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**Title:** Overview of 3GPP Release 4 (draft)  
**Document for:** Information  
**Agenda Item:** 12

## **Overview of 3GPP Release 4**

### **Summary of all Release 4 Features**

**v.0.3**

## Credits

This document has been produced by the ETSI MCC department, headed by Adrian Scrase and then by John Meredith. The technical experts of MCC who contributed to this document are namely [TO BE UPDATED!!] *Adrian Zoicas, Alain Sultan, Andrijana Jurisic, Cesar Gutierrez, Claude Arzelier (coordinator of the RAN aspects), David Boswarthick, Friedhelm Rodermund, Juergen Krause, Kimmo Kymalainen, Michael Clayton, Paolo Usai, Per Johan Jorgensen and Maurice Pope*. The work was coordinated by Alain Sultan, who wishes to acknowledge all contributors for the high quality of their inputs.

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# 1 Introduction

## 1.1 Scope

This document contains a high-level description of the Release 4 Features.

A Feature is defined as 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.

Features are as independent as possible from each other, and relationships between features (if any) are clarified here.

Some features correspond to a grouping of different independent items impacting the same parts of the system (e.g. "Release 4 RAN improvements"). These groupings are performed to artificially limit the total number of features for each Release. For these features, a summary of each item is provided.

For each feature (or independent item), references are given to guide the reader on how to deepen the subject: the Work Item Description (WID) as well as the list of impacted specifications are provided in the beginning of the section describing the feature. Only the list of impacted specifications is provided here. The exact impact on a given specification due to a given feature is described in the Change Request (CR) list, which can be found at the end of the specification, or the CR database provides the full list of CRs for all 3GPP specifications.

The second part of this introduction contains global references, and provides links towards the 3GPP Specifications, the temporary documents (tdocs), the Work Plan, the Work Item Descriptions (WIDs) and the CR database.

The main body of this document is structured according to the 3GPP Release 4 Features: each chapter corresponds to one Release 4 Feature.

## 1.2 References

### 1.2.1 Specifications

Global information on the Specifications (also called "specs") can be found at:

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

The latest versions of all 3GPP specifications, containing the most recent corrections and additions, are available at:

<http://www.3gpp.org/ftp/Specs/latest/>

For specific purposes, older versions might be needed. These versions are available at:

<http://www.3gpp.org/ftp/Specs/Archive/>

where the specifications are sorted by series and then by folders containing all the available versions of a given spec (one folder per spec), for all Releases.

## 1.3 Tdocs

The Temporary Documents (tdocs) are mainly the original papers written by the 3GPP Members, and are the inputs for elaborating the specs. They are available (sorted by 3GPP technical groups (Technical Specification Groups (TSGs) and Working Groups (WGs)) at:

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

starting with 'tsg...'

### 1.3.1 Work Plan, Work Items and Study Items

Work Item Description (“WID”) (also called WI Sheet) and Study Item (also called "Feasibility Studies") are forms which initial version provides the target to be reached before starting the technical work. Potential subsequent versions narrow the target and foreseen completion date according the actual progress. They are stored in:

[http://www.3gpp.org/ftp/Information/WI\\_sheets/](http://www.3gpp.org/ftp/Information/WI_sheets/)

The 3GPP Work Plan is a living document, updated roughly each month, which contains the full list of Work Items and Study Items, as well as summary information for each WI, as: the WG in charge of it, its starting date and (foreseen or actual) completion date, the actual progress, etc. The Work Plan is available at:

[http://www.3gpp.org/ftp/Information/WORK\\_PLAN/](http://www.3gpp.org/ftp/Information/WORK_PLAN/)

### 1.3.2 Change Request database

A specification is originally drafted and maintained by a rapporteur, who compiles the contents from discussions in the WGs and TSGs. When it is considered to be 80% complete, it is brought under a so-called "change control" process. After this, changes to the specification can only be made using Change Requests that are usually agreed by consensus in the Working Group responsible for the specification, but then formally approved by the relevant Technical Specification Group<sup>1</sup>.

