3GPP TSG-T (Terminals) Meeting #11
Palm Springs, USA, 14 - 16 March, 2001

Tdoc TP-010060

3GPP Work Plan – Cover page
Version 2001, March 13th

Introduction

This cover sheet contains 3 parts:
Part 1: Specific comments for this version
Part 2: General recurrent information
Part 3: History

The last version of the Work Plan and all the related documents (cover page, PDF views, etc) are available at:
ftp://ftp.3gpp.org/information/work_plan

For comments on a given WI, contact the MCC support of the given WI's responsible WG/TSG (mapping "WG/TSG to MCC support" and MCC e-mail addresses available at:
http://www.3gpp.org/About_3GPP/structure.htm).
For comment on a Feature, contact the feature's responsible MCC support.
For general comments, contact Alain Sultan at: alain.sultan@etsi.fr, mentioning in the e-mail subject "General comment on the Work Plan".

Specific comments for this version

Main changes between version February 16th and March 13th

Changes from the following Working Groups have been incorporated:
R1, R2, R3, R4
S2, S3, S4
N2, N3, N4
T2, T3
More details are provided bellow on changes from R1, R2, R3, T2, T3, N2, N3, S2 and S3.
N1 has provided its latest changes in January, S1 in November, S5 and N5 in February, T1 in December.

R1 changes

DELETED: Unique ID 1466, Smart antenna Rel4   No   WG RAN1   Yes   Mon
12/03/01RANimp-SmartATSG   Mon 14/08/00   Fri 30/03/01   25%   RAN_Wis
      G. Yang, CWTS

R2 changes

5 Mar 2001: splitting off of IPDL for TDD for Rel-4 agreed by R2 with respect to Unique ID 2457,
UE positioning enhancements - other methods   Rel5   No   WG RAN2   Yes   Mon
12/03/01LCS1-UEpos-enhWG   Mon 28/08/00   Fri 28/12/01   24%   RAN_Wis
      M. Beckmann, Siemens

R3 changes

Unique ID 1995, Migration to modification procedures   Rel4   No   WG RAN3   No
      ETRAN-MigrMod   TSG   Mon 02/10/00   Fri 30/03/01   50%
      RAN Wis   T. Yoshimura, Japan Telecom

Change of name to: Transport bearer modification procedure on Iub, Iur, and Iu
100% complete

T2 changes

The following WI is proposed for deletion:
917   Alternatives to AT commands (TBD)

T2 agreed to move
1831   vObjects and Other Constructs for Use in Data Synchronisation
from Rel4 to Rel5 which I reflected in the work plan. Related to this I changed the Release of
1829   Wide Area Data Synchronisation   to "NA" because it includes Rel4 and Rel5 WTs. Did I
right?

T2 agreed to delete the following WTs from Rel4 (feature MExE enhancements)
1816   FS on Support of (U)SAT/OSA/CAMEL interaction to provide advance services   No
         WG T2
1813   FS on AT command support   No   WG T2
1811   Support of the Terminal parts of the VHE /User Profile   No   WG T2

T3 changes

DELETED: Unique ID 1562, UICC/USIM database specification   Rel4   No   WG T3 Yes
         UICC1-DataB   TSG   Mon 11/12/00   Fri 23/03/01   0%   TP-99210
         Jean-Francois Rubon (Gemplus)   8/3/2001: Work item deleted at T3 #17.

N2 changes

CAMEL4 is a Rel-5 feature, and SA1 have almost completed the service requirements. The SA1
CAMEL ad hoc will no longer conduct separate meetings, but be part of the regular SA1 meetings. For
the CN2#17 meeting new service requirements were introduced as result of recent SA1 agreements.
This are introduced as 3 new work tasks under CAMEL4 as follows:

- **Enhancements of dialled services**
- **Provision of location information of called subscriber**
- **Notification of GPRS mobility management**

The 3 worktasks were discussed and progressed during CN2#17.

Other work tasks under the feature CAMEL phase 4 were modified regarding % of completion (2
WT's almost complete) and dates to fit the Rel-5 timeschedule.

No work is done on worktask 'Impact on CAMEL stage 3' (ID1288) under the feature 'Provisioning of
IP-based multimedia services'. Should be clarified what interaction exists with ID2017 'CAMEL
applicability to media streams like VoIP'.

For Rel-4 under the feature' Evolutions of the transport in the CN' :
ID2018: CN2 has completed the CAP part.

N3 changes

WID: UID 2047, **WI_CODE** IMS-CCR-IWCS, **WI Title** "Interworking between IM CN subsystem
and CS networks "
Modification: Move back end date to December 2001
         Change to WI Title
         Change to % complete.
         Added missing TS number

WID: **UID** 2048, **WI_CODE** IMS-CCR-IWIP , **WI Title** "Interworking between IM CN subsystem
and IP networks"
Modification: Move back end date to December 2001
         Change to WI Title

Change to % complete.
Added missing TS number

WID: **UID** 1325, **WI_CODE** CSSPLIT , **WI Title** " Standardisation of protocols (control & user planes) over Nb interface"
Modification: Change to WI Title
Change to % complete.

WID: **UID** 1655 [inc. 1336 1337], **WI_CODE** CSM-SWAP , **WI Title** " Circuit-switched multimedia swap and fallback "
Modification: **CN3 propose to delete this WI, as no work will be done in this area.**

WID: **UID** 1524, **WI_CODE** GTT-IW , **WI Title** "GTT Interworking "
Modification: CN3 consider the present solution requires no contribution from CN3. **The CN3 WI can de deleted** (poss. later revived)

WID: **UID** 1359, **WI_CODE** BMWPN-SMWOP , **WI Title** " Service Modification without pre-notification "
Modification: CN3 expect the SA1 WID to be deleted and CN3 will request CN#11 to **Delete this CN3 WID**

S2 changes

Unique ID 1678: Stage 2 of IP Transport of CN protocols (e.g., CAP, MAP) (in Evolutions of the transport in the CN) has been deleted: it's now useless: Stage 3 is now completed and no Stage 2 has ever been started.

Unique ID 1364: Bearer Modification because of radio conditions. Proposed to be deleted. No new work ever started on this issue.
Note that the complete Feature "Bearer Modification without pre-notification" is proposed for deletion.

 Unique ID 1339: Stage 2 of CS multimedia services has been deleted. No company involved, and no new issue to be done for Rel-4.
Note that the complete Feature "CS multimedia services" is proposed for deletion.

Unique ID 1557: QoS for CS services at HOs (inter-MSC and SRNS change): Complete feature proposed to be deleted. Check SA and GERAN opinions. No new work ever started on this issue.

Unique ID 1614: Protocol impacts of FS on Transport and control separation in the PS CN domain of Evolutions of the transport in the CN (WG CN4):
Deleted as the stage 2 of "FS on Transport and control separation in the PS CN domain" has concluded that such feature is not needed.

S3 changes

Deleted: Unique ID 1612, General security issues
It should be replaced by new work items at SA#9 (home control and MS triggered authentication).

Detailed changes

The detailed changes are provided in the "notes" field of the modified WIs.

General recurrent information

This paragraph contains recurrent information provided to the reader not familiar with the 3GPP Work Plan.

General description

The Work Plan is a living document, aiming at providing co-operations between all the 3GPP TSGs and WGs to help them reaching common targets.

These targets are called "**Features**", and are new or substantially enhanced functionality which represents added value to the existing system. A feature should normally embody an improved service to the customer and / or increased revenue generation potential to the supplier. The features are divided into "**Building Blocks**", a BB being a set of technical functionality which would generally be expected to reside in a single system element, i.e. a single physical or logical entity or a single protocol. The Building Blocks are divided into "**Work Tasks**", a WT being by definition handled by a single Working Group. The output of a work task is the creation of one or more new Technical Specifications (or Reports) and / or Change Requests to existing TSs / TRs.

These definitions are extracted from SP-000109.

This tree structure is established to ease the monitoring of the 3GPP work progress for R00, and to make explicit the purpose of the work assigned to one WG in the global system.

A **Work item** is a generic term to refer to a *feature, building block* or *work task*, i.e. all the lines of the Work Plan are work items. A full description of the a work item can be found in the 3GPP Working Procedures, available at http://www.3gpp.org/About_3GPP/3gpp_wp.zip .

The Work Plan is provided in the form of a Gantt chart: the left part contains the names and attributes of the Work Items, the right part contains a calendar view reflecting the work progress (blue and grey lines apply to foreseen tasks, black lines for completed tasks).

The indentation of WI names reflects the hierarchical level in the tree structure (Features, Building Blocks, and Work Tasks).

Attributes applicable to a WI

From the Work Plan perspective, a WI is fully characterised by the following set of attributes:

1. Unique ID
2. Name
3. Release (based on the completion date). It applies to non-splitable features. If the feature is splitable, it applies to each individual Building Block composing the feature, provided that the Building Blocks are non-splitable. It does not apply to Feasibility Studies, Testing nor Charging Activities.
4. Splitable: defines whether the WI has to be considered as a single block or if it can be realised onto different releases
5. Acronym
6. Resource name: defines the responsible WG or TSG
7. Modified (see next section)
8. Modified since last TSG (see next section)
9. Start
10. Finish
11. % completed
12. Impacted TS and TR
13. Approval Level: MCC<CHAIR<WG<TSG. Each level can delete the proposal from the levels bellow. Only TSG Approved Wis are officially approved. All the other Wis are proposals, more or less stable according to the approval level.
14. Last modif, containing the date of the last modification. Note: this field has been recently added. The value has been initialised to April, 1st.
15. Hyperlink (to the proposed/approved WI coversheet)
16. WI rapporteur name
17. WI rapporteur e-mail
18. MCC responsible: defines who in MCC is responsible in monitoring the overall Feature.
19. Notes (free field).

The fields Start, Finish and % completed are calculated for summary tasks.
For better readability, only some of these attributes are shown in the PDF views.

How the changes on the Work Plan are tracked?

The changes are tracked at two level: a global one, stressing out the overall changes of the Work Plan, and a more detailed one, making use of the "notes" field.

Global level

The global level is a text of some paragraphs listing the main changes. For readability reasons, the global level is not part of the MS Project Work Plan but is contained in this present Work Plan cover page.
The global level shall at least:

- Report creation and deletion of Features and Building Blocks. It is not requested to mention the creation and deletion of Work Tasks (but this can be done if judged relevant by the MCC responsible person).

The global level is updated before each set of plenary meetings.

Detailed level

The detailed level is a set of comments provided in the "notes" field text of each modified WI (a WI is identified by its Unique ID).
Even at the "detailed level", not all the modifications have to be mentioned: some fields are by nature subject to constant updates (e.g. "% completed"), so it would be a waste of time to keep track of these changes.
The fields subject to change tracking are the following ones:

- Name
- Release
- Splitable (defines whether the WI has to be considered as a single block or if it can be realised onto different releases)
- Acronym
- Resource name (defines the responsible WG or TSG)
- Finish date

The other ones -listed bellow- are not subject of change tracking. Change tracking on these ones is up to the MCC responsible person. These are:

- % completed
- Impacted TS and TR
- Level of Approval (MCC<CHAIR<WG<TSG).
- Hyperlink (to the proposed/approved WI coversheet)
- WI rapporteur name
- WI rapporteur e-mail
- MCC responsible: defines who in MCC is responsible in monitoring the overall Feature.
- Notes (free field).
- Start date

The detailed level is updated each time a line is modified or created. In addition, a new field called "last modif" has been created (initialised to April, 1st) to provide the date of the latest modification of the WI.

