS 25.402 for supporting low chip rate TDD	approved	4.0.0	R3
25.402	016	1	B	Rel-4	RP-010166	R3-010933	Introduction of Cell Synchronisation for TDD	approved	4.0.0	R3
25.402	017		B	Rel-4	RP-010166	R3-010697	Sync Port signal Extension	approved	4.0.0	R3
25.410	015	1	B	Rel-4	RP-010163	R3-010663	Introduction of Q.2630.2	approved	4.0.0	R3
25.411	004		F	R99	RP-010109	R3-010100	Fractional ATM on Iu	approved	3.4.0	R3
25.413	236	1	F	R99	RP-010110	R3-010245	Deletion of IHOSS (Point to Point Octet Stream Service)	approved	3.5.0	R3
25.413	238	1	F	R99	RP-010110	R3-010246	Relocation Command – RABS to be released IE	approved	3.5.0	R3
25.413	240	2	F	R99	RP-010110	R3-010744	New values for Paging Cause	approved	3.5.0	R3
25.413	241	1	F	R99	RP-010110	R3-010281	Condition for when to include DRX Cycle Length Coefficient	approved	3.5.0	R3
25.413	242	1	F	R99	RP-010110	R3-010282	Handling of Response messages with IEs with criticality = Ignore IE	approved	3.5.0	R3
25.413	243	1	F	R99	RP-010110	R3-010292	Clarification of Iu signalling connection co-ordination for inter system handover	approved	3.5.0	R3
25.413	245	1	F	R99	RP-010110	R3-010929	Clarification of Condition for SDU Format Information	approved	3.5.0	R3
25.413	246		F	R99	RP-010110	R3-010174	Editorial correction to RANAP functions list	approved	3.5.0	R3
25.413	248	1	F	R99	RP-010110	R3-010248	RANAP Paging Procedure Description	approved	3.5.0	R3
25.413	249		F	R99	RP-010110	R3-010247	Clarification of definition of Class 1 Elementary Procedure (EP)	approved	3.5.0	R3
25.413	250	2	B	Rel-4	RP-010163	R3-010894	Introduction of transport bearer modification procedure	approved	4.0.0	R3
25.413	252	1	B	Rel-4	RP-010162	R3-011043	Support of PS realtime relocation in RANAP	approved	4.0.0	R3
25.413	253		F	R99	RP-010110	R3-010735	Modification of Relocation Requirement IE	approved	3.5.0	R3
25.413	254		F	R99	RP-010110	R3-010736	Interaction of Relocation and Location Report procedures	approved	3.5.0	R3
25.413	255		F	R99	RP-010110	R3-010738	Handling of RABs failing during relocation	approved	3.5.0	R3
25.413	256	1	F	R99	RP-010110	R3-010979	Corrections to RAB parameters	approved	3.5.0	R3
25.413	257		F	R99	RP-010110	R3-010741	Incomplete explanation of condition IfNotOnlyNSI	approved	3.5.0	R3
25.413	258		F	R99	RP-010110	R3-010742	Handling for SRNS Context Response at unavailable seq. no.s.	approved	3.5.0	R3
25.413	260		F	R99	RP-010110	R3-010761	Handling of the Procedures Triggering an Error Indication Procedure	approved	3.5.0	R3
25.413	261		F	R99	RP-010110	R3-010803	User Plane Information for RAB modification	approved	3.5.0	R3
25.413	263	2	F	R99	RP-010110	R3-011083	Erroneous Criticality Diagnostics IE	approved	3.5.0	R3
25.413	265		B	Rel-4	RP-010189	R3-010840	Alignment of Geographic Shape Descriptions between 25.413 and 23.032	approved	4.0.0	R3
25.413	266	1	F	R99	RP-010110	R3-011000	Relocation Complete Clarification	approved	3.5.0	R3
25.413	268		F	R99	RP-010111	R3-010785	Handling of Not Comprehended and Missing IEs Leading to Incapability to Compile a Response Message	approved	3.5.0	R3
25.413	271		B	Rel-4	RP-010158	R3-010980	Changes on RANAP due to WI TrFO	approved	4.0.0	R3
25.413	272	1	B	Rel-4	RP-010156	R3-011031	RAB Quality of Service Renegotiation over Iu, Proposed CR	approved	4.0.0	R3
25.413	273	1	B	Rel-4	RP-010156	R3-011092	Introduction of RAB QoS Negotiation in RANAP	approved	4.0.0	R3