The Change Request database contains all available information on Change Requests, including a Work Item code, a Change Request number that is unique within the specification (different versions are possible, but only one can ever be approved), the status of each Change Request and references to relevant temporary document numbers and meetings. This database is available in:

[http://www.3gpp.org/ftp/Information/Databases/Change\\_Request/](http://www.3gpp.org/ftp/Information/Databases/Change_Request/)

Further information on CR is available at:

<http://www.3gpp.org/specs/CR.htm>

## 2 New Features

### 2.1 UMTS and GSM

#### 2.1.1 Transcoder-Free Operation

<b>Acronym:</b>	TrFO
<b>UID:</b>	1541
<b>Main responsibility:</b>	N4

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<sup>1</sup> For a complete description on the handling of Specs and CRs at 3GPP, see the presentation in: <http://www.3gpp.org/ftp/Information/presentations/>

### References for WI " Transcoder-Free Operation "

Document	Title/Contents
SP-00xxxx	WI Sheet
<b>Impacted Specifications</b>	
TS 2x.xxx	Example
<b>New Dedicated Specifications</b>	
	None

To be written by Kimmo.

Indicative contact: tamurato@elsf.ncos.nec.co.jp

Contains:

112	OoBTC solution	N4	TRFO- OOBTC	N4- 000531	
905	Speech Transcoder: Location and Control at the UMTS Core Network Border	S2	TRFO- STLC	S2-99352	WI description and Tdoc S2-99352...

## 2.1.2 Transparent End-to-End PS mobile streaming application

**Acronym:** PSTREAM

**UID:** 1539

**Main responsibility:** S4

### References for WI " Transparent End-to-End PS mobile streaming application "

Document	Title/Contents
SP-000345	WI Sheet
<b>Impacted Specifications</b>	
TS 2x.xxx	Example
<b>New Dedicated Specifications</b>	
	None

To be written by Paolo.

## 2.1.3 Tandem Free aspects for 3G and between 2G and 3G systems

**Acronym:** TFO

**UID:** 1631

**Main responsibility:** S4

### References for WI " Tandem Free aspects for 3G and between 2G and 3G systems "

Document	Title/Contents
SP-00xxxx	WI Sheet
<b>Impacted Specifications</b>	
TS 2x.xxx	Example
<b>New Dedicated Specifications</b>	
	None

To be written by Paolo.

Contains:

1632	Tandem Free AMR	TFO-AMR
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## 2.1.4 Enable bearer independent CS architecture

**Acronym:** CSSPLIT  
**UID:** 1322  
**Main responsibility:** CN4

**References for WI " Enable bearer independent CS architecture "**

Document	Title/Contents
SP-000288	WI Sheet
<b>Impacted Specifications</b>	
TS 2x.xxx	Example
<b>New Dedicated Specifications</b>	
	None

To be written by Kimmo.

Indicative contacts: Alexander Milinski, Siemens; Heinz-Peter.Keutmann@eed.ericsson.se

1323	Enable bearer-independent call control	N4	N4-000512
1331	Lawful interception	S3	

## 2.2 UMTS-only

### 2.2.1 Low Chip Rate TDD option

**Acronym:** LCRTDD  
**UID:** 1222  
**Main responsibility:** RAN1

**References for WI " Low Chip Rate TDD option "**

Document	Title/Contents
RAN_Wis	WI Sheet
<b>Impacted Specifications</b>	
TS 2x.xxx	Example
<b>New Dedicated Specifications</b>	
	None

To be written by Tsukasa.

Indicative contacts: G. Yang, CWTS; Y. Liu, CWTS; D. Zhang, CWTS

Contains:

1223	Physical layer	R1	LCRTDD-Phys	RAN_Wis	"G. Yang, CWTS"
1224	Layer 2 and layer 3 protocol aspects	R2	LCRTDD-L23	RAN_Wis	"Y. Liu, CWTS"
1225	"RF radio transmission/reception, system performance requirements and conformance testing"	R4	LCRTDD-RF	RAN_Wis	"D. Zhang, CWTS"
1227	UE radio access capability	R2	LCRTDD-UErac	RAN_Wis	"Y. Liu, CWTS"
1228	Iub/Iur protocol aspects	R3	LCRTDD-IubIur	RAN_Wis	"Y. Liu, CWTS"
2262	Low chiprate TDD interworking with GERAN			GP-000432	

## 2.3 GSM-only

### 2.3.1 700 MHz spectrum support

**Acronym:** 700SS  
**UID:** 2403  
**Main responsibility:** GP

#### References for WI " 700 MHz spectrum support "

Document	Title/Contents
GP-000449	WI Sheet
<b>Impacted Specifications</b>	
TS 2x.xxx	Example
<b>New Dedicated Specifications</b>	
	None

To be written by Paolo.