History

This section is reset after each plenary meeting.

Main changes between version Dec. 13th and Dec. 19th

The two errors mentioned at the closing of TSG SA#10 have been corrected, i.e.:
- IP Transport of CN protocols (e.g., CAP, MAP) (Unique ID 859) is changed from Rel5 to Rel4
- Wide Area Data Synchronisation (Unique ID 1829) is also changed from Rel5 to Rel4.

Main changes between version Dec. 19th and February 16th

CN WG1:

ID 2233: change the WI title, and add 23.218 as subtask. New link of the agreed WID in TSGN#10.
ID2101: dates are not realistic "Emergency call recalling capability enhancement" TSG#14. The feature should be removed from the WID. SA1 need to be informed. Remove the Work Task.
ID1317: end date is to be aligned with TSG#14.
ID1321: Emergency call recalling capability enhancement for CS Is there any changes for Rel-4? We want to revise the WI to remove the definition of it. It is defined in 22.010
It will not be developed in CN1, the rapporteur will revise the WI. SA1 need to be informed.
Stage 1 Crs will be propose to the next SA1 meeting by private companies at the intention of changing the scope of the WI which has been agreed in CN1. For both ID2101 and ID1321 remove Work Task.
ID2225: change the end date to align with TSG#14.
ID1322: no comments if we had contributions!
ID1360: it shows 0% completion and no work has been done in CN1. No contribution is foreseen delete from the work plan
ID1359: ask the plenary if this feature is necessary at all!
ID1656: We need to find out and report the accuracy of this Wt, we need to discuss this in the next meeting. A summery is required to be reported to TSGN#11.
ID526 Summery for this WI status is required to be presented to the next TSGN#11.What else is needed for CN1 before we can say it is complete.
ID523 add a new task The WID need to be reviewed to see if CN1 is included and CN1 specs as well.
ID1545: we need SA2 to tell us what are the requirements. Is there any task for CN1 in ID 1545, GMM and SM aspects of QoS? ID1551, ID1659, ID1660 what are these for?
ID2099: there will be some contributions in this area, we will add a new WT saying stage 3. Date to end the task is end of March.
ID2248: fix the start time and finish time is TSGN#11.
ID2231: not splitable.
ID1679: add CN1 WT as BSSAP+. The WID need to be revised to cover the change.
ID2230 Advanced Speech Call Items title need to be changed, where the WI is called Advanced Speech Call Items enhancement.
A TEI5 WI is needed.
LCS WID need updating by SA2. It still refers to R00 and CN1 need to be added.

CN WG2:

Unique ID	Title	Release	Notes of progress
2018	CAP over IP	REL-4	CN4 is working on this. On schedule. CN2 will follow the principles decided in CN4. % completed increased until 15/1.
	CAMEL4 / Stage 1	REL-5	Not an CN2 issue
2014	CAMEL4 / Interactions with Optimal Routing	REL-5	On schedule. Increase completion rate so that it is seen to be according to schedule. % completed increased until 15/1.
	CAMEL4 / Call Party Handling	REL-5	Some progress. <No increase

			incompletion rate.
2013	CAMEL4 / Mid call procedure for MO and MT calls	REL-5	On schedule. Increase completion rate so that it is seen to be according to schedule. % completed increased until 15/1.
	CAMEL4 / Provisioning of IP-based multimedia services	REL-5	On standstill, no progress. The service requirement & architecture is open.
	CAMEL4 / CAMEL applicability to media streams like VoIP	REL-5	On standstill, no progress. The service requirement & architecture is open.
2016	CAMEL4 / CAMEL control over MT SMS	REL-5	On schedule. Increase completion rate so that it is seen to be according to schedule. % completed increased until 15/1.
2015	CAMEL4 / Inclusion of flexible tone injection	REL-5	On schedule. Increase completion rate so that it is seen to be according to schedule. % completed increased until 15/1.
	CAMEL4 / Charging notification to the CSE	REL-5	On standstill, no progress. The service requirement & architecture is open.

CN WG3 (N3#15):

For [U-ID 2047] "Multimedia domain and CS networks Interworking" - changed the rapporteur, and removed requirement for TR xx.xxx.

For [U-ID 2048] "Multimedia domain and IP networks Interworking" - changed the rapporteur

For [U-ID 1325] "Standardisation of protocols (control & user planes) over reference points between MGWs" - changed the % complete to 50%.

For [U-ID 1655] "Circuit-switched multimedia swap and fallback
" - IMPORTANT note added on the status of this WI. Pushed back from Rel-4 to Rel-5.

For [U-ID 1359] "Service Modif without Pre-notif" - IMPORTANT NOTE ADDED "No more work will be done on this WID SA1 are requested to delete the requirements"

For [U-ID 2205] "IWF at the EDGE" - IMPORTANT NOTE ADDED "CN3 has no intention to pursue this WI further due to the lack of rapporteur and contributions"

RAN WG2:

- ETRAN-RABSE (RAB support enhancement - no ROHC):
    - Moved to RAN improvements
    - Acronym corrected to RANimp-RABSE

- ETRAN-RABSE (RAB support enhancement - ROHC part):
    - Moved to RAN improvements
    - Release corrected to Rel4
    - Acronym corrected to RANimp-RABSE

- <no acronym> (Evolutions of the transport in the UTRAN//Logical Test Interface,
            Specification, R4 evolution of UTRAN):
    - Start and finish dates moved to April-June period after consultation
      with T1 Secretary

- TI-ATC (EMMI Specification):
    - Start and finish dates moved to April-June period after consultation
      with T1 Secretary

- LCRTDD-Uerac (UE radio access capability):
    - Acronym corrected to LCRTDD-UErac

- ID 1558 <no acronym> (QoS for CS services at HOs (inter-MSC and SRNS change)//UTRAN aspects):
-            Deleted after consultation with S2 Secretary

- <no acronym> (Evolutions of the transport in the UTRAN//Logical Test Interface,
              Specification, R4 evolution of UTRAN):
    - Deleted in accordance with decision in T1

- TI-ATC (EMMI Specification):
-           Deleted in accordance with decision in T1

- <no acronym> (Tandem Free aspects for 3G and between 2G and 3G systems//
          Tandem Free AMR//
          Implementation//
          in UTRAN):
-           Deleted after consultation with R3 and S4

RAN WG3:

The following lines are deleted:
767: (TB Confirmed) Bearer establishment between MSC and RNC and between RNC and Node B
897: (TB Confirmed) Notification of the Codec mode to RAN, Iu UP control procedure (rate control,
initialization, time alignment)

ID	Unique	Name	Relea	Splita	Resource	Acronym	Leve	Qtr 4, 2000 / Qtr 1, 2001 / Qtr 2, 2001 / Qtr 3, 2001 / Qtr 4, 2001
1	2044	**VERSION 2001 March 13th**		No				
2	1462	**"CTRL + a" to display all the 3GPP fields**		No				
3	1463	**If MS Project crashes, hide the "hyperlink" field**		No				
4	2058			No				
5	96			No				
6	2	**Evolutions of the transport in the UTRAN**	NA	Yes	SG RAN	**ETRAN**	TSG	
7	625	**IP transport in the UTRAN**	Rel4	No	/G RAN3	ETRAN-IPtrans	TSG	
8	12	**QoS optimisation for AAL2 connections over Iub and**	Rel4	No	/G RAN3	ETRAN-QoSAAL2	TSG	
9	1995	**Transport bearer modification procedure on Iub, Iur,**	Rel4	No	/G RAN3	ETRAN-MigrMod	TSG	
10	2257	**Evolution of transport in UTRAN and GERAN**	Rel4	No	/G RAN3	**ETRANG**	TSG	
11	2258	Addition of transport mechanisms other than ATM for Iu - Identifi		No	/G RAN3	ETRANG	TSG	
12	2259	Addition of transport mechanisms other than ATM for Iu - Specif		No	/G RAN3	ETRANG	TSG	
13	1834	**Conformance Test Aspects**		No	WG T1			
14	2208	Testing RAB support enhancements		No	WG T1	CT-RABS?		
15	4	**Evolutions of the transport in the CN**	NA	Yes	WG CN4	**CNTRSP**		
16	859	**IP Transport of CN protocols (e.g., CAP, MAP)**	Rel4	No	WG CN4	**SS7IP**		
17	1679	Stage 3		No	WG CN4	**SS7IP**		
18	2018	CAP		Yes	WG CN2	SS7IP	WG	
19	2019	MAP		No	WG CN4	SS7IP		
20	2253	BSSAP+		No	WG CN1	SS7IP-BSSAP+	WG	
21	2455	FS on Usage of SUA		No	WG CN4	SS7IP		
22	1513	**FS on Transport and control separation in the PS CN**		No	WG SA2		TSG	
23	1615	Architectural impacts		No	WG SA2		WG	
24	1216	**Improvements of Radio Interface**	NA	Yes	SG RAN	**RInImp**	TSG	
25	1470	**Improvement of inter-frequency and inter-system me**	Rel5	No	/G RAN1	RInImp-IfIsM	TSG	
26	1471	**Base station classification**	Rel4	No	/G RAN4	**RInImp-BSClass**	TSG	
27	1476	FDD Base station classification		No	/G RAN4	RInImp-BSClass-FE	TSG	
28	1477	TDD Base station classification		No	/G RAN4	RInImp-BSClass-TE	TSG	
29	1217	**Hybrid ARQ II/III**	Rel5	No	/G RAN2	RInImp-HARQ	TSG	

ID	Unique	Name	Relea	Splita	Resource	Acronym	Leve
30	1218	**Improved usage of downlink resource in FDD for CCT**	Rel5	No	/G RAN2	RInImp-CCTrCH	TSG
31	1507	**Terminal Power Saving features**	Rel4	No	/G RAN1	RInImp-TPS	TSG
32	1509	**UTRA repeater specification (master)**	Rel4	No	/G RAN4	RInImp-REP	TSG
33	1994	**DSCH power control improvement in soft handover**	Rel4	No	/G RAN1	RInImp-DSCHsho	TSG
34	1996	**UMTS 1800**	Rel4	No	/G RAN4	RInImp-UMTS18	TSG
35	1506	**FS on Radio link performance enhancements**		No	/G RAN1	RInImp-Rlperf	TSG
36	1219	**FS on High Speed downlink packet access**		No	/G RAN2	RInImp-HSDPA	TSG
37	1221	**FS on USTS**		No	/G RAN1	RInImp-USTS	TSG
38	1510	**FS on improved common DL channel for Cell-FACH s**		No	/G RAN2	RInImp-DLCFACH	TSG
39	1997	**FS on UE antenna efficency test method performanc**		No	/G RAN4	RInImp-UEAnTM	TSG
40	**1839**	**Conformance Test Spec. improvements in Radio Inte**		**No**	**WG T1**		
41	2210	Testing improvement of inter-frequency and inter-system measu		No	WG T1		
42	2211	Testing Hybrid ARQ II/III		No	WG T1		
43	2212	Testing Improved usage of downlink resource in FDD for CCTrC		No	WG T1		
44	2213	Testing Terminal Power saving features		No	WG T1		
45	2214	Testing DSCH power control improvement in soft handover		No	WG T1		
46	2215	Testing UMTS 1800		No	WG T1		
47	**1222**	**Low Chip Rate TDD option**	Rel4	**No**	**/G RAN1**	**LCRTDD**	**TSG**
48	1223	**Physical layer**		No	/G RAN1	LCRTDD-Phys	TSG
49	1224	**Layer 2 and layer 3 protocol aspects**		No	/G RAN2	LCRTDD-L23	TSG
50	1225	**RF radio transmission/reception, system performanc**		No	/G RAN4	LCRTDD-RF	TSG
51	1227	**UE radio access capability**		No	/G RAN2	LCRTDD-UErac	TSG
52	1228	**Iub/Iur protocol aspects**	Rel4	No	/G RAN3	LCRTDD-Iublur	TSG
53	**2262**	**Low chiprate TDD interworking with GERAN**		**No**			
54	2263	Handover and Cell Selection / Reselection to UTRA 1.28 Mcps TD		No			
55	1911	**Start Testing**		No	MLST		
56	**2103**	**Conformance Test Aspects - Low Chip Rate TDD**		**No**	**WG T1**		
57	2216	Testing Physical Layer		No	WG T1		
58	2217	Testing Layer 2 and layer 3 protocol aspects		No	WG T1		