25.413	274	1	B	Rel-4	RP-010156	R3-011093	Introduction of RAB QoS Negotiation during Relocation	approved	4.0.0	R3
25.413	275	3	F	R99	RP-010111	R3-011099	Criticality in Ranap	approved	3.5.0	R3
25.414	023	2	F	R99	RP-010112	R3-010320	Change of referenced specifications of Diffserv	approved	3.7.0	R3
25.414	024	1	F	R99	RP-010112	R3-010202	Clarification of the ALC values	approved	3.7.0	R3
25.414	025	1	B	Rel-4	RP-010163	R3-010665	Introduction of Modification procedure of Q.2630.2	approved	4.0.0	R3
25.414	026	1	B	Rel-4	RP-010162	R3-010654	Introduction of I.363.2 (11/2000)	approved	4.0.0	R3
25.415	045	1	F	R99	RP-010113	R3-010223	Clarification of meaning of error cause values	approved	3.6.0	R3
25.415	046	1	F	R99	RP-010113	R3-010313	Corrections to 25.415	approved	3.6.0	R3
25.415	047	1	F	R99	RP-010113	R3-010290	Error cause value 17	approved	3.6.0	R3
25.415	049	1	F	R99	RP-010113	R3-010291	Correction of RNL-SAP primitive	approved	3.6.0	R3
25.415	050	1	F	R99	RP-010113	R3-010222	Handling of FQC information	approved	3.6.0	R3
25.415	051	1	B	Rel-4	RP-010162	R3-010655	Introduction of I.363.2 (11/2000)	approved	4.0.0	R3
25.415	053		F	R99	RP-010113	R3-010746	Frame number and Initialisation	approved	3.6.0	R3
25.415	054		F	R99	RP-010113	R3-010747	Start of user data sending	approved	3.6.0	R3
25.415	056	1	F	R99	RP-010113	R3-010986	Coding of Initialisation Procedure	approved	3.6.0	R3
25.415	057		B	Rel-4	RP-010158	R3-010981	RNL-SAP Primitives necessary for TrFO	approved	4.0.0	R3
25.415	058		B	Rel-4	RP-010158	R3-010982	TrFO impacts on Rate Control	approved	4.0.0	R3
25.415	059		B	Rel-4	RP-010158	R3-010983	General changes for WI TrFO	approved	4.0.0	R3
25.415	060		B	Rel-4	RP-010158	R3-010984	TrFO Impacts on IuUP initialisation	approved	4.0.0	R3
25.419	030	1	F	R99	RP-010114	R3-010283	Handling of Response messages with IEs with criticality = Ignore IE	approved	3.3.0	R3
25.419	031		F	R99	RP-010114	R3-010759	Handling of the Procedures Triggering an Error Indication Procedure	approved	3.4.0	R3
25.419	032	2	F	R99	RP-010114	R3-011084	Update to R3-010947: Erroneous Criticality Diagnostics IE	approved	3.4.0	R3
25.419	033		F	R99	RP-010114	R3-010783	Handling of Not Comprehended and Missing IEs Leading to Incapability to Compile a Response Message	approved	3.4.0	R3
25.419	034		F	R99	RP-010114	R3-011016	Criticality Revision in SABP	approved	3.4.0	R3
25.420	009		F	R99	RP-010114	R3-010149	Editorial correction to 25.420	approved	3.3.0	R3
25.420	010	1	B	Rel-4	RP-010163	R3-010666	Introduction of Q.2630.2	approved	4.0.0	R3
25.420	011	1	B	Rel-4	RP-010162	R3-010656	Introduction of Q.2630.2	approved	4.0.0	R3
25.420	012	2	B	Rel-4	RP-010160	R3-011057	Introduction of SCCP Handling for Common Measurements on Iur	approved	4.0.0	R3
25.420	013		F	R99	RP-010115	R3-010906	Clarification on RNSAP procedure.	approved	3.3.0	R3
25.420	014	2	B	Rel-4	RP-010159	R3-011053	Introduction of SCCP Handling for Common Measurements and Information Exchange on Iur	approved	4.0.0	R3
25.421	001		F	R99	RP-010116	R3-010184	Correction to the referred specification	approved	3.1.0	R3
25.423	282	1	F	R99	RP-010117	R3-010215	In/out of sync alignment with WG1 for TDD	approved	3.5.0	R3
25.423	283		F	R99	RP-010117	R3-010025	Removal of Rate Matching Parameter Ambiguity	approved	3.5.0	R3
25.423	284	2	F	R99	RP-010117	R3-010226	Activation CFN alignment with R2	approved	3.5.0	R3
25.423	285		F	R99	RP-010117	R3-010028	Rejection of RL Setup if only one of Initial DL Power or UL SIR Target IEs are included in the Request message	approved	3.5.0	R3
25.423	286		F	R99	RP-010117	R3-010030	The Common Transport Channel Resources Initialisation Procedure is Mandatory at Cell Change in Cell_FACH state	approved	3.5.0	R3
25.423	288	2	F	R99	RP-010117	R3-010271	Improved Compressed Mode Handling Specification Text	approved	3.5.0	R3
25.423	289		F	R99	RP-010117	R3-010034	Application of the Frame Handling Priority ambiguous in RADIO LINK SETUP	approved	3.5.0	R3

