3GPP TSG SA WG3 Security — S3#12 **S3-000278**

11-14 April, 2000, Stockholm, Sweden

Source: **TSG SA WG2** Intergroup co-ordination chair persons ad-hoc meeting.
Title: **Proposal for the Release 2000 Features, Building Blocks and Work Tasks v.0.9**

Introduction

This document is an initial attempt to describe the *work items* of R00 in terms of their function as *feature, building block* and *work task.* This top-down structure is established to ease monitoring the work progress for R00, as detailed in companion documents. **It will work only if all the Working Groups actively co-operate, i.e. performing the actions mentioned below.**
This document will be presented in v.0.9 or v.0.10 to all the 3GPP Working Groups.
The purpose of the presentations to all the WGs is to collect comments so that a stable version can be reached on **April, 20th**.

Background

A *work item* is a generic term to refer to a given *feature, building block* or *work task*, i.e. all the individual elements of the table below should soon become work items (some work tasks may however be grouped within a single WI).
A full description of the term *work item* can be found in the 3GPP Working Procedures, as detailed in the annex (the complete 3GPP Working Procedures can be found at http://www.3gpp.org/About_3GPP/3gpp_wp.zip).

What is asked to the WGs

- **To review the attached proposal**
- **To make comments as explained in the next paragraph**
- **To create for the next TSGs plenaries the corresponding work items -if agreeing with the proposal- specifying in particular the foreseen completion date**

Rules for WGs comments

To share the work load within S2 for the monitoring of the work progress, 12 IGCs (Inter-Group Co-ordination ad-hocs) have been created. Each IGC monitors a set of Features, as shown in the table below. Comments on a feature (or on its related building blocks and work tasks) should be made directly to the corresponding IGC convenor. Also it will be highly appreciated to make him aware of all proposed/approved new WI. The e-mail addresses of all the IGC convenors are given below. If the originator of the comment does not know who to contact, he/she should send his comment to Alain Sultan, who will forward it to the appropriate IGC convenor(s).
Comments should be made before Monday, 17th of April, noon (CET), except if another deadline is mentioned during the presentation.
Comments should be made by the whole WG, so e-mail discussions within the WGs are highly recommended to meet the tight calendar.
Note that the IGCs have no decisional power. They will try their best to accommodate the different proposals from all the WGs. In case of inconsistencies, they will refer to the TSG plenaries which should take the appropriate actions.

Foreseen output

With the help of all the WGs, a stable proposal is hoped to be reached on April, 20th. This Work Plan will enable to lead in a consistent way the activities of the full 3GPP community for the Release 2000.
The stable version will allocate the work to the different WGs, specifying all the foreseen completion dates.
This output will be sent to all the WGs in the days following April, the 20th.

Contacts for comments

The e-mail addresses of all the IGC convenors are provided below.

1. Bearer and Access Stratum	*François Courau*, Alcatel	francois.courau@alcatel.fr
2. QoS	*Oscar Lopez-Torres*, T-Mobil	Oscar.Lopez@t-mobil.de
3. CC and roaming	*Ulrich Dropmann,* Siemens	Ulrich.Dropmann@icn.siemens.de
4. Codecs	*Ian Doig,* Motorola	IANDOIG1@email.mot.com
5. Messaging	*Martin Guntermann*, Mannesmann Mobilfunk	martin.guntermann@d2mannesmann.de
6. Terminal local features	*Paul Voskar*, Nokia	paul.voskar@nokia.com
7. Service platforms	*Christophe Gourraud*, Ericsson	christophe.gourraud@lmc.ericsson.se
8. Security	*Chris Pudney*, Vodafone-Airtouch	chris.pudney@vf.vodafone.co.uk
9. Billing, charging and management	*Yukio Hiramatsu,* NTT	hiramatu@MAGNET.NETLAB.NTT.CO.JP
10. Testing	*N.N.,* Motorola	by interim teuvo.jarvela@nokia.com
11. Location related issues	*Jan Kall,* Nokia	jan.kall@nokia.com
12. Overall Co-ordination and general issues	*Alain Sultan,* ETSI/MCC	alain.sultan@etsi.fr

Proposal for the Features, Building Blocks and Work Tasks of R00

See the table below.

Inter Group Co-ordination	***Feature***	***Building block[1]***	***(involved WG) work task[2]***
Bearer and Access Stratum[3]	**Evolution of transport**	**Evolution of the Transport in the UTRAN[4]**	Introduction of an option allowing an IP transport in the UTRAN
		Evolution of the Transport in the CN[5]	
		Evolution of Bearers in the CN[6]	Evolution of the bearers inside the PLMN
			Evolution of the bearers at the inter-working point with other types of networks
		Radio Interface Improvement	To be discussed at RAN level. It shall normally contain the left over from R99 postponed to R00
		RAN improvement[7]	To be discussed at RAN level. It shall normally contain the left over from R99 postponed to R00

[1] please note that the building blocks not very stable at the moment
[2] please note that work tasks are not stable at all the moment
[3] a lot of work items has been approved in the RAN #7 last week in Madrid. François is working hard to make them fit in the feature/BB/WT frame. A revised version of this document will be provided as soon as he has finished this task. He is presently working on the following WIs:

LCS support in UTRAN
SOLSA
Radio Interface Testing and requirement on equipment
RAN O&M
Evolution of bearers on the radio interface to enable IP based multimedia in UMTS
Evolution of transport in the UTRAN (this belong to a feature called “evolution of the transport”)
Positioning method enhancement
UTRAN improvement
Radio Interface Improvement

[4] These building blocks are considered as independent.
[5] These building blocks are considered as independent.
[6] Transport and bearers are distinguished in this proposal because it is assumed that Bearer can be provided using different transport techniques as they shall fit the requirement in terms of QoS.
[7] These building blocks shall be considered as independent from any features and followed as such.

QoS	**Real Time QoS for packet services**	**HOs: support of inter-SGSN change and SRNS relocation <S2, N1, N2, R3>**	
		Support of RSVP signalling. It is suggested to review this item also for Non-real time QoS Enhancements for packet services <S2, N1,...?>	
		Support of other type of signalling (; similar to RSVP/Intserv) at the MT and/or GGSN for future evolution <S2, T2, N1, ...?>	
		End-to-end (re-)negotiation of QoS parameters <S2, N1, T2, ...?>	
	Non-real time QoS Enhancements for packet services	**Mapping of overall end to end QoS in each new interface <S2, R3, N1, N2, T2, ...?>**	
		Evolution of maximum SDU size <N1, N3, S1, R2, R3, S4>	
		End-to-end (re-)negotiation of QoS parameters <S2, N1, T2, ...?>	
		HOs : support of inter-SGSN change and SRNS relocation <S2, N1, N2, R3>	
	QoS for speech[8].		
	QoS for Multimedia[9]	**HOs: support of inter-SGSN change and SRNS relocation <S2, N1, N2, R3>**	
	QoS for circuit switched – data	**HOs: support of inter-MSC change and SRNS relocation <S2, N1, N2, R3>**	
	QoS for VoIP	**HOs: support of inter-SGSN change and SRNS relocation <S2, N1, N2, R3>**	

[8] This feature has different building blocks, specific building blocks; e.g., codec performance evaluation is co-ordinated under “Codecs”.

[9] This feature is an integral part of the “provisioning of IP-based multimedia services”, where the detailed signalling is coordinated under “QoS”. In other words, it shall be coordinated by both, QoS and Call Control and Roaming, because of the additional signalling flowing between GPRS nodes (; e.g., RSVP signalling) . Therefore, QoS needs to coordinate “QoS signalling” at various levels.

	Requirements for an IP call control protocol to supply QoS session-compatibility information (e.g. SIP vs. H.323) .	**Analysis of the Protocols (SIP vs. H.323) to provide enough "compatibility information" at signalling level to set proper RAB and CN Bearers <S2, N1, R3>**	
	QoS Charging-sensitive parameters	**Inclusion of charging-sensitive parameters <S5, S1>**	
	QoS verification/requirements on parameter values in external networks/terminals (; e.g., VoIP fixed network terminals)	**Confirmation of min. and max. value ranges for the UMTS Bearer Service attributes <S2, R2, R3, N1, S1, N3>**	
Call Control and Roaming	**Provisioning of IP-based multimedia services** • **S1 WI** on service requirements including roaming, WI formally to be created • **22.976** • **3.-5.5., S1 RR A-H, Finalisation of 22.976** • **17.-21.7., S1#9, Completion of CR's against 22 series** (dates taken from 22.976)	**An architecture for Call control and roaming to support IP-based multimedia services in UMTS** • **S2 WI** on architecture SP-000150 • **23.821** • **22.-26.5., S2#13, Finalise definition of R00 documents** • **21-23.6., SA#8, R00 Stage 2 at least 80% complete**	[particular call control and roaming protocol standardisation is part of work task of CN WG's and to be reviewed with CN WG's] [detailing of this will be done in preparation of the S2/CN WS 10.-14.4. by Call Control and Roaming Convenor and jointly developed by CN and S2]
		Security features to support IP-based multimedia services in UMTS • **S3**, for detailed planning cf. IGC Security	
		Evolution of the bearers on the Radio interface to enable efficient IP-based multimedia services in UMTS • **RAN:** for detailed planning cf. IGC Bearer and Access Stratum	
		QoS to support IP-based multimedia services in UMTS • **S2:** for detailed planning cf. IGC QoS	