Timeline annotations:
- Row 47: Start Testing
- Row 55: Start Testing

ID	Unique	Name	Relea	Splita	Resource	Acronym	Leve	Timeline
59	2218	Testing RF Radio Transmission and Reception		No	WG T1			
60	2219	Testing UE radio access capability		No	WG T1			
61	9	**RAN improvements**	NA	Yes	SG RAN	RANimp	TSG	Start Testing
62	656	**RRM optimization for Iur and Iub**	Rel4	No	/G RAN3	RANimp-RRMopt	TSG	
63	655	**Node B synchronisation for TDD**	Rel4	No	/G RAN1	RANimp-NBsync	TSG	
64	624	**RAB support enhancement - no ROHC**	Rel5	No	/G RAN2	RANimp-RABSE	TSG	
65	2206	**RAB support enhancement - ROHC part only**	Rel4	No	/G RAN2	RANimp-RABSE	WG	
66	1680	**Header compression removal/stripping in the RAN**	Rel5	No	SG RAN			
67	1686	**Unequal error protection in PS domain in the RAN**	Rel5	No	SG RAN			
68	1912	**Start Testing**		No	MLST			Start Testing
69	2102	**Conformance Test Aspects - RAN Improvements**		**No**	**WG T1**			
70	2220	Testing Smart antenna		No	WG T1			
71	2221	Testing Node B synchronisation for TDD		No	WG T1			
72	2222	Testing Radio access bearer support enhancments		No	WG T1			
73	1273	**Provisioning of IP-based multimedia services**	Rel5	No	WG SA1	IMS	TSG	MLST: Stage 3 for basic calls
74	1274	**Call control and roaming to support IP-based multim**		No	WG SA2	IMS-CCR	TSG	MLST: Stage 3 for basic calls
75	1633	Stage 1		No	WG SA1	IMS-CCR		
76	1514	Stage 2 (Architecture and Main flows)		No	WG SA2	IMS-CCR	TSG	
77	1277	FS on Impacts on HSS		No	WG CN4	IMS-CCR		
78	2233	SIP Call Control protocol for the IM CN Subsystem		**No**	**WG CN1**	**IMS-CCR**	**TSG**	
79	1998	IP multimedia subsystem signalling flows		No	WG CN1	IMS-CCR	TSG	
80	1278	IP multimedia subsystem stage 3		No	WG CN1	IMS-CCR	TSG	
81	2255	IP Multimedia (IM) Session Handling; stage 2		No	WG CN1	IMS-CCR	TSG	
82	1673	MLST: Stage 3 for basic calls		No	MLST			MLST: Stage 3 for basic calls
83	1804	SIP interactions with the Rel4 Supl Services		**No**	**WG CN1**	**IMS-CCR**		
84	1650	Check if any		No	WG SA1	IMS-CCR		
85	1651	Stage 3 if applicable		No	WG CN1	IMS-CCR		
86	1280	SIP SS and relationship to Mg, Mw and Cx		No	WG CN4	IMS-CCR		
87	1281	Multimedia Capabilities		**No**	**WG CN1**	**IMS-CCR**		

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ID	Unique	Name	Rele	Splita	Resource	Acronym	Leve
88	1282	Terminal capabilities		No	WG CN1	IMS-CCR	
89	1806	Terminal capabilities and Interactions on running multimedia		No	WG T2	IMS-CCR	
90	1805	Network capabilities		No	WG CN1	IMS-CCR	
91	1285	Network capabilities (N4 aspects)		No	WG CN4	IMS-CCR	
92	**1286**	CSCF – HSS (Cx) applications and services (SCP)		**No**	**WG SA2**	**IMS-CCR**	
93	1515	Stage 2 flows		No	WG SA2	IMS-CCR	
94	2021	Stage 2 flows (N4) (see note)		No	WG CN4	IMS-CCR	
95	2023	Impacts from CAMEL		No	WG CN4	IMS-CCR	
96	1288	Impact on Camel Stage 3		No	WG CN2	IMS-CCR	
97	1289	Impact on MAP		No	WG CN4	IMS-CCR	
98	2024	Stage 3 protocol on Cx		No	WG CN4	IMS-CCR	
99	**1290**	Addressing, Identities		**No**	**WG SA2**	**IMS-CCR**	
100	1291	Architectural issues		No	WG SA2	IMS-CCR	
101	1292	Impact on HSS		No	WG CN4	IMS-CCR	
102	**1294**	Interworking with other multimedia protocols		**No**	**WG CN3**	**IMS-CCR**	
103	1295	Requirements		No	WG SA1	IMS-CCR	
104	1296	Impact on MM/CC/SM		No	WG CN1	IMS-CCR-IWMM	
105	2047	Interworking between IM CN subsystem and CS networks		No	WG CN3	IMS-CCR-IWCS	TSG
106	2048	Interworking between IM CN subsystem and IP networks		No	WG CN3	IMS-CCR-IWIP	WG
107	1913	**Start Testing**		No	MLST		
108	1844	**Conformance Test Aspects - Provisioning of IP-based**		No	WG T1	IMS-TEST	
109	1298	**Access Security for IP-based services**		No	WG SA3	IMS-ASEC	TSG
110	1299	**Lawful interception**		No	WG SA3	IMS-LI	TSG
111	1300	**RAN improvements and evolution of the bearers on**		No	TSG RAN	IMS-RAN	
112	1597	**(Copy) Ensure reliable QoS for PS domain and IM sul**		No	WG SA2		
113	1303	**(Copy) Charging and OAM&P**		No	WG SA5	IMS-OAM	
114	1598	**(Copy) AMR-WB**		No	WG SA4		
115	**1305**	**Roaming between IP multimedia and CS domain net**		**No**	**WG CN4**	**IMS-ONCS**	
116	1457	Roaming requirements		No	WG SA1		TSG

ID	Unique	Name	Relea	Splita	Resource	Acronym	Leve	Qtr 4, 2000 / Qtr 1, 2001 / Qtr 2, 2001 / Qtr 3, 2001 / Qtr 4, 2001
117	1306	Stage 2		No	WG SA2		TSG	
118	1307	Stage 2 review		No	WG CN4			
119	1456	Internetwork roaming aspects		No	?		TSG	
120	2227	MExE interactions		No	WG T2			
121	2228	MMS interactions		No	WG T2		WG	
122	1310	**Support of VHE/OSA by Rel4 network entities and pro**		No	WG CN5	IMS-ONOSA	TSG	
123	1732	**Number portability in IM subsystem**		No	WG CN4	IMS-MNP		
124	**2036**	**Multimedia codecs and protocols for conversational**		**No**	**WG SA4**	**IMS-CODEC**	**TSG**	
125	2039	Codecs		No	WG SA4		TSG	
126	2040	performance characterisation of codec		No	WG SA4		TSG	
127	2038	protocols		No	WG SA4		TSG	
128	1539	**Transparent End-to-End PS mobile streaming appl**	Rel4	No	WG SA4	PSTREAM	TSG	
129	**1652**	**Emergency call enhancements**	**NA**	**Yes**	**WG CN1**	**EMC1**	**WG**	
130	**1653**	**For IP & PS based calls**	Rel5	No	**WG CN1**	**EMC1-PS**	**TSG**	
131	1314	Service Requirements for IP-based emergency calls		No	WG SA1	EMC1-PS		
132	1315	SIP emergency calls and packet emergency calls signalling flow		No	WG CN1	EMC1-PS		
133	1316	Stage 2 for emergency calls and packet emergency calls in gene		No	WG SA2	EMC1-PS		
134	1317	Distinction of emergency call types to different emergency servi		No	WG CN1	EMC1-PS		
135	1646	Stage 3 for emergency calls and packet emergency calls in gene		No	WG CN1	EMC1-PS		
136	1605	(Copy2) Ensure reliable QoS for PS domain and IM subsystem		No	WG SA2			
137	**1654**	**For CS based calls**	Rel4	No	**WG CN1**	**EMC1-CS**	**TSG**	
138	1320	Distinction in CS domain of emergency call types to different em		No	WG SA1	EMC1-CS		
139	1999	Distinction in CS domain of emergency calls to different emerger		No	WG CN1	EMC1-CS		
140	**2224**	**Conformance Test Aspects - Emergency call enhance**		**No**	**WG T1**			
141	2225	Testing Stage 3 for emergency calls and packet emergency calls		No	WG T1			
142	2226	Testing CS based emergency calls		No	WG T1			
143	**1322**	**Enable bearer independent CS architecture**	Rel4	No	**WG SA2**	**CSSPLIT**	**TSG**	Start Testing
144	**1323**	**Enable bearer-independent call control**		No	**WG CN4**	**CSSPLIT**	**WG**	
145	1516	Architecture and Stage 2 description on 23.002		No	WG SA2	CSSPLIT		