25.423	290		F	R99	RP-010117	R3-010035	URA Information Handling Alignment with RRC	approved	3.5.0	R3
25.423	291		F	R99	RP-010117	R3-010036	Deletion of a non existing RL	approved	3.5.0	R3
25.423	292		F	R99	RP-010117	R3-010040	Clarification of RNSAP Procedure Module Definitions	approved	3.5.0	R3
25.423	293	1	F	R99	RP-010117	R3-010214	Correction to ASN.1	approved	3.5.0	R3
25.423	295	1	F	R99	RP-010117	R3-010228	Correction to RL addition procedure text	approved	3.5.0	R3
25.423	296	3	F	R99	RP-010117	R3-010847	Secondary CCPCH info for TDD	approved	3.5.0	R3
25.423	297	3	F	R99	RP-010117	R3-011102	Additional IE's needed for Channel Switching from Cell_FACH to Cell_DCH [TDD].	approved	3.5.0	R3
25.423	298		F	R99	RP-010117	R3-010127	Handling of Response messages with IEs with criticality = Ignore IE	approved	3.5.0	R3
25.423	299	2	F	R99	RP-010117	R3-010848	Midamble - Channelisation code association for TDD	approved	3.5.0	R3
25.423	300		F	R99	RP-010117	R3-010168	Radio Link Initialisation procedure text	approved	3.5.0	R3
25.423	301	1	F	R99	RP-010117	R3-010285	Clarification of operation of Common & Dedicated Measurement Initiation	approved	3.5.0	R3
25.423	302		F	R99	RP-010117	R3-010234	Removal of Ambiguity in Radio Link Failure Procedure	approved	3.5.0	R3
25.423	304	1	F	R99	RP-010117	R3-010899	TX Diversity Indication for TDD	postponed		R3
25.423	305		F	R99	RP-010118	R3-010676	Time measurement granularity	approved	3.5.0	R3
25.423	306	2	F	R99	RP-010118	R3-011021	Measurement range modification	approved	3.5.0	R3
25.423	307	1	F	R99	RP-010118	R3-010917	SCH Timeslot IE definition	approved	3.5.0	R3
25.423	308	1	F	R99	RP-010118	R3-010919	DL Timeslot ISCP report correction	approved	3.5.0	R3
25.423	309	2	B	Rel-4	RP-010164	R3-011007	The impacts on TS 25.423 for supporting low chip rate TDD in RNSAP	approved	4.0.0	R3
25.423	310	2	B	Rel-4	RP-010167	R3-011038	SCH Power Control Improvement	approved	4.0.0	R3
25.423	311	1	F	R99	RP-010118	R3-010927	Paging Cause	approved	3.5.0	R3
25.423	313		F	R99	RP-010118	R3-010760	Handling of the Procedures Triggering an Error Indication Procedure	approved	3.5.0	R3
25.423	314		F	R99	RP-010118	R3-010764	Mapping of TFS and TFI	approved	3.5.0	R3
25.423	315		F	R99	RP-010118	R3-010767	Release of Common Transport Channel Resources in the DRNS	approved	3.5.0	R3
25.423	316	1	F	R99	RP-010118	R3-011064	Miscellaneous Corrections	approved	3.5.0	R3
25.423	317		F	R99	RP-010118	R3-010769	Removal of IE Group Name for Groups with only one Repetition	approved	3.5.0	R3
25.423	318	2	F	R99	RP-010118	R3-011025	Forward Compatibility of RNSAP with regards to Dedicated Measurements	approved	3.5.0	R3
25.423	319	1	F	R99	RP-010118	R3-011008	Remaining Errors after CR Implementation	approved	3.5.0	R3
25.423	320	2	B	Rel-4	RP-010160	R3-011013	DPC Rate Reduction in Soft Handover	approved	4.0.0	R3
25.423	323	2	B	Rel-4	RP-010160	R3-011058	Introduction of the Common Measurement Procedures in RNSAP	approved	4.0.0	R3
25.423	324	1	B	Rel-4	RP-010165	R3-010944	The impacts on TS25.423 for supporting gating operation	postponed		R3
25.423	327	3	B	Rel-4	RP-010159	R3-011054	Introduction of the Common Measurement Procedures in RNSAP	approved	4.0.0	R3
25.423	328	2	B	Rel-4	RP-010159	R3-011056	Introduction of the Information Exchange Procedures in RNSAP	approved	4.0.0	R3
25.423	329	2	F	R99	RP-010118	R3-011085	Erroneous Criticality Diagnostics IE	approved	3.5.0	R3
25.423	332		F	R99	RP-010118	R3-010784	Handling of Not Comprehended and Missing IEs Leading to Incapability to Compile a Response Message	approved	3.5.0	R3
25.423	334	1	F	R99	RP-010118	R3-011024	Merged Clarifications to the Measurement Procedures	approved	3.5.0	R3
25.423	335	1	F	R99	RP-010118	R3-011032	Introduction of the PC Preamble and SRB Delay IEs.	approved	3.5.0	R3
25.423	336	1	B	Rel-4	RP-010159	R3-011022	Introduction of Cell Geographical Area Additional Shapes	approved	4.0.0	R3
25.423	337	1	B	Rel-4	RP-010159	R3-011059	Merge CR for common measurements over Iur	approved	4.0.0	R3
25.423	339	1	B	Rel-4	RP-010160	R3-011063	Introduction of Rate Control on DCHs	approved	4.0.0	R3
25.424	007		F	R99	RP-010119	R3-010022	Application of AAL2 Link Characteristics on Iur CCHs	approved	3.6.0	R3