Contains:

2404	GERAN support for the 700 MHz band	
2408	GERAN MS Conformance test for 700 MHz band	GP-000451
2410	GERAN BTS Conformance test for 700 MHz band	GP-000452

## 3 Improvements of pre-Release 4 features

### 3.1 UMTS and GSM

#### 3.1.1 Multimedia Messaging Service

**Acronym:** MMS  
**UID:** 1818  
**Main responsibility:** T2

#### References for WI " Multimedia Messaging Service "

Document	Title/Contents
TP-000078	WI Sheet
<b>Impacted Specifications</b>	
TS 2x.xxx	Example
<b>New Dedicated Specifications</b>	
	None

To be written by Friedhelm.

Indicative contact: Josef.Laumen@SAL.SIEMENS.DE

Contains:

136	Definition of service requirements
1819	Review of definition of service requirements
1820	Technical Realisation



### 3.1.2 MExE enhancements Rel-4

**Acronym:** MExE  
**UID:** 1445  
**Main responsibility:** T2

**References for WI " MExE enhancements Rel-4 "**

Document	Title/Contents
TP-030052	WI Sheet
<b>Impacted Specifications</b>	
TS 2x.xxx	Example
<b>New Dedicated Specifications</b>	
	None

To be written by Friedhelm.  
 Indicative contacts: lars.brenk@tppcom.com  
 Contains:

1445	<b>MExE enhancements Rel-4</b>	T2	MEXE	TP-030052
1447	MExE Security Analysis Activity	S3	MEXE-SEC	SP-010327
1810	MExE Rel4 Improvements and Investigations	T2	MEXE-ENHANC	

### 3.1.3 Advanced Speech Call Items enhancements\_REL-4

**Acronym:** ASCI  
**UID:** 2230  
**Main responsibility:** CN1

**References for WI " Advanced Speech Call Items enhancements\_REL-4 "**

Document	Title/Contents
NP-000730	WI Sheet
<b>Impacted Specifications</b>	
TS 2x.xxx	Example
<b>New Dedicated Specifications</b>	
	None

To be written by Per.  
 Indicative contact: sonia.garapaty@nortelnetworks.com

### 3.1.4 Operator Determined Barring for Packet Oriented Services

**Acronym:** ODB  
**UID:** 2463  
**Main responsibility:** NP

### References for WI " Operator Determined Barring for Packet Oriented Services "

Document	Title/Contents
NP-010089	WI Sheet
<b>Impacted Specifications</b>	
TS 2x.xxx	Example
<b>New Dedicated Specifications</b>	
	None

To be written by David.

Indicative contact: tamurato@nsf.ncos.nec.co.jp

### 3.1.5 UMTS QoS Architecture for PS Domain

**Acronym:** QoSPS  
**UID:** 2546  
**Main responsibility:** S2

#### References for WI " UMTS QoS Architecture for PS Domain "

Document	Title/Contents
SP-010342	WI Sheet
<b>Impacted Specifications</b>	
TS 2x.xxx	Example
<b>New Dedicated Specifications</b>	
	None

To be written by Alain.

Indicative contacts: Ina.widegren@era.ericsson.se (S2); A. Molander, Ericsson (R3); A. Lansisalmi, Nokia (R3); Albert.Yuhan@voicestream.com (S5); Michael.Truss@MOTOROLA.COM (S5)

Contains:

2548	Architecture	S2		
2550	Charging and OAM&P for QoS Management	S5	QoSPS-OAM	SP-010461
1681	RAB Quality of Service (re)Negotiation over lu	R3	QoSPS-MAPEND-RABQoS	RAN_Wis
1553	GERAN QoS Aspects - Handovers: maintenance of real-time QoS while moving between cells in the PLMN including inter-SGSN and SRNS relocation or possibly other mechanisms	GP	GERQoS	GP-010431
50010	GERAN MS Conformance test for inter-system and intra-system Packet data real-time Handover	"G4,R3"	GERQoS-Mstest	GP-012287
1685	PS-domain handover for real-time services	R3	QoSPS-PSdoRTS	RAN_Wis
2554	RAB QoS Renegotiation at Relocation	R3		

### 3.1.6 Rel-4 Evolutions of the transport in the CN

**Acronym:** CNTRSP  
**UID:** 400004  
**Main responsibility:** CN4

### References for WI " Rel-4 Evolutions of the transport in the CN "

Document	Title/Contents
not needed	WI Sheet
<b>Impacted Specifications</b>	
TS 2x.xxx	Example
<b>New Dedicated Specifications</b>	
	None

To be written by Kimmo.