ID	Unique	Name	Rele:	Splita	Resource	Acronym	Leve
146	1325	Standardisation of protocols (control & user planes) over Nb int		No	WG CN3	CSSPLIT	TSG
147	1326	Standardisation of protocols over reference points between MS		No	WG CN4	CSSPLIT	TSG
148	1616	Standardisation of detailed stage 2 description		No	WG CN4	CSSPLIT	TSG
149	**1327**	Bearer control between MSC server and MGW		**No**	**WG CN4**	**CSSPLIT**	**TSG**
150	1328	stage 3 - protocol issues		No	WG CN4	CSSPLIT	TSG
151	1329	stage 3 - parameter value issues		No	WG CN3	CSSPLIT	
152	1331	**Lawful interception**		No	WG SA3	CSSPLIT	
153	1332	**Bearer Independence and codec control issues**		No	WG SA4	CSSPLIT	
154	1918	**Start Testing**		No	MLST		
155	**2052**	**Conformance Test Aspects - Enable bearer independ**		**No**	**WG T1**	**CSSPLIT-TEST**	
156	1847	UE Conformance test spec., Bearer independent CS, Protocol		No	WG T1	CSSPLIT-TEST	
157	1848	UE Conformance test spec., Bearer independent CS, TTCN		No	WG T1	CSSPLIT-TEST	
158	**1333**	**DEL?: CS multimedia services**	Rel4	**No**	**WG SA2**	**CSM**	
159	1338	**Stage 1**		No	WG SA1	CSM	
160	**1655**	**Circuit-switched multimedia swap and fallback**		**No**	**WG CN3**	**CSM-SWAP**	
161	1335	Call control and signalling aspects		No	WG CN1	CSM-SWAP-CC	
162	1336	Transport aspects		No	WG CN3		
163	1337	inband signalling		No	WG CN3		
164	1920	**Start Testing**		No	MLST		
165	**2056**	**Conformance Test Aspects - CS multimedia services**		**No**	**WG T1**	**CSM-TEST**	
166	1849	UE Conformance test spec. CS multimedia services, Protocol		No	WG T1		
167	1850	UE Conformance test spec. CS multimedia services, TTCN		No	WG T1		
168	**1340**	**Facsimile**	Rel4	**No**	**WG SA1**	**FAX**	**TSG**
169	**1341**	**Real Time Fax**		**No**	**WG SA2**	**FAX-RT**	
170	1808	Terminal capabilities, AT commands		No	WG T2	FAX-RT	
171	1343	Signalling aspects (e.g. ICM)		No	WG CN1	FAX-RT	
172	1648	Service provision		No	WG CN3	FAX-RT	
173	1345	Review whether service/stage 1 aspects need to be aligned		No	WG SA1	FAX-RT	
174	1346	Review whether architecture/stage 2 aspects need to be aligne		No	WG SA2	FAX-RT	

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175	2041	**Start Testing**		No	MLST			
176	1851	**Conformance Test Aspects - Facsimile**		No	WG T1			
177	1517	**Global Text Telephony**	NA	Yes	WG SA2	GTT	TSG	Start Testing
178	2240	**Minimum solution**	Rel4	No				
179	1634	Stage 1		No	WG SA1	GTT	TSG	
180	1519	Stage 2		No	WG SA2	GTT	TSG	
181	2234	Specification of Cellular Text telephone Modem		No	WG SA4	GTT-CTM		
182	2238	General description and C-code		No	WG SA4	GTT-CTM		
183	2237	Minimum Performance requirements		No	WG SA4	GTT-CTM		
184	2239	**Improvements of GTT**	Rel5	No				Start Testing
185	1350	Activation and transport		No	WG SA2	GTT		
186	1520	SIP and H.324 Activation and transport		No	WG SA2	GTT		
187	1521	Data Channel Activation and transport		No	WG SA2	GTT		
188	1523	Selection of transport method		No	WG SA2	GTT		
189	1524	Interworking		No	WG CN3	GTT-IW		
190	1809	Terminal Aspects		No	WG T2	GTT	TSG	
191	1357	USIM Aspects		No	WG T3	GTT		
192	2096	GTT using CS multimedia telephony		No	WG SA4	GTT		
193	1915	Start Testing		No	MLST	GTT		Start Testing
194	1852	Conformance Test Aspects - Global Text telephony		No	WG T1	GTT		
195	1526	**DEL?: Bearer Modification without pre-notification**	Rel4	No	WG SA1	BMWPN	TSG	Start Testing
196	2223	**Testing Support of Bearer modification without pren**		No	WG T1			
197	1635	**Stage 1**		No	WG SA1	BMWPN		
198	1359	**Service Modification without pre-notification**		No	WG CN3	BMWPN-SMWOP	TSG	
199	1361	Interworking function, TAF		No	WG CN3	BMWPN		
200	1362	Out of band Transcoder Control		No	WG CN4	BMWPN		
201	1363	AT commands		No	WG T2	BMWPN		
202	1364	**deleted at SA#11: Bearer Modification because of rad**		No	WG SA2	BMWPN		
203	1921	**Start Testing**		No	MLST	BMWPN-TEST		Start Testing

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204	**2057**	**Conformance Test Aspects**		**No**	**WG T1**	**BMWPN-TEST**		
205	1853	UE Conformance test spec. Bearer modification, Protocol		No	WG T1	BMWPN-TEST		
206	1857	UE Conformance test spec. Bearer modification, TTCN		No	WG T1	BMWPN-TEST		
207	**1367**	**VHE enhancements**	**NA**	**Yes**	**WG SA1**	**VHE1**	**TSG**	
208	1368	**Detailed definition of the VHE user profile**	Rel5	No	WG SA2	VHE1-USERP	WG	
209	1373	Stage 1		No	WG SA1	VHE1-USERP	WG	
210	1404	Stage 2		No	WG SA2	VHE1-USERP	WG	
211	2123	Enhanced UserProfileManagement		No	WG CN5	VHE1-USERP	TSG	
212	2104	**Extensions to existing (and possibly new) toolkits**	Rel5	Yes	WG SA2	VHE1-TLKT1	WG	
213	2105	Stage 1		No	WG SA1	VHE1-TLKT1	WG	
214	2106	Stage 2		No	WG SA2	VHE1-TLKT1	WG	
215	2107	Stage 3 (wait for stage 2)		No		VHE1-TLKT1	WG	
216	2108	**Interaction between toolkits to enable IP multimedia**	Rel5	Yes	WG SA2	VHE1-IMS	WG	
217	2109	Stage 1		No	WG SA1	VHE1-IMS	WG	
218	2110	Stage 2		No	WG SA2	VHE1-IMS	WG	
219	2111	Stage 3 (wait for stage 2)		No		VHE1-IMS	WG	
220	2112	**Transparent roaming for services**	Rel5	Yes	WG SA2	VHE1-RMG	WG	
221	2113	Stage 1		No	WG SA1	VHE1-RMG	WG	
222	2114	Stage 2		No	WG SA2	VHE1-RMG	WG	
223	2115	Stage 3 (wait for stage 2)		No		VHE1-RMG	WG	
224	**1637**	**OSA enhancements**	**NA**	**Yes**	**WG SA1**	**OSA1**	**WG**	
225	2120	**General Stage 2**		No	WG SA2	OSA1	WG	
226	1424	**Interactions OSA - e-commerce**	Rel4	No	WG SA2	OSA1-ECOM	WG	
227	1425	Stage 1		No	WG SA1	OSA1-ECOM	WG	
228	1529	Stages 2 and 3		No	WG CN5	OSA1-ECOM	TSG	
229	1429	**OSA APIs for MuMa CC**	Rel5	No	WG SA2	OSA1-CSCF		
230	1430	Stage 1		No	WG SA1	OSA1-CSCF		
231	1530	Stages 2 and 3		No	WG CN5	OSA1-CSCF	TSG	
232	1419	**OSA security**	Rel5	No	WG SA3	OSA1-SEC	TSG	

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233	2121	Stage 1		No	WG SA1	OSA1-SEC						
234	1420	Stage 2		No	WG SA2	OSA1-SEC						
235	1421	Stage 3		No	WG SA3	OSA1-SEC						
236	1422	security related SCF(s) definition		No	WG CN5	OSA1-SEC	TSG					
237	1423	(possibly) changes required from supporting platforms, e.g. gsmS		No	WG SA3	OSA1-SEC						
238	1621	impact on terminal		No	WG T2	OSA1-SEC	WG					
239	1433	**Retrieval of Terminal capabilities**	Rel5	No	WG SA2	OSA1-TC						
240	1434	Stage 1		No	WG SA1	OSA1-TC						
241	1436	Stages 2 and 3		No	WG CN5	OSA1-TC	TSG					
242	2122	Provisionning of the terminal capabilities		No	WG T2	OSA1-TC						
243	1786	**LCS - OSA interfaces (!)**		No	WG SA1	OSA1-LCSI	WG					
244	1787	Stage 1		No	WG SA1	OSA1-LCSI	WG					
245	2124	Stage 2		No	WG SA2	OSA1-LCSI	WG					
246	1788	Stage 3		No	WG CN5	OSA1-LCSI	TSG					
247	2116	**(copy) Charging and OAM&P (!)**		No	WG SA5	OSA1-OAM	TSG					
248	**1638**	**CAMEL phase 4**	Rel5	**No**	**WG SA1**	**CAMEL4**						
249	1461	**Service requirements**		No	WG SA1	CAMEL4						
250	2011	**Charging notification to the CSE**		No	WG CN2	CAMEL4-CNCNE						
251	2012	**Call Party Handling**		No	WG CN2	CAMEL4-CPH						
252	2013	**Mid call procedure for MO and MT calls**		No	WG CN2	CAMEL4-MCP						
253	2014	**Interactions with Optimal Routing**		No	WG CN2	CAMEL4-IOR						
254	2015	**Inclusion of flexible tone injection**		No	WG CN2	CAMEL4-IFTI						
255	2016	**CSE control over MT SMS**		No	WG CN2	CAMEL4-CCSMS						
256	2017	**CAMEL applicability to media streams like VoIP**		No	WG CN2	CAMEL4-ONSTRM						
257	2460	**Notification of GPRS mobility management to CSE**		No	WG CN2	CAMEL4-NMM						
258	2459	**Enhancement of dialled services**		No	WG CN2	CAMEL4-EDS						
259	2458	**Provision of location information of called subscribe**		No	WG CN2	CAMEL4-LOCB						
260	**1445**	**MExE enhancements**	**NA**	**No**	**WG T2**	**MEXE**	**TSG**					
261	**1447**	**MExE Security**	**Rel4**	**No**	**WG SA3**	**MEXE-SEC**	**TSG**					

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262	2045	Stage 3		No	WG SA3	MEXE1-SEC						
263	1448	Terminal aspects		No	WG T2							
264	**1810**	**MExE Rel4 Improvements and Investigations**	Rel4	**No**	WG T2	**MEXE-ENHANC**	TSG					
265	1812	3rd MExE classmark		No	WG T2		TSG					
266	1814	FS on Secure download mechanism and capabilities to support S		No	WG T2		TSG					
267	1815	FS on Support of MP3/MPEG4 content		No	WG T2		TSG					
268	1816	FS on Support of (U)SAT/OSA/CAMEL interaction to provide adv		No	WG T2		TSG					
269	1813	FS on AT command support		No	WG T2		TSG					
270	1811	Support of the Terminal parts of the VHE /User Profile		No	WG T2		TSG					
271	**1625**	**Wideband Telephony Service - AMR (Master)**	Rel4	**No**	**WG SA4**	**AMRWB**	**TSG**	▽ Start Testing				
272	**62**	**Specification**		**No**	WG SA4	**AMRWB**		▽ Start Testing				
273	1459	Design Constraints		No	WG SA4	AMRWB						
274	1460	General Description		No	WG SA4	AMRWB						
275	1626	Feasibility Study		No	WG SA4	AMRWB	TSG					
276	**67**	Codec issues		**No**	**WG SA4**	**AMRWB**						
277	1627	Codec qualification		No	WG SA4	AMRWB	TSG					
278	74	Codec selection tests		No	WG SA4	AMRWB						
279	891	Codec selection		No	WG SA4	AMRWB						
280	890	Other codec issues (verif., caracterisation)		No	WG SA4	AMRWB						
281	1989	Start Testing		No	MLST	AMRWB		◆ Start Testing				
282	1855	Conformance tests (CRs to 34 series)		No	WG T1	AMRWB						
283	**76**	Terminal Acoustic Characteristics		**No**	**WG SA4**	**AMRWB**						
284	1628	Definition		No	WG SA4	AMRWB	TSG					
285	1629	Test specification		No	WG SA4	AMRWB	TSG					
286	**889**	**Implementation**		**No**	**WG SA4**	**AMRWB**						
287	893	In UTRAN		No	TSG RAN	AMRWB						
288	**80**	Support of AMR-WB in GERAN		**No**	G GERAN	**GAMRWB**	**TSG**					
289	2265	GMSK and 8PSK WB FR / HR support - Channel coding in 4		No	G GERAN	GAMRWB	TSG					
290	2266	GMSK and 8PSK WB FR / HR support - Signalling for the A		No	G GERAN	GAMRWB	TSG					