25.424	008	1	F	R99	RP-010119	R3-010199	Clarification of the ALC values	approved	3.6.0	R3
25.424	009	1	B	Rel-4	RP-010163	R3-010668	Introduction of Modification procedure of Q.2630.2	approved	4.0.0	R3
25.424	010	1	B	Rel-4	RP-010162	R3-010657	Introduction of Path Type capability of Q.2630.2 and I.363.2 (11/2000)	approved	4.0.0	R3
25.425	022	2	F	R99	RP-010120	R3-010306	Corrections to 25.425 – Editor's proposal	approved	3.4.0	R3
25.425	023	4	B	Rel-4	RP-010164	R3-010998	The impacts on TS 25.425 for supporting low chip rate TDD	approved	4.0.0	R3
25.425	024	3	F	R99	RP-010120	R3-010926	Clarification of Iur RACH frame protocol	approved	3.4.0	R3
25.425	025	1	B	Rel-4	RP-010162	R3-010658	Introduction of I.363.2 (11/2000)	approved	4.0.0	R3
25.425	026	1	F	R99	RP-010120	R3-010923	Clarification of Services expected from data transport	approved	3.4.0	R3
25.425	028		F	R99	RP-010120	R3-010758	Handling of spare bits	approved	3.4.0	R3
25.426	010		F	R99	RP-010121	R3-010023	Application of AAL2 Link Characteristics on Iub/Iur DCHs	approved	3.6.0	R3
25.426	011	1	F	R99	RP-010121	R3-010200	Clarification of the ALC values	approved	3.6.0	R3
25.426	012	1	B	Rel-4	RP-010163	R3-010669	Introduction of Modification procedure of Q.2630.2	approved	4.0.0	R3
25.426	013	1	B	Rel-4	RP-010162	R3-010659	Introduction of Path Type capability of Q.2630.2 and I.363.2 (11/2000)	approved	4.0.0	R3
25.427	039	1	F	R99	RP-010122	R3-010240	In/out of sync alignment with WG1 for TDD	approved	3.6.0	R3
25.427	040	1	F	R99	RP-010122	R3-010239	Editorial Correction	approved	3.6.0	R3
25.427	042	2	B	Rel-4	RP-010164	R3-010712	The impacts on TS 25.427 for supporting low chip rate TDD	approved	4.0.0	R3
25.427	043	1	F	R99	RP-010122	R3-010924	Clarification of Services expected from data transport	approved	3.6.0	R3
25.427	045	1	B	Rel-4	RP-010160	R3-010956	DPC Rate Reduction in Soft Handover	approved	4.0.0	R3
25.430	014	2	B	Rel-4	RP-010164	R3-010713	The impacts on TS 25.430 for supporting low chip rate TDD	approved	4.0.0	R3
25.430	015		F	R99	RP-010123	R3-010150	Correction of ALCAP	approved	3.5.0	R3