Indicative contact: Juan-Antonio.Ibanez@eed.ericsson.se (S2)

859	"IP Transport of CN protocols (e.g., CAP, MAP)"	N4	
1513	FS on Transport and control separation in the PS CN domain	S2	SP-000293

### 3.1.7 Rel-4 Emergency call enhancements

**Acronym:** EMC1  
**UID:** 401652  
**Main responsibility:** N1

#### References for WI " Rel-4 Emergency call enhancements "

Document	Title/Contents
SP-00xxxx	WI Sheet
<b>Impacted Specifications</b>	
TS 2x.xxx	Example
<b>New Dedicated Specifications</b>	
	None

To be written by Per.

Indicative contact: Mr Rouzbeh, Ericsson (EUSFARO@am1.ericsson.se)

Contains:

1654	For CS based calls	EMC1-CS	NP-010136
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### 3.1.8 Rel-4 Terminal interfaces

**Acronym:** TI  
**UID:** 401826  
**Main responsibility:** T2

#### References for WI " Rel-4 Terminal interfaces "

Document	Title/Contents
not needed	WI Sheet
<b>Impacted Specifications</b>	
TS 2x.xxx	Example
<b>New Dedicated Specifications</b>	
	None

To be written by Friedhelm.

Indicative contact: Olga.Tome@ECS.ERICSSON.SE

Contains:

1827	AT commands enhancements	TI-ATC	
1829	Wide Area Data Synchronisation	TI-WADS	

1832	Terminal local model	TLM	TP-000080
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### 3.1.9 Rel-4 Location Services enhancements

**Acronym:** LCS1  
**UID:** 401536  
**Main responsibility:** S2

#### References for WI " Rel-4 Location Services enhancements "

Document	Title/Contents
SP-010518	WI Sheet
<b>Impacted Specifications</b>	
TS 2x.xxx	Example
<b>New Dedicated Specifications</b>	
	None

To be written by Alain.

Indicative contacts: Jan Kall, Nokia (S2); Yun-Chao Hu, Ericsson (R3); M. Beckmann, Siemens (R2)

2229	CBS interactions	T2	LCS1-CBS
523	LCS support in the CS domain	S2	LCS1-CS
525	LCS support in the PS domain	S2	LCS1-PS
401600	UE positioning Rel-4	RP	LCS1-UEpos
1601	lub/lur interfaces for methods Rel 99	R3	LCS1-UEpos-lublur
1602	UE positioning enhancements - IPDL for TDD	R2	LCS1-UEpos-enh

### 3.1.10 Rel-4 UICC/(U)SIM enhancements and interworking

**Acronym:** UICC1  
**UID:** 401560  
**Main responsibility:** T3

#### References for WI " Rel-4 UICC/(U)SIM enhancements and interworking "

Document	Title/Contents
not needed	WI Sheet
<b>Impacted Specifications</b>	
TS 2x.xxx	Example
<b>New Dedicated Specifications</b>	
	None

To be written by Andrijana.

Contains:

1799	Common PCN Handset Specification (CPTS)	UICC1-CPTS	TP-000116
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### 3.1.11 Rel-4 (U)SIM toolkit enhancements

**Acronym:** USAT1  
**UID:** 401800  
**Main responsibility:** T3

**References for WI " Rel-4 (U)SIM toolkit enhancements "**

Document	Title/Contents
not needed	WI Sheet
<b>Impacted Specifications</b>	
TS 2x.xxx	Example
<b>New Dedicated Specifications</b>	
	None

To be written by Andrijana.  
 Indicative contact: Jean-Francois Rubon (Gemplus)  
 Contains:

2034	USAT local link	USAT1- LocLnk	TP- 000155
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### 3.1.12 Rel-4 Security enhancements