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291	2267	GMSK and 8PSK WB FR / HR support - Signalling for Iu		No	G GERAN	GAMRWB	TSG					
292	2268	GMSK and 8PSK WB FR / HR support - Link adaptation in 45		No	G GERAN	GAMRWB	TSG					
293	**2269**	GERAN MS conformance test for AMR-WB		**No**	**G GERAN**	**GAMRWB**	**TSG**					
294	2270	MS test		No	G GERAN	GAMRWB	TSG					
295	**2271**	GERAN BTS conformance test for AMR-WB		**No**	**G GERAN**	**GAMRWB**	**TSG**					
296	2272	BTS test		No	G GERAN	GAMRWB	TSG					
297	1656	In CN, see notes		No	WG CN1	AMRWB						
298	**1541**	**Transcoder-Free Operation**	**Rel4**	**No**	**WG CN4**	**TrFO**						
299	**112**	**OoBTC solution**		**No**	**WG CN4**	**TRFO-OOBTC**	**WG**					
300	1512	implementation in UTRAN	Rel4	No	/G RAN3	TRFO-OOBTC-UTF	TSG					
301	896	Impact on architecture, Principles and Terminology		No	WG SA2	TRFO-OOBTC						
302	1657	Codec Negotiation between UE and MSC		No	WG CN1	TRFO-OOBTC	TSG					
303	115	Codec Negotiation inter MSC		No	WG CN4	TRFO-OOBTC						
304	894	Bearer establishment inter MSC		No	WG CN4	TRFO-OOBTC	TSG					
305	1617	Prevention of user fraud		No	WG SA3	TRFO-OOBTC						
306	**905**	**Speech Transcoder: Location and Control at the UM**		**No**	**WG SA2**	**TRFO-STLC**	**WG**					
307	124	Transcoder at Edge		No	TSG CN	TRFO-STLC						
308	2205	IWF at the Edge (CN border)		No	WG CN3	TRFO-STLC						
309	**1631**	**Tandem Free aspects for 3G and between 2G and 3**	**Rel4**	**No**	**WG SA4**	**TFO**						
310	**1632**	**Tandem Free AMR**		**No**	**WG SA4**	**TFO-AMR**						
311	130	Specification		No	WG SA4	TFO-AMR						
312	**907**	Implementation		**No**	**TSG CN**	**TFO-AMR**						
313	131	in CN		No	TSG CN	TFO-AMR						
314	132	in GERAN		No	G GERAN	TFO-AMR						
315	**1818**	**Multimedia Messaging**	**Rel4**	**No**	**WG T2**	**MMS**	**TSG**					
316	136	**Definition of service requirements**		No	WG SA1	MMS						
317	1819	**Review of definition of service requirements**		No	WG T2		TSG					
318	**1820**	**Technical Realisation**		**No**	**WG T2**		**TSG**					
319	1532	Definition of reference Achitecture model (Martin to check)		No	WG SA2	MMS						

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320	1821	Review of definition of reference Achitecture model		No	WG T2		TSG
321	1822	"Fulfill Requirements of Stage 1"		No	WG T2		TSG
322	1823	Definition of MMS primitives in Stage 2		No	WG T2		TSG
323	1826	**Terminal interfaces**	NA	Yes	WG T2	TI	
324	1827	**AT commands enhancements**	Rel4	No	WG T2	TI-ATC	
325	1828	Specification of AT commands for new services		No	WG T2		
326	917	Alternatives to AT commands (TBD)		No	WG T2	Yes	
327	1858	UE Conformance test spec. AT command		No	WG T1	TI-ATC	
328	1829	**Wide Area Data Synchronisation**	Rel4	No	WG T2	TI-WADS	
329	1830	Continues evolution of Synchronisation protocol	Rel4	No	WG T2	TI-SYNC-EVOL	
330	1831	vObjects and Other Constructs for Use in Data Synchronisation	Rel5	No	WG T2	TI-SYNC-VOBJ	TSG
331	2251	Start Testing		No	MLST	AMRWB	
332	1860	UE Conformance test spec. Wide area data sync		No	WG T1	TI-WADS	
333	1832	**Terminal local model**	Rel4	No	WG T2	TLM	TSG
334	1536	**Location Services enhancements**	NA	Yes	WG SA2	LCS1	TSG
335	1171	**Event based and Periodic LCS**	Rel5	No	WG SA1	LCS1-EBP	
336	1641	Stage 1		No	WG SA1	LCS1-EBP	
337	1538	Stage 2 specification		No	WG SA2	LCS1-EBP	
338	1179	Impact on MAP		No	WG CN4	LCS1-EBP	
339	519	**(copy) Charging and OAM&P (!)**		No	WG SA5	LCS1-OAM	
340	521	**New security aspects of LCS (not identified)**		No	WG SA3	LCS1-SEC	
341	523	**LCS support in the CS domain**	Rel4	No	WG SA2	LCS1-CS	
342	525	**LCS support in the PS domain**	Rel4	No	WG SA2	LCS1-PS	
343	1642	Stage 1		No	WG SA1	LCS1-PS	
344	1181	Stage 2		No	WG SA2	LCS1-PS	
345	1180	Stage 3		No	WG CN1	LCS1-PS	
346	526	Layer 3 LCS signaling UE (MS) -SGSN (UMTS PS and and G		No	WG CN1	LCS1-PS	
347	527	GTP signaling for LCS		No	WG CN4	LCS1-PS	
348	544	**LCS interoperation stage 2 aspects**		No	WG SA2		

Timeline header: Qtr 4, 2000 | Qtr 1, 2001 | Qtr 2, 2001 | Qtr 3, 2001 | Qtr 4, 2001
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Markers: "Start Testing" (323, 328, 331)

ID	Unique	Name	Rele	Split	Resource	Acronym	Leve
349	**2434**	**LCS interoperation stage 2 aspects to GERAN**		No	G GERAN	**LCS-GERAN**	**TSG**
350	2435	Co-ordinated development of GSM LCS Phase 2and UMTS LCS,		No	G GERAN	LCS-GERAN	TSG
351	**2436**	**Location Services for GERAN in A/Gb Mode**		No	G GERAN	**LCS-GERAN**	**TSG**
352	2437	GERAN LCS Stage 2 (first release)		No	G GERAN	LCS-GERAN	TSG
353	2438	Gb interface support for LCS		No	G GERAN	LCS-GERAN	TSG
354	2439	RLC/MAC protocol support for LCS		No	G GERAN	LCS-GERAN	TSG
355	2440	L3 protocol support for LCS		No	G GERAN	LCS-GERAN	TSG
356	2441	Stage 3 specifications		No	G GERAN	LCS-GERAN	TSG
357	**2442**	**Location Services for GERAN in Iu Mode**		No	G GERAN	**LCS-GERAN**	**TSG**
358	2443	GERAN LCS Stage 2 (second release)		No	G GERAN	LCS-GERAN	TSG
359	2444	Iu-ps interface support for LCS		No	G GERAN	LCS-GERAN	TSG
360	2445	Iu-cs interface support for LCS		No	G GERAN	LCS-GERAN	TSG
361	2446	Iur-g interface support for LCS		No	G GERAN	LCS-GERAN	TSG
362	2447	RRC protocol support for LCS		No	G GERAN	LCS-GERAN	TSG
363	2448	Additional impacts on Broadcast of LCS data on packet channels		No	G GERAN	LCS-GERAN	TSG
364	2449	Stage 3 specifications		No	G GERAN	LCS-GERAN	TSG
365	**2450**	**GERAN MS Conformance test for LCS**		No	GERAN4	**LCS-GERAN**	**TSG**
366	2451	MS test		No	GERAN4	LCS-GERAN	TSG
367	**2452**	**GERAN BTS Conformance test for LCS**		No	GERAN3	**LCS-GERAN**	**TSG**
368	2453	BTS test		No	GERAN3	LCS-GERAN	TSG
369	2229	**CBS interactions**	Rel4	No	WG T2	LCS1-CBS	
370	1916	**MExE interactions**	Rel4	No	WG T2	LCS1-MEXE	
371	**1600**	**UE positioning**	**Rel4**	No	SG RAN	**LCS1-UEpos**	**TSG**
372	1601	Iub/Iur interfaces for methods Rel 99	Rel4	No	/G RAN3	LCS1-UEpos-IubIur	TSG
373	1602	UE positioning enhancements - IPDL for TDD	Rel4	No	/G RAN2	LCS1-UEpos-enh	TSG
374	2457	UE positioning enhancements - other methods	Rel5	No	/G RAN2	LCS1-UEpos-enh	WG
375	1603	(Copy) UTRA repeater specification		No	/G RAN4		TSG
376	1796	**(Copy) LCS application interfaces (LCS-OSA)**		No	WG SA1		
377	1183	**FS on LCS support in the IM CN subsystem**		No	WG SA1		

Timeline header: Qtr 4, 2000 (Oct Nov Dec) | Qtr 1, 2001 (Jan Feb Mar) | Qtr 2, 2001 (Apr May Jun) | Qtr 3, 2001 (Jul Aug Sep) | Qtr 4, 2001 (Oct Nov Dec)