25.430	016	1	B	Rel-4	RP-010163	R3-010670	Introduction of Q.2630.2	approved	4.0.0	R3
25.430	017	1	B	Rel-4	RP-010162	R3-010660	Introduction of Q.2630.2	approved	4.0.0	R3
25.431	001		F	R99	RP-010124	R3-010101	Fractional ATM on Iub	approved	3.1.0	R3
25.431	002		F	R99	RP-010124	R3-010204	Correction to the referred specification	approved	3.1.0	R3
25.433	325	2	F	R99	RP-010125	R3-010289	In/out of sync alignment with WG1 for TDD	approved	3.5.0	R3
25.433	326		F	R99	RP-010125	R3-010024	Removal of Rate Matching Parameter Ambiguity	approved	3.5.0	R3
25.433	327	1	F	R99	RP-010125	R3-010206	Activation CFN Alignment with R2	approved	3.5.0	R3
25.433	328	1	F	R99	RP-010125	R3-010207	AUDIT RESPONSE tabular format modification	approved	3.5.0	R3
25.433	329	3	F	R99	RP-010125	R3-010789	Improved Compressed Mode Handling Specification Text	approved	3.5.0	R3
25.433	330		F	R99	RP-010125	R3-010066	Correction to ASN.1	approved	3.5.0	R3
25.433	333	1	F	R99	RP-010125	R3-010237	Correction to the maximum number of RLs in the RL Addition procedure	approved	3.5.0	R3
25.433	334	1	F	R99	RP-010125	R3-010238	Editorial Correction in TS 25.433	approved	3.5.0	R3
25.433	335	1	F	R99	RP-010125	R3-010208	Editorial Correction to Unsynchronised Radio Link Reconfiguration Procedure Text	approved	3.5.0	R3
25.433	336		F	R99	RP-010125	R3-010103	Radio Link Initialisation procedure text	approved	3.5.0	R3
25.433	339		F	R99	RP-010125	R3-010128	Handling of Response messages with IEs with criticality = Ignore IE	approved	3.5.0	R3
25.433	340	2	F	R99	RP-010125	R3-010849	Midamble - Channelisation code association for TDD	approved	3.5.0	R3
25.433	341	1	F	R99	RP-010125	R3-010209	Correction of error procedure text of Common Transport Channel Deletion	approved	3.5.0	R3
25.433	342	2	F	R99	RP-010125	R3-010284	Clarification of operation of Common & Dedicated Measurement Initiation	approved	3.5.0	R3
25.433	344	2	F	R99	RP-010125	R3-010321	Inclusion of Services expected from NBAP signalling bearer	approved	3.5.0	R3
25.433	346		F	R99	RP-010125	R3-010220	Intuitive Value Names for the Compressed Mode Deactivation Flag IE	approved	3.5.0	R3