**Acronym:** SEC1  
**UID:** 401571  
**Main responsibility:** SA4

**References for WI " Rel-4 Security enhancements "**

Document	Title/Contents
SP-000421	WI Sheet
<b>Impacted Specifications</b>	
TS 2x.xxx	Example
<b>New Dedicated Specifications</b>	
	None

To be written by Maurice.  
 Indicative contact: Peter.Howard@vodafone.com  
 Contains:

1587	Evolution of GSM CS algorithms (e.g. A5/3 development and deployment)	S3	SEC1- CSALGO1	SP- 000306	Algorithm development go-ahead at SA3#21. Scheduled for completion in August 2002?. Approved SA#17. DELETE ENTRY FROM REL-4?
1588	Evolution of GSM PS algorithms (e.g. GEA 2 deployment)	S3	SEC1- PSALGO1	SP- 000307	A5/3 development will consider new GEA algorithm based on Kasumi.
401583	MAP application layer security	S3	SEC1- MAPAL		"TO DELETE: REPLACED BY NDS-MAP and NDS-IP. TO BE DELETED, but replacement NDS-MAP was missing. Completed Auto Key Management -> Rel-6"

## 3.2 UMTS-only

### 3.2.1 Rel-4 Evolutions of the transport in the UTRAN

**Acronym:** ETRAN  
**UID:** 400002  
**Main responsibility:** RAN

### References for WI " Rel-4 Evolutions of the transport in the UTRAN "

Document	Title/Contents
RAN Wis	WI Sheet
<b>Impacted Specifications</b>	
TS 2x.xxx	Example
<b>New Dedicated Specifications</b>	
	None

To be written by Juergen.

Indicative contacts: Francois Courau; T. Yoshimura, Japan Telecom

Contains:

12	QoS optimisation for AAL2 connections over Iub and Iur interfaces	R3	ETRAN-QoSAAL2
1995	"Transport bearer modification procedure on Iub, Iur, and Iu"	R3	ETRAN-MigrMod

### 3.2.2 Rel-4 Improvements of Radio Interface

**Acronym:** RInImp

**UID:** 401216

**Main responsibility:** RAN1

#### References for WI " Rel-4 Improvements of Radio Interface "

Document	Title/Contents
RAN Wis	WI Sheet
<b>Impacted Specifications</b>	
TS 2x.xxx	Example
<b>New Dedicated Specifications</b>	
	None

To be written by Tsukasa.

Indicative contacts: T. Kummetz, Mikom; Alf Ahlström, Allgon; Howard Benn, Motorola(R4); A. Toskala, Nokia (R1); A. Ghosh, Motorola; J. Kwak, GBT (R2)

Contains:

1509	UTRA repeater specification (master)	R4	RInImp-REP
1994	DSCH power control improvement in soft handover	R1	RInImp-DSCHsho
1996	UMTS 1800	R4	RInImp-UMTS18
2467	UMTS 1900	R4	RInImp-UMTS19
1219	FS on High Speed downlink packet access	R2	RInImp-HSDPA
1510	FS on improved common DL channel for Cell-FACH state	R2	RInImp-DLFCACH

### 3.2.3 Rel-4 RAN improvements

**Acronym:** RANimp

**UID:** 400009

**Main responsibility:** RAN

### References for WI " Rel-4 RAN improvements "

Document	Title/Contents
RAN Wis	WI Sheet
<b>Impacted Specifications</b>	
TS 2x.xxx	Example
<b>New Dedicated Specifications</b>	
	None

To be written by Cesar.

Indicative contacts: S. Oestreich, Siemens (R1); M. Israelsson, A. Krishnarajah, Ericsson (R2)

Contains:

655	Node B synchronisation for TDD	R1	RANimp-NBsync
2206	RAB support enhancement for Rel-4	R2	RANimp-RABSE

## 3.3 GSM-only

### 3.3.1 GERAN improvements 1 (Gb over IP)

**Acronym:** GEIMP1  
**UID:** 2310  
**Main responsibility:** GP

#### References for WI " GERAN improvements 1 (Gb over IP) "

Document	Title/Contents
GP-000433	WI Sheet
<b>Impacted Specifications</b>	
TS 2x.xxx	Example
<b>New Dedicated Specifications</b>	
	None

To be written by Paolo.