ID	Unique	Name	Relea	Splita	Resource	Acronym	Leve	Qtr 4, 2000 Oct Nov Dec	Qtr 1, 2001 Jan Feb Mar	Qtr 2, 2001 Apr May Jun	Qtr 3, 2001 Jul Aug Sep	Qtr 4, 2001 Oct Nov Dec
378	2125	**Open LCS interfaces in UMTS and GERAN**	**Rel5**	No	WG SA2	**LCS-INTF**	**TSG**					
379	2127	Stage 2		No	WG SA2		WG					
380	2126	Stage 3		No								
381	**1542**	**Ensure reliable QoS for PS domain**	**Rel4**	No	WG SA2	**QoSPS**						
382	1543	**stage 2 for End-to-end QoS (re)negotiation and reser**		No	WG SA2	QoSPS						
383	**1658**	**stage 3 for End-to-end QoS (re)negotiation and reser**		**No**	WG CN1	**QoSPS**						
384	1545	GMM and SM aspects		No	WG CN1	QoSPS						
385	1546	GTP aspects		No	WG CN4	QoSPS						
386	**1547**	**Mapping of end to end QoS parameters on each inte**		**No**	WG SA2	**QoSPS-MAPEND**						
387	1548	Impacts on N4 documents		No	WG CN4							
388	1549	Impacts on N3 documents		No	WG CN3							
389	**1681**	RAB Quality of Service (re)Negotiation over Iu	**Rel4**	**No**	/G RAN3	**QoSPS-MAPEND-I**	**TSG**					
390	1991	RAB Quality of Service Negotiation over Iu	Rel4	No	/G RAN3	QoSPS-MAPEND-F	TSG					
391	2456	RAB Quality of Service Negotiation over Iu during relocation	Rel4	No	/G RAN3	QoSPS-MAPEND-F						
392	1992	RAB Quality of Service Re-Negotiation over Iu	Rel4	No	/G RAN3	QoSPS-MAPEND-F	TSG					
393	1685	**PS-domain handover for real-time services**	**Rel4**	No	/G RAN3	**QoSPS-PSdoRTS**	**TSG**					
394	1550	**Interactions between external mechanisms and UMT**		No	WG CN3							
395	1551	**Possible new code points in QoS IE from external ne**		No	WG CN1	QoSPS-ENDEND-CI						
396	1659	**Possible new code points in QoS IE for UMTS**		No	WG CN1	QoSPS-ENDEND-CI						
397	1660	**Mapping between the QoS UMTS point codes and th**		No	WG CN1	QoSPS-ENDEND-CI						
398	1552	**(Copy) Charging Management**		No	WG SA5	QoSPS-OAMCH	**TSG**					
399	1624	**Security aspects**		No	WG SA3							
400	1619	**Application aspects, multi-mode aspects**		No	WG T2		WG					
401	**1553**	**GERAN QoS Aspects - Handovers: maintenance of re**		**No**	G GERAN	**GERQoS**						
402	**2306**	Handover for the PS domain		**No**	G GERAN							
403	2309	Stable RT handover report 25.936 including header removal		No	G GERAN							
404	2307	Update of stage 2		No	G GERAN							
405	2308	Update of relevant stage 3 specs		No	G GERAN							
406	**1554**	**Evolution of maximum SDU size**		**No**	WG SA2	**QoSPS-MAXSDU**						

ID	Unique	Name	Relea	Splita	Resource	Acronym	Leve
407	1555	Impacts on CN protocols (e.g., GTP, MAP)		No	WG CN4		
408	1556	Impact on interworking over GTP e.g. PPP		No	WG CN3		
409	1611	**Admission control function triggers**	NA	No	/G RAN3	QoSPS-AdmC	
410	**1557**	**DEL?: QoS for CS services at HOs (inter-MSC and**	**Rel4**	**No**	**WG SA2**	**QoSCS**	
411	1559	**GERAN aspects**		No	G GERAN		
412	**1560**	**UICC/(U)SIM enhancements and interworking**	**NA**	**Yes**	**WG T3**	**UICC1**	
413	1798	**FS on UICC/ME Performance Enhancements**		No	WG T3		TSG
414	1562	**DELETED: UICC/USIM database specification**	Rel4	No	WG T3	UICC1-DataB	TSG
415	1799	**Common PCN Handset Specification (CPHS)**	Rel4	No	WG T3	UICC1-CPHS	TSG
416	1564	**report on SIM/USIM Interworking**		No	WG T3		TSG
417	**1800**	**(U)SIM toolkit enhancements**	**NA**	**Yes**	**WG T3**	**USAT1**	
418	1566	**Enhancements to (U)SIM toolkit secure messaging**	Rel4	No	WG T3	USAT1-SM	TSG
419	1801	**Protocol Standardisation of a SIM Toolkit Interpreter**	Rel4	No	WG T3	USAT1-Interpr	TSG
420	2034	**USAT local link**	Rel4	No	WG T3	USAT1-LocLnk	TSG
421	**1802**	**UICC API**	**NA**	**Yes**	**WG T3**	**USAT1-API**	
422	**2029**	Java API	**Rel4**	**No**	**WG T3**	**USAT1-API-JAVA**	
423	1803	Test specification		No	WG T3		TSG
424	**2031**	Multos API	**Rel5**	**No**	**WG T3**	**USAT1-API-MULT**	**TSG**
425	2032	Specification		No	WG T3	USAT1-API-MULTC	TSG
426	2033	Test specification		No	WG T3	USAT1-API-MULTC	TSG
427	2100	**USIM Toolkit security**		No	WG SA3	USAT1-API-MULTC	TSG
428	**1571**	**Security enhancements**	**NA**	**No**	**WG SA3**	**SEC1**	**TSG**
429	**2099**	**UE triggered authentication during connections**	**Rel4**	**No**	**WG SA3**	**SEC1-UETADC**	**TSG**
430	2254	Stage3		No	WG CN1	SEC1-UETADC	
431	1587	**Evolution of GSM CS algorithms (e.g. A5/3 developm**	Rel4	No	WG SA3	SEC1-CSALGO1	TSG
432	**1588**	**Evolution of GSM PS algorithms (e.g. GEA 2 deploym**	**Rel4**	**No**	**WG SA3**	**SEC1-PSALGO1**	**TSG**
433	1589	Main aspects		No	WG SA3	SEC1-PSALGO1	
434	1618	Impact on GTP		No	WG CN4	SEC1-PSALGO1	WG
435	1661	GEA capability indication in MS CM		No	WG CN1	SEC1-PSALGO1-G	

ID	Unique	Name	Relea	Splita	Resource	Acronym	Leve
436	**1572**	**Protection for user plane data**	**Rel5**	Yes	**WG SA3**	**SEC1-PUPD**	**TSG**
437	1573	Integrity protection in access network		No	WG SA3	SEC1-PUPD	
438	1575	Network based end-to-end security		No	WG SA3	SEC1-PUPD	
439	**1576**	**Network domain security**		Yes	**WG SA3**	**SEC1-NDS**	**TSG**
440	**1577**	Control plane protection in core network (e.g., GTP, CAP, MAP/IF	**Rel5**	No	**WG SA3**	**SEC1-NDS**	
441	1578	Main aspects		No	WG SA3	SEC1-NDS	
442	1579	Integration of GTP signalling security architecture		No	WG CN4	SEC1-NDS	
443	**1580**	User plane protection in core network (e.g., provided by IPsec)	**Rel5**	No	**WG SA3**	**SEC1-NDS**	
444	1581	Main aspects		No	WG SA3	SEC1-NDS	
445	1582	Integration of GTP signalling security architecture		No	WG CN4	SEC1-NDS	
446	2098	Study of network-based denial of service		No	WG SA3	SEC1-NDS	TSG
447	**1583**	**MAP application layer security**	**Rel4**	No	**WG SA3**	**SEC1-MAPAL**	**TSG**
448	1584	Main aspects		No	WG SA3	SEC1-MAPAL	WG
449	2025	Other stage 3 aspects		No	WG CN4	SEC1-MAPAL	TSG
450	1586	**Key management for core network security**		No	WG SA3	SEC1-KMCN	TSG
451	1594	**Visibility and Configurability of security**	Rel4	No	WG SA3	SEC1-VCS	TSG
452	1595	**FIGS**	Rel5	No	WG SA3	SEC1-FIGS	
453	**2026**	**Enhanced HE control of security (including positive a**	**Rel6**	**No**	**WG SA3**		
454	2027	Stage 2		No	WG SA3		
455	2028	FS on Network impacts		No	WG CN4		
456	**1861**	**Miscelleneous UE Conformance Testing Activities**	**NA**	**Yes**	**WG T1**	**MISTST1**	
457	1862	**Optimisation of Test Time, RF Aspects (FDD)**		No	WG T1	MISTST1	
458	1863	**Optimisation of Test Time, RF Aspects (TDD)**		No	WG T1	MISTST1	
459	1907	**Extensions to R99 Test cases**		No	WG T1	MISTST1	
460	1908	**Review all other work items for impact on new or exi**		No	WG T1	MISTST1	
461	1909	**Additional signalling tests to cover VHE, OSA, MExE,**		No	WG T1	MISTST1	
462	1365	**Support of Push Services**	Rel5	No	WG SA2	PUSH	TSG
463	**1142**	**Charging and OAM&P (Master)**	**Rel4**	**No**	**WG SA5**	**OAM**	
464	2089	**Principles, high level Requirements and Architecture**		No	WG SA5	OAM-AR/PR	TSG

ID	Unique	Name	Relea	Splitz	Resource	Acronym	Leve	Qtr 4, 2000 / Qtr 1, 2001 / Qtr 2, 2001 / Qtr 3, 2001 / Qtr 4, 2001
465	2088	**Performance Management (PM) (Master)**		No	WG SA5	OAM-PM		
466	2081	**Fault Management (FM) (Master)**		No	WG SA5	OAM-FM	TSG	
467	2082	**Configuration Management (CM) (Master)**		No	WG SA5	OAM-CM		
468	2242	**Charging Management for all-IP UMTS networks (Ma**		No	WG SA5	OAM-CH/IP	TSG	
469	2083	**Charging Management (CH) (Master)**		No	WG SA5	OAM-CH		
470	2062	**Subscription Management**	Rel4	No	WG SA5	SM	TSG	
471	2071	**UTRAN Operations and Maintenance procedures**	Rel4	No	WG SA5	UOAM	TSG	
472	1993	**small Technical Enhancements and Improvements**	Rel4	No	Generic	TEI4	TSG	
473	2230	**Advanced Speech Call Items enhancements_REL-4**	**Rel4**	**No**	**WG CN1**	**ASCI**	**TSG**	
474	2232	**Stage 2**		No	WG CN4	ASCI	WG	
475	2231	**Stages 2 and 3 on A interface**		No	WG CN1	ASCI	WG	
476	2243	**Intra Domain Connection of RAN Nodes to Multiple**	**Rel5**	**No**	**WG SA2**	**MULCN**	**TSG**	
477	2244	**Overall System Architecture**		No	WG SA2	MULCN	TSG	
478	2245	**RAN work**		No	/G RAN3	MULCN	TSG	
479	2246	**GERAN work**		No	GERAN2	MULCN	TSG	
480	2247	**CN work**		**No**	**WG CN1**	**MULCN**	**TSG**	
481	2248	N1 work		No	WG CN1	MULCN	TSG	
482	2249	N4 work		No	WG CN4	MULCN	TSG	
483	2310	**GERAN improvements 1**	**Rel4**	**No**	**GERAN**	**GEIMP1**	**TSG**	
484	2311	**Gb over IP (Ip-fication of Gb)**		**No**	**GERAN**	**GbIP**	**TSG**	
485	2312	Concept		No	GERAN		TSG	
486	2313	Changes to 08.16, 08.18		No	GERAN		TSG	
487	2314	**GERAN improvements 2**	**Rel4**	**No**	**GERAN**	**GEIMP2**	**TSG**	
488	2315	**Gb enhancements**		**No**	**GERAN**	**Gben**	**TSG**	
489	2316	NACC (network Assisted Cell Change)		**No**	**GERAN**		**TSG**	
490	2420	Concept		No	GERAN		TSG	
491	2317	Changes in 03.64		No	GERAN		TSG	
492	2318	Changes in 04.60		No	GERAN		TSG	
493	2319	Changes in 44.008		No	GERAN		TSG	