25.433	347		F	R99	RP-010125	R3-010221	Removal of Ambiguity in Radio Link Failure Procedure	approved	3.5.0	R3
25.433	348		F	R99	RP-010125	R3-010050	Removal of inter-mixing of FDD with TDD for DCHs to Modify	approved	3.5.0	R3
25.433	350	1	F	R99	RP-010125	R3-010922	Correction of Capacity model for TDD	approved	3.5.0	R3
25.433	351		F	R99	RP-010125	R3-010675	Time measurement granularity	approved	3.5.0	R3
25.433	352	2	F	R99	RP-010126	R3-011020	Measurement range modification	approved	3.5.0	R3
25.433	353		F	R99	RP-010126	R3-010679	Addition of SIB17	approved	3.5.0	R3
25.433	354		F	R99	RP-010126	R3-010680	Correction of Frame Handling Priority Presence	approved	3.5.0	R3
25.433	355		F	R99	RP-010126	R3-010681	SCH Timeslot IE definition	approved	3.5.0	R3
25.433	356	1	F	R99	RP-010126	R3-010918	DL Timeslot ISCP report correction	approved	3.5.0	R3
25.433	358	2	B	Rel-4	RP-010164	R3-011005	The impacts on TS 25.433 for supporting low chip rate TDD in the NBAP Common Procedures	approved	4.0.0	R3
25.433	359	3	B	Rel-4	RP-010164	R3-011006	The impacts on TS 25.433 for supporting low chip rate TDD in the NBAP Dedicated Procedures	approved	4.0.0	R3
25.433	360	3	B	Rel-4	RP-010166	R3-011073	Introduction of NBAP Cell Synchronisation function for TDD	approved	4.0.0	R3
25.433	361	1	B	Rel-4	RP-010166	R3-010934	NBAP Procedure modifications due to cell synchronisation	approved	4.0.0	R3
25.433	362	2	B	Rel-4	RP-010167	R3-011037	DSCH Power Control Improvement	approved	4.0.0	R3
25.433	365		F	R99	RP-010126	R3-010752	DL power clarification	approved	3.5.0	R3
25.433	367		F	R99	RP-010126	R3-010756	Modification of Context ID Presence in RESET REQUEST	approved	3.5.0	R3
25.433	368		F	R99	RP-010126	R3-010762	Handling of the Procedures Triggering an Error Indication Procedure	approved	3.5.0	R3
25.433	369		F	R99	RP-010126	R3-010763	Removal/Modification of notes related to UARFCN	approved	3.5.0	R3
25.433	370		F	R99	RP-010126	R3-010765	Mapping of TFS and TFI	approved	3.5.0	R3
25.433	371		F	R99	RP-010126	R3-010766	General clarifications ad corrections	approved	3.5.0	R3
25.433	372	2	B	Rel-4	RP-010159	R3-010994	Introduction of the UTRAN-GPS and SFN-SFN timing measurement in NBAP	approved	4.0.0	R3
25.433	373	2	B	Rel-4	RP-010160	R3-011014	DPC Rate Reduction in Soft Handover	approved	4.0.0	R3
25.433	374	2	B	Rel-4	RP-010159	R3-010990	Introduction of the Information Exchange Procedures in RNSAP	approved	4.0.0	R3
25.433	375	1	B	Rel-4	RP-010165	R3-010943	The impacts on TS25.433 for supporting gating operation	postponed		R3
25.433	377	1	F	R99	RP-010126	R3-010907	NBAP correction in tabular format	approved	3.5.0	R3
25.433	378	1	F	R99	RP-010126	R3-010916	Correction based on NBAP detailed review	approved	3.5.0	R3
25.433	379	2	F	R99	RP-010126	R3-011086	Erroneous Criticality Diagnostics IE	approved	3.5.0	R3
25.433	381	1	B	Rel-4	RP-010159	R3-010989	Introduction of the network configurable idle periods for OTDOA UE Positioning function	approved	4.0.0	R3
25.433	383		F	R99	RP-010126	R3-010786	Handling of Not Comprehended and Missing IEs Leading to Incapability to Compile a Response Message	approved	3.5.0	R3
25.433	385	2	F	R99	RP-010126	R3-011088	Node B resource model	approved	3.5.0	R3
25.433	386		F	R99	RP-010126	R3-010937	Correction of Physical Shared Channel Reconfiguration	approved	3.5.0	R3
25.433	387	1	B	Rel-4	RP-010160	R3-011015	Limited Power Increase Range	approved	4.0.0	R3
25.433	388		F	R99	RP-010126	R3-011035	Interaction between measurements and reset on Iub	approved	3.5.0	R3
25.434	006	1	F	R99	RP-010127	R3-010201	Clarification of the ALC values	approved	3.5.0	R3
25.434	007	1	B	Rel-4	RP-010163	R3-010672	Introduction of Modification procedure of Q.2630.2	approved	4.0.0	R3
25.434	008	1	B	Rel-4	RP-010162	R3-010661	Introduction of Path Type capability of Q.2630.2 and I.363.2 (11/2000)	approved	4.0.0	R3
25.435	037	3	B	Rel-4	RP-010164	R3-010999	The impacts on TS 25.435 for supporting low chip rate TDD	approved	4.0.0	R3
25.435	038	1	F	R99	RP-010128	R3-010925	Clarification of Services expected from data transport	approved	3.6.0	R3