Contains:

2311	Gb over IP (Ip-fication of Gb)	GbIP	GP-000434
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### 3.3.2 GERAN improvements 2 (NACC)

**Acronym:** GEIMP2  
**UID:** 2314  
**Main responsibility:** GP

#### References for WI " GERAN improvements 2 (NACC) "

Document	Title/Contents
GP-012812	WI Sheet
<b>Impacted Specifications</b>	
TS 2x.xxx	Example
<b>New Dedicated Specifications</b>	
	None

To be written by Paolo.

Contains:

2315	Gb enhancements	Gben	GP-
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			000436
2316	Intra BSC NACC (Network Assisted Cell Change)		

### 3.3.3 GERAN improvements 4 (Delayed TBF)

**Acronym:** GEIMP4  
**UID:** 2324  
**Main responsibility:** GP

#### References for WI " GERAN improvements 4 (Delayed TBF) "

Document	Title/Contents
GP-010363	WI Sheet
<b>Impacted Specifications</b>	
TS 2x.xxx	Example
<b>New Dedicated Specifications</b>	
	None

To be written by Paolo.

Contains:

2325	Gb enhancements 2	GEIMP4- Gben2	GP- 010363
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## 4 Other aspects

### 4.1 Rel-4 Charging and OAM&P

**Acronym:** OAM  
**UID:** 401142  
**Main responsibility:** SA5

#### References for WI " Rel-4 Charging and OAM&P "

Document	Title/Contents
SP-010461	WI Sheet
<b>Impacted Specifications</b>	
TS 2x.xxx	Example
<b>New Dedicated Specifications</b>	
	None

To be written by Adrian.

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bert.boden@d2mannesmann.de

Contains:

2089	"Rel4 Principles, high level Requirements and Architecture"	OAM- AR/PR	SP- 010461	"Michael TRUSS (Motorola), Tommy BERGGREN (Telia AB)"
2088	Rel4 Performance Management		SP-	Karl-Heinz



			010238	NENNER (T-Mobile)
2081	Fault Management		SP-000524	Patrick JURÉ (Lucent Technologies)
2082	Configuration Management	OAM-CM	SP-000524	Thomas TOVINGER (Ericsson)
2083	Rel4 Charging Management	OAM-CH	SP-000524	Karl-Heinz NENNER (T-Mobile)
2071	UTRAN Operations and Maintenance procedures	UOAM	SP-000524	Bert Boden (Mannesmann Mobilfunk)

## 4.2 Miscellaneous UE Conformance Testing Activities

**Acronym:** MISTST1  
**UID:** 1861  
**Main responsibility:** T1

### References for WI " Miscellaneous UE Conformance Testing Activities "

Document	Title/Contents
not needed	WI Sheet
<b>Impacted Specifications</b>	
TS 2x.xxx	Example
<b>New Dedicated Specifications</b>	
	None

To be written by Lidia

Lev	UID	Title	Rel	WG	Acronym	WID	Rapporteur	e-mail
1	1861	<b>Miscellaneous UE Conformance Testing Activities</b>	NA	T1	MISTST1	not needed		

## 4.3 Small Technical Enhancements and Improvements for Rel4

**Acronym:** TEI4  
**UID:** 1993  
**Main responsibility:** Generic

### References for WI " small Technical Enhancements and Improvements for Rel4 "

Document	Title/Contents
SP-00xxxx	WI Sheet
<b>Impacted Specifications</b>	
TS 2x.xxx	Example
<b>New Dedicated Specifications</b>	
	None

To be written by Alain

## 4.4 Global Text Telephony

**Acronym:** GTT  
**UID:** 1517

**Main responsibility:** S2

<b>References for WI " Global Text Telephony "</b>	
<b>Document</b>	<b>Title/Contents</b>
SP-010340	WI Sheet
<b>Impacted Specifications</b>	
TS 2x.xxx	Example
<b>New Dedicated Specifications</b>	
	None

To be written by Alain.

## 4.5 Facsimile

**Acronym:** FAX-RT

**UID:** 1340

**Main responsibility:**

<b>References for WI " Facsimile "</b>	
<b>Document</b>	<b>Title/Contents</b>
SP-000169	WI Sheet
<b>Impacted Specifications</b>	
TS 2x.xxx	Example
<b>New Dedicated Specifications</b>	
	None

**Contains:**

1341	Real Time Fax	"postponed from R99 to R00, SP-000169"
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