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494	2320	**GERAN improvements 3**	**Rel5**	**No**	**G GERAN**	**GEIMP3**	**TSG**
495	2321	**Evolution of the transport for A**		**No**	**G GERAN**	**EtA**	**TSG**
496	2322	Definition of a new A interface Transport Layer option based on		No	G GERAN		TSG
497	2323	Adaptation of the Layer 3 BSSMAP procedures as required		No	G GERAN		TSG
498	2324	**GERAN improvements 4**	**Rel4**	**No**	**G GERAN**		**TSG**
499	2325	**Gb enhancements 2**		**No**	**G GERAN**		**TSG**
500	2429	stage 2		No	G GERAN		
501	2421	Stage 3 (changes in 44.060)		**No**	**GERAN2**		**TSG**
502	2327	Definition of enhanced countdown procedure		No	GERAN2		TSG
503	2328	Definition of enhanced TBF release procedure		No	GERAN2		TSG
504	2329	Definition of USF=FREE type polling mechanism on PDCH		No	GERAN2		TSG
505	2330	**GERAN support for IP multimedia**	**Rel5**	**No**	**G GERAN**		**TSG**
506	2331	**GERAN Header adaptation**		**No**	**G GERAN**		**TSG**
507	2332	Definition of compression and removal modes for PDCP protocol		No	G GERAN		TSG
508	2333	Conceptual description in stage 2		No	G GERAN		TSG
509	2334	Necessary changes on stage 3 regarding header removal		No	G GERAN		TSG
510	2335	**GERAN Radio access bearer design for IP multimedi**		**No**	**G GERAN**		**TSG**
511	2422	**MuM control signalling for conversational multimedia services**		**No**	**G GERAN**		**TSG**
512	2431	Identification of requirements		No	G GERAN		TSG
513	2337	Necessary modifications due to SIP		No	G GERAN		TSG
514	2338	**Physical layer multiplexing**		**No**	**G GERAN**		**TSG**
515	2339	Stage 2		No	G GERAN		TSG
516	2432	Stage 3		No	G GERAN		TSG
517	2341	**GERAN MS Conformance test for support of IP multir**		**No**	**G GERAN**		**TSG**
518	2342	MS test		No	GERAN4		TSG
519	2343	**GERAN BTS Conformance test for support of IP multi**		**No**	**G GERAN**		**TSG**
520	2344	BTS test		No	GERAN3		TSG
521	2345	**Alignment of 3G functional split and Iu**	**Rel5**	**No**	**G GERAN**		**TSG**
522	2346	**GERAN user / control plane**		**No**	**G GERAN**		**TSG**

ID	Unique	Name	Relea	Splita	Resource	Acronym	Leve	Qtr 4, 2000	Qtr 1, 2001	Qtr 2, 2001	Qtr 3, 2001	Qtr 4, 2001
523	**2347**	Alignment with UMTS bearer concept	**No**		**G GERAN**		**TSG**					
524	2423	Stage 2	No		G GERAN		TSG					
525	2348	Adoption of the UTRAN PDCP	No		G GERAN		TSG					
526	2349	Development of RLC / MAC	No		G GERAN		TSG					
527	2350	Development of GERAN RR	No		G GERAN		TSG					
528	2351	Ciphering and integrity protection	No		G GERAN		TSG					
529	2352	Logical and physical channel realization TCH, PDTCH, contr	No		G GERAN		TSG					
530	2353	Use of stealing bits	No		G GERAN		TSG					
531	2354	Fast access	No		G GERAN		TSG					
532	2355	Fast power control	No		G GERAN		TSG					
533	**2424**	Physical layer alignment with UMTS bearer concept	**No**		**G GERAN**		**TSG**					
534	2356	PDTCH/TCH in 45.003	No		G GERAN		TSG					
535	2357	Control channels in 45.003	No		G GERAN		TSG					
536	2358	Receiver performance in 45.005 for PDTCH/TCH and contro	No		G GERAN		TSG					
537	**2359**	**Iu rg interface**	**No**		**G GERAN**		**TSG**					
538	**2425**	Inter BSS interface	**No**		**G GERAN**							
539	2360	Identification of requirements	No		G GERAN							
540	2361	Stage 2	No		G GERAN							
541	2362	Adoption of relevant parts from Iur	No		G GERAN							
542	2363	Complementation with GERAN specifics	No		G GERAN							
543	2364	New stage 3	No		G GERAN							
544	**2426**	Inter BSS-RNS interface	**No**		**G GERAN**							
545	2365	Identification of requirements	No		G GERAN							
546	2366	Stage 2	No		G GERAN							
547	2367	Adoption of relevant parts from Iur	No		G GERAN							
548	2368	Complementation with GERAN specifics	No		G GERAN							
549	2369	New stage 3	No		G GERAN							
550	**2370**	**Voice over GERAN PS and CS concept**	**No**		**G GERAN**							
551	2371	Architecture for A, Iu cs and Iu ps	No		G GERAN							

ID	Unique	Name	Relea	Splita	Resource	Acronym	Leve	Qtr 4, 2000 Oct Nov Dec	Qtr 1, 2001 Jan Feb Mar	Qtr 2, 2001 Apr May Jun	Qtr 3, 2001 Jul Aug Sep	Qtr 4, 2001 Oct Nov Dec
552	2372	Transcoder position/operation		No	G GERAN							
553	2373	Handover		No	G GERAN							
554	2374	RTP payload		No	G GERAN							
555	2375	FPC		No	G GERAN							
556	2376	LA		No	G GERAN							
557	**2377**	**GERAN Narrowband speech realization**		**No**	**G GERAN**							
558	**2427**	8-PSK NB HR		**No**	**G GERAN**							
559	2378	Channel coding in 45.003		No	G GERAN							
560	2379	Signallimg for A interface		No	G GERAN							
561	2380	Signallimg for Iu		No	G GERAN							
562	2381	Link adaptation in 45.009		No	G GERAN							
563	2382	Receiver performance in 45.005		No	G GERAN							
564	**2428**	8-PSK NB QR		**No**	**G GERAN**							
565	2383	Channel coding in 45.003		No	G GERAN							
566	2384	Signallimg for A interface		No	G GERAN							
567	2385	Signallimg for Iu		No	G GERAN							
568	2386	Link adaptation in 45.009		No	G GERAN							
569	2387	Receiver performance in 45.005		No	G GERAN							
570	**2388**	**GERAN MS Conformance test for GERAN interface ev**		**No**	**G GERAN**							
571	2389	MS test		No	G GERAN							
572	**2390**	**GERAN MS Conformance test for GERAN interface ev**		**No**	**G GERAN**							
573	2391	BSS test		No	G GERAN							
574	**2392**	**GERAN enhancements for streaming services 1**	**Rel5**	**No**	**G GERAN**							
575	**2393**	**GERAN enhancements for streaming services 1**		**No**	**G GERAN**							
576	2394	Concept		No	G GERAN							
577	2395	RLC protocol enhancement		No	G GERAN							
578	**2396**	**GERAN enhancements for streaming services 2**	**Rel5**	**No**	**G GERAN**							
579	**2397**	**GERAN enhancements for streaming services 2**		**No**	**G GERAN**							
580	2398	Usage of ECSD		No	G GERAN							

ID	Unique	Name	Relea	Splita	Resource	Acronym	Leve	Qtr 4, 2000 / Qtr 1, 2001 / Qtr 2, 2001 / Qtr 3, 2001 / Qtr 4, 2001
581	2399	Stage 2		No	G GERAN			
582	2400	Stage 3		No	G GERAN			
583	2401	RLC PDU formats		No	G GERAN			
584	2402	MAC header		No	G GERAN			
585	2403	**700 MHz spectrum support**	Rel4	No	G GERAN			
586	2404	**GERAN support for the 700 MHz band**		No	G GERAN			
587	2405	Signalling support		No	G GERAN			
588	2406	Physical layer definitions		No	G GERAN			
589	2407	Receiver performance and RF budget		No	G GERAN			
590	2408	**GERAN MS Conformance test for 700 MHz band**		No	G GERAN			
591	2409	MS test		No	G GERAN			
592	2410	**GERAN BTS Conformance test for 700 MHz band**		No	G GERAN			
593	2411	BTS test		No	G GERAN			
594	2412	**GERAN/UTRAN interface evolution 1**	Rel5	No	G GERAN			
595	2413	**Evolution of Iu ps**		No	G GERAN			
596	2414	Identification of GERAN requirements on Iu ps		No	G GERAN			
597	2415	Update of specifications		No	G GERAN			
598	2416	**GERAN/UTRAN interface evolution 2**	Rel5	No	G GERAN			
599	2417	**Evolution of Iu cs**		No	G GERAN			
600	2418	Identification of GERAN requirements on Iu cs		No	G GERAN			
601	2419	Update of specifications		No	G GERAN			

ID		Unique	Name	Relea	Splita	Resource	Acronym	Timeline
6		2	**Evolutions of the transport in the UTRAN**	NA	Yes	TSG RAN	ETRAN	
7		625	IP transport in the UTRAN	Rel4	No	TG RAN3	ETRAN-IPtrans	
8		12	QoS optimisation for AAL2 connections over Iub and	Rel4	No	TG RAN3	ETRAN-QoSAAL2	
9		1995	Transport bearer modification procedure on Iub, Iur,	Rel4	No	TG RAN3	ETRAN-MigrMod	
10		2257	Evolution of transport in UTRAN and GERAN	Rel4	No	TG RAN3	ETRANG	
15		4	**Evolutions of the transport in the CN**	NA	Yes	WG CN4	CNTRSP	
16		859	IP Transport of CN protocols (e.g., CAP, MAP)	Rel4	No	WG CN4	SS7IP	
24		1216	**Improvements of Radio Interface**	NA	Yes	TSG RAN	RInImp	
26		1471	Base station classification	Rel4	No	TG RAN4	RInImp-BSClass	
31		1507	Terminal Power Saving features	Rel4	No	TG RAN1	RInImp-TPS	
32		1509	UTRA repeater specification (master)	Rel4	No	TG RAN4	RInImp-REP	
33		1994	DSCH power control improvement in soft handover	Rel4	No	TG RAN1	RInImp-DSCHsho	
34		1996	UMTS 1800	Rel4	No	TG RAN4	RInImp-UMTS18	
47		1222	**Low Chip Rate TDD option**	Rel4	No	TG RAN1	LCRTDD	▽ Start Testing
52		1228	Iub/Iur protocol aspects	Rel4	No	TG RAN3	LCRTDD-IubIur	
61		9	**RAN improvements**	NA	Yes	TSG RAN	RANimp	▽ Start Testing
62		656	RRM optimization for Iur and Iub	Rel4	No	TG RAN3	RANimp-RRMopt	
63		655	Node B synchronisation for TDD	Rel4	No	TG RAN1	RANimp-NBsync	
65		2206	RAB support enhancement - ROHC part only	Rel4	No	TG RAN2	RANimp-RABSE	
128		1539	**Transparent End-to-End PS mobile streaming appl**	Rel4	No	WG SA4	PSTREAM	
129		1652	**Emergency call enhancements**	NA	Yes	WG CN1	EMC1	
137		1654	For CS based calls	Rel4	No	WG CN1	EMC1-CS	
143		1322	**Enable bearer independent CS architecture**	Rel4	No	WG SA2	CSSPLIT	▽ Start Testing
158		1333	**DEL?: CS multimedia services**	Rel4	No	WG SA2	CSM	▽ Start Testing
168		1340	**Facsimile**	Rel4	No	WG SA1	FAX	Start Testing
177		1517	**Global Text Telephony**	NA	Yes	WG SA2	GTT	▽ Start T
178		2240	Minimum solution	Rel4	No			
195		1526	**DEL?: Bearer Modification without pre-notification**	Rel4	No	WG SA1	BMWPN	▽ Start Testing
224		1637	**OSA enhancements**	NA	Yes	WG SA1	OSA1	