25.435	039		F	R99	RP-010128	R3-010757	Handling of spare bits	approved	3.6.0	R3
25.834	001		B	Rel-4	RP-010037	R2-010220	Tx diversity	approved	4.1.0	R2
25.834	002		B	Rel-4	RP-010037	R2-010221	Propagation delay measurement	approved	4.1.0	R2
25.834	003	1	B	Rel-4	RP-010037	R2-010563	Update of TR 25.834	approved	4.1.0	R2
25.836	001	1	C	Rel-4	RP-010073	R1-010382	Additions to the node B synchronisation procedure	approved	4.1.0	R1
25.841	001	1	B	Rel-4	RP-010074	R1-010380	TFCI power control for DSCH in split mode	approved	4.1.0	R1
25.843	001		B	Rel-4	RP-010038	R2-010509	Update of TR 25.843	approved	4.1.0	R2
25.853	001	1	F	R99	RP-010129	R3-010242	Clarification of the Delay Budget Report Scope.	approved	3.1.0	R3
25.921	008		F	R99	RP-010033	R2-010208	Description of backward compatibility consideration rule for RANAP, SABP, RNSAP and NBAP ASN.1	approved	3.3.0	R2
25.921	009		F	R99	RP-010033	R2-010428	Usage of the Version column	approved	3.3.0	R2
25.921	010	1	F	R99	RP-010033	R2-010698	Clean-up	approved	3.3.0	R2
25.921	011		F	R99	RP-010033	R2-010700	Recommendations on the use of the extension mechanism	approved	3.3.0	R2
25.922	012	1	F	R99	RP-010034	R2-010191	Principles of RACH/PRACH Configuration in TDD	approved	3.5.0	R2
25.922	013	1	F	R99	RP-010034	R2-010605	Radio Bearer Control corrections	approved	3.5.0	R2
25.922	014		F	R99	RP-010034	R2-010403	Correction to idle mode tasks	approved	3.5.0	R2
25.925	005	1	F	R99	RP-010035	R2-010609	Editorial corrections and consistency check	approved	3.4.0	R2
25.931	006	1	B	Rel-4	RP-010163	R3-010673	Introduction of the Modification Procedure of Q.2630.2	approved	4.0.0	R3
25.931	007	1	B	Rel-4	RP-010162	R3-010662	Introduction of Q.2630.2	approved	4.0.0	R3
25.931	008	1	B	Rel-4	RP-010130	R3-011077	Service based intersystem handover and directed retry procedure	approved	4.0.0	R3
25.944	005	1	B	Rel-4	RP-010071	R1-010255	1.28 Mcps TDD related changes to 25.944	approved	4.0.0	R1
25.944	006	-	F	R99	RP-010067	R1-010256	Corrections for TDD sections	approved	3.4.0	R1
34.109	006		B	R99	RP-010036	R2-010525	Electrical Man Machine Interface	approved	3.3.0	R2
34.124	5		F	R99	RP-010094	R4-010247	Essential corrections to TS34.124	approved	3.3.0	R4
34.124	6		B	Rel-4	RP-010097	R4-010432	UE electromagnetic compatibility (EMC) for 1.28Mcps TDD Option	approved	4.0.0	R4