ID	ℹ	Unique	Name	Relea	Splita	Resource	Acronym	Qtr 3, 2000 / Qtr 4, 2000 / Qtr 1, 2001 / Qtr 2, 2001 / Qtr 3
226	📝	1424	**Interactions OSA - e-commerce**	Rel4	No	WG SA2	OSA1-ECOM	
260	🌐	**1445**	**MExE enhancements**	**NA**	**No**	**WG T2**	**MEXE**	
261	📝	1447	**MExE Security**	Rel4	No	WG SA3	MEXE-SEC	
264		1810	**MExE Rel4 Improvements and Investigations**	Rel4	No	WG T2	MEXE-ENHANC	
271	🌐	**1625**	**Wideband Telephony Service - AMR (Master)**	Rel4	No	WG SA4	AMRWB	▽ Start Testing
298	📝	**1541**	**Transcoder-Free Operation**	Rel4	No	WG CN4	TrFO	
309		**1631**	**Tandem Free aspects for 3G and between 2G and 3**	Rel4	No	WG SA4	TFO	
315	🌐	**1818**	**Multimedia Messaging**	Rel4	No	WG T2	MMS	
323	🌐	**1826**	**Terminal interfaces**	NA	Yes	WG T2	TI	▽ Start Testing ◆
324		**1827**	**AT commands enhancements**	Rel4	No	WG T2	TI-ATC	
328	📝	**1829**	**Wide Area Data Synchronisation**	Rel4	No	WG T2	TI-WADS	▽ Start Testing ◆
329	⊞	1830	Continues evolution of Synchronisation protocol	Rel4	No	WG T2	TI-SYNC-EVOL	
333	⊞	1832	**Terminal local model**	Rel4	No	WG T2	TLM	
334	🌐	**1536**	**Location Services enhancements**	NA	Yes	WG SA2	LCS1	
341	⊞	523	**LCS support in the CS domain**	Rel4	No	WG SA2	LCS1-CS	
342		**525**	**LCS support in the PS domain**	Rel4	No	WG SA2	LCS1-PS	
369	✓	2229	**CBS interactions**	Rel4	No	WG T2	LCS1-CBS	
370	⊞	1916	**MExE interactions**	Rel4	No	WG T2	LCS1-MEXE	
371	🌐	**1600**	**UE positioning**	Rel4	No	'SG RAN	LCS1-UEpos	
372	✓	1601	Iub/Iur interfaces for methods Rel 99	Rel4	No	/G RAN3	LCS1-UEpos-IubIur	
373	✓	1602	UE positioning enhancements - IPDL for TDD	Rel4	No	/G RAN2	LCS1-UEpos-enh	
381	📝	**1542**	**Ensure reliable QoS for PS domain**	Rel4	No	WG SA2	QoSPS	
410	📝	**1557**	**DEL?: QoS for CS services at HOs (inter-MSC and**	Rel4	No	WG SA2	QoSCS	
412	🌐	**1560**	**UICC/(U)SIM enhancements and interworking**	NA	Yes	WG T3	UICC1	
414	⊞	1562	**DELETED: UICC/USIM database specification**	Rel4	No	WG T3	UICC1-DataB	
415	⊞	1799	**Common PCN Handset Specification (CPHS)**	Rel4	No	WG T3	UICC1-CPHS	
417	🌐	**1800**	**(U)SIM toolkit enhancements**	NA	Yes	WG T3	USAT1	
418	⊞	1566	**Enhancements to (U)SIM toolkit secure messaging**	Rel4	No	WG T3	USAT1-SM	
419	⊞	1801	**Protocol Standardisation of a SIM Toolkit Interpreter**	Rel4	No	WG T3	USAT1-Interpr	

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								Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul
420		2034	**USAT local link**	Rel4	No	WG T3	USAT1-LocLnk													
421		1802	**UICC API**	NA	Yes	WG T3	**USAT1-API**													
422		2029	Java API	Rel4	No	WG T3	**USAT1-API-JAVA**													
428		1571	**Security enhancements**	NA	No	WG SA3	**SEC1**													
429		2099	**UE triggered authentication during connections**	Rel4	No	WG SA3	**SEC1-UETADC**													
431		1587	**Evolution of GSM CS algorithms (e.g. A5/3 developm**	Rel4	No	WG SA3	SEC1-CSALGO1													
432		1588	**Evolution of GSM PS algorithms (e.g. GEA 2 deploym**	Rel4	No	WG SA3	**SEC1-PSALGO1**													
447		1583	**MAP application layer security**	Rel4	No	WG SA3	**SEC1-MAPAL**													
451		1594	**Visibility and Configurability of security**	Rel4	No	WG SA3	SEC1-VCS													
463		1142	**Charging and OAM&P (Master)**	Rel4	No	WG SA5	**OAM**													
470		2062	**Subscription Management**	Rel4	No	WG SA5	SM													
471		2071	**UTRAN Operations and Maintenance procedures**	Rel4	No	WG SA5	UOAM													
472		1993	**small Technical Enhancements and Improvements**	Rel4	No	Generic	TEI4													
473		2230	**Advanced Speech Call Items enhancements_REL-**	Rel4	No	WG CN1	ASCI													
483		2310	**GERAN improvements 1**	Rel4	No	G GERAN	GEIMP1													
487		2314	**GERAN improvements 2**	Rel4	No	G GERAN	GEIMP2													
498		2324	**GERAN improvements 4**	Rel4	No	G GERAN														
585		2403	**700 MHz spectrum support**	Rel4	No	G GERAN														

ID	Unique	Name	Relea	Splita	Resource	Acronym	Leve	Timeline (2001)
24	1216	**Improvements of Radio Interface**	NA	Yes	TSG RAN	RInImp	TSG	
25	1470	**Improvement of inter-frequency and inter-system mo**	Rel5	No	WG RAN1	RInImp-IfIsM	TSG	
29	1217	**Hybrid ARQ II/III**	Rel5	No	WG RAN2	RInImp-HARQ	TSG	
30	1218	**Improved usage of downlink resource in FDD for CCT**	Rel5	No	WG RAN2	RInImp-CCTrCH	TSG	
61	9	**RAN improvements**	NA	Yes	TSG RAN	RANimp	TSG	▽ Start Testing
64	624	**RAB support enhancement - no ROHC**	Rel5	No	WG RAN2	RANimp-RABSE	TSG	
66	1680	**Header compression removal/stripping in the RAN**	Rel5	No	TSG RAN			
67	1686	**Unequal error protection in PS domain in the RAN**	Rel5	No	TSG RAN			
73	1273	**Provisioning of IP-based multimedia services**	Rel5	No	WG SA1	IMS	TSG	‖ MLST: Stage 3 for basic calls ▽ Start
129	1652	**Emergency call enhancements**	NA	Yes	WG CN1	EMC1	WG	
130	1653	**For IP & PS based calls**	Rel5	No	WG CN1	EMC1-PS	TSG	
177	1517	**Global Text Telephony**	NA	Yes	WG SA2	GTT	TSG	▽ Start Testing
184	2239	**Improvements of GTT**	Rel5	No				▽ Start Testing
207	1367	**VHE enhancements**	NA	Yes	WG SA1	VHE1	TSG	
208	1368	**Detailed definition of the VHE user profile**	Rel5	No	WG SA2	VHE1-USERP	WG	
212	2104	**Extensions to existing (and possibly new) toolkits**	Rel5	Yes	WG SA2	VHE1-TLKT1	WG	
216	2108	**Interaction between toolkits to enable IP multimedia**	Rel5	Yes	WG SA2	VHE1-IMS	WG	
220	2112	**Transparent roaming for services**	Rel5	Yes	WG SA2	VHE1-RMG	WG	
224	1637	**OSA enhancements**	NA	Yes	WG SA1	OSA1	WG	
229	1429	**OSA APIs for MuMa CC**	Rel5	No	WG SA2	OSA1-CSCF		
232	1419	**OSA security**	Rel5	No	WG SA3	OSA1-SEC	TSG	
239	1433	**Retrieval of Terminal capabilities**	Rel5	No	WG SA2	OSA1-TC		
248	1638	**CAMEL phase 4**	Rel5	No	WG SA1	CAMEL4		
323	1826	**Terminal interfaces**	NA	Yes	WG T2	TI		▽ Start Testing
328	1829	**Wide Area Data Synchronisation**	Rel4	No	WG T2	TI-WADS		▽ Start Testing
330	1831	**vObjects and Other Constructs for Use in Data Synchronisation**	Rel5	No	WG T2	TI-SYNC-VOBJ	TSG	
334	1536	**Location Services enhancements**	NA	Yes	WG SA2	LCS1	TSG	
335	1171	**Event based and Periodic LCS**	Rel5	No	WG SA1	LCS1-EBP		
371	1600	**UE positioning**	Rel4	No	TSG RAN	LCS1-UEpos	TSG	

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374	2457	UE positioning enhancements - other methods	Rel5	No	/G RAN2	LCS1-UEpos-enh	WG					
378	2125	**Open LCS interfaces in UMTS and GERAN**	**Rel5**	No	**WG SA2**	**LCS-INTF**	**TSG**					
417	1800	**(U)SIM toolkit enhancements**	**NA**	**Yes**	**WG T3**	**USAT1**						
421	1802	**UICC API**	**NA**	**Yes**	**WG T3**	**USAT1-API**						
424	2031	Multos API	**Rel5**	**No**	**WG T3**	**USAT1-API-MULT**	**TSG**					
428	1571	**Security enhancements**	**NA**	No	**WG SA3**	**SEC1**	**TSG**					
436	1572	**Protection for user plane data**	**Rel5**	**Yes**	**WG SA3**	**SEC1-PUPD**	**TSG**					
439	1576	**Network domain security**		**Yes**	**WG SA3**	**SEC1-NDS**	**TSG**					
440	1577	Control plane protection in core network (e.g., GTP, CAP, MAP/IF	**Rel5**	**No**	**WG SA3**	**SEC1-NDS**						
443	1580	User plane protection in core network (e.g., provided by IPsec)	**Rel5**	**No**	**WG SA3**	**SEC1-NDS**						
452	1595	**FIGS**	Rel5	No	WG SA3	SEC1-FIGS						
462	1365	**Support of Push Services**	Rel5	No	WG SA2	PUSH	TSG					
476	2243	**Intra Domain Connection of RAN Nodes to Multiple**	Rel5	No	**WG SA2**	**MULCN**	**TSG**					
494	2320	**GERAN improvements 3**	**Rel5**	No	**; GERAN**	**GEIMP3**	**TSG**					
505	2330	**GERAN support for IP multimedia**	**Rel5**	No	**; GERAN**		**TSG**					
521	2345	**Alignment of 3G functional split and Iu**	**Rel5**	No	**; GERAN**		**TSG**					
574	2392	**GERAN enhancements for streaming services 1**	**Rel5**	No	**; GERAN**							
578	2396	**GERAN enhancements for streaming services 2**	**Rel5**	No	**; GERAN**							
594	2412	**GERAN/UTRAN interface evolution 1**	**Rel5**	No	**; GERAN**							
598	2416	**GERAN/UTRAN interface evolution 2**	**Rel5**	No	**; GERAN**							