Annex D: Meeting schedule

NOTE: Updates to meeting dates, hosts and/or venues are indicated in red and underlined.

TSG-RAN

Meeting	Date	Host	Location
RAN#13	18 - 21 September 2001	Lucent Technologies	Beijing, China
RAN#14	11 - 14 December 2001	ARIB, TTC	Kyoto, Japan
RAN#15	05 - 08 March 2002	TTA	tbd, Korea
RAN#16	04 - 07 June 2002	Motorola	tbd, tbd
RAN#17	03 - 06 September 2002	Alcatel	tbd, France
RAN#18	03 - 06 December 2002	North American Friends of 3GPP	tbd, USA
RAN#19	?? - ?? March 2003	UK Friends of 3GPP	tbd, UK
RAN#20	?? - ?? June 2003	Nokia	tbd, Finland

TSG-RAN WG1

Meeting	Date	Host	Location
#21	26 - 29 June	Nortel Networks (tbc)	Paris, France (tbc)
#22	27 - 31 August		
#23	08 - 12 October		
#24	19 - 23 November		

TSG-RAN WG2

Meeting	Date	Host	Location
#22	09 - 13 July 2001	Siemens	Berlin, Germany
#23	27 - 31 August 2001	Nokia	Helsinki, Finland
#24	15 - 19 October 2001	GBT	New York, USA
#25	26 - 30 November 2001	Fujitsu	Makuhari, Japan

TSG-RAN WG3

Meeting	Date	Host	Location
#22	02 - 06 July 2001	ETSI	Sophia Antipolis, France
#23	27 August - 31 August 2001	Nokia	Helsinki, Finland
#24	15 - 19 October 2001	GBT	New York, USA
#25	26 - 30 November 2001	Fujitsu	Makuhari, Japan

TSG-RAN WG4

Meeting	Date	Host	Location
#18	09 - 13 July 2001	Siemens	Berlin, Germany
#19	03 - 07 September 2001	Agilent	Scotland, United Kingdom
#20	12 - 16 November 2001	North American Friends of 3GPP	New York, USA