		Billing, charging and management aspects for IP-based multimedia services in UMTS • **S5:** for detailed planning cf. IGC Billing, charging and management	
		[Building blocks of other technical areas are for further study]	
	Enable bearer independent Circuit-switched network architecture • **S2 WI** on architecture (SP-000149) • **23.821** • **22.-26.5., S2#13, Finalize defintion of R00 documents** • **21-23.6., SA#8, R00 Stage 2 at least 80% complete** [detailing of this will be done in preparation of the S2/CN WS 10.-14.4. by Call Control and Roaming Convenor and jointly developed by CN and S2]	**Enable bearer-independent call control**	Standardisation of protocols over reference points between media gateways
			Standardisation of protocols over reference points between MSC server and Gateway MSC server
			[additional work tasks possible as architecture evolves]
		Bearer independence and codec control issues • for detailed planning cf. IGC Codecs	
		Separation of switching and control by open interface	Standardisation of protocols over reference points between MGW and MGWC/MSC server
	Evolution of CS services [this is rather a group of feature than a feature by itself, structuring must be reviewed] • **S1:** Review whether 22 series is impacted	**Evolution of CS architecture** • **S2:** Review whether architecture is impacted	**Real Time FaxN3** internal work task • postponed from R99 to R00, **SP-000169** • **R00 target June 00**
		Text telephony • **SP-000117** with WI proposal [Ed comment: to be verified with SA#7 minutes whether WI is accepted]	**Circuit-switched multimedia swap and fallback** • **Agreed WI NP-000051** • **December 2000**
	Optimisation of MAP based mobility management procedures [this is rather a group of feature than a feature by itself, structuring must be reviewed]		**Turbocharger** • **N4** internal WI • postponed from R99, open whether part of R00 (**SP-000169**) • **December 2000**

			Automatic Establishment of Roaming Relations [Ed comment: MCC, please clarify origin of this feature] [It is for further study whether this is Feature, BB or WT]
	Optimisation of signalling procedures [this is rather a group of feature than a feature by itself, structuring must be reviewed]		**Layer 3 Segmentation** • **N2 (?)** internal WI • postponed from R99, open whether part of R00 (**SP-000169**) • **December 2000**
Codecs		Specification of the video codec(s) ??	No Work in this area intended
	Codec for Multimedia Telephony Service	**3G Audio-Visual Terminal Characteristics R99/00** June 2000	*General Description* **R99**
			Modifications to H.324 **R99**
			Call Set-Up Requirements **R99**
			Terminal Display and Camera Characteristics For H.324 Narrow-band Video Telephony Service **R99** June 2000 (CS)
			Terminal Display and Camera Test Specifications For H.324 Narrow-band Video Telephony Service **R99** June 2000 (CS)
			Terminal Display and Camera Characteristics For H.323 Narrow-band Video Telephony Service R00 December 2000 (PS)
			Terminal Display and Camera Test Specifications For H.323 Narrow-band Video Telephony Service R00 December 2000 (PS)
			Narrow Band (3.1kHz) Speech & Video Telephony Terminal Acoustic Characteristics **R99** June 2000
			Narrow Band (3.1kHz) Speech & Video Telephony Terminal Acoustic Test Specification. **R99** June 2000

		QoS for speech and multimedia codec ICG QoS. Common Building Block. See IGC QoS documentation.	TD SP-000019: TS 26.912 v2.0.0 QoS for Speech and Multimedia Codec - Quantitative performance evaluation of H.324 Annex C over 3G **R99** completed TSG#7
		Floating Point Implementation for AMR June 2000 **R99** Common Building Block ?	*Verification of the AMR floating point performance* **R99** June 2000
	Wideband Telephony Service *R00*	**AMR – Wideband specification *R00***	**S4**, WB AMR speech Codec feasibility study report, completed TSG#7 **S4**,TD SP-000024: TR 26.901 v2.0.0 AMR Wideband Speech Codec Feasibility Study Report (Release 2000).
			S4,TD SP-000027: AMR Wideband Permanent project document WB-3: Performance Requirements, completed TSG#7
			S4,TD SP-000028: AMR Wideband Permanent project document WB-4: Design Constraints, completed TSG#7
			S4,WB AMR speech Codec Qualification (see section 7.1) June 2000
			S4,WB AMR speech Codec Selection Tests June to September 2000
			S4,WB AMR speech Codec Selection October 2000
			S4,Wide Band Speech Telephony Terminal Acoustic Characteristics December 2000
			T1, to review Wide Band Speech Telephony Terminal Acoustic Characteristics November 2000
			S4,Wide Band Speech Telephony Terminal Acoustic Test Specification December 2000
			T1, to review Wide Band Speech Telephony Terminal Acoustic Test Specification November 2000
			S4,Wideband Speech Codec General Description December 2000

			Wideband Speech Codec ANSI C-Code December 2000 Wideband Speech Codec Test Sequences December 2000 Wideband Speech Codec Speech Transcoding Functions December 2000 Wideband Speech Codec Error Concealment of lost frames December 2000 Wideband Speech Codec Source Controlled Bit-Rate Operation December 2000 Wideband Speech Codec Voice Activity Detector December 2000 Wideband Speech Codec Frame Structure December 2000 Wideband Speech Codec Performances Characterization Tbd 2001 Codec lists December 2000
			T1 Conformance tests (CRs to 34 series) ***ICG Testing*** June 2001
		WB AMR Implementation in UTRAN	**RAN WG** Tasks (CRs) December 2000
		WB AMR Implementation in CN	**CN WG** Tasks (CRs) December 2000
		WB AMR Requirements	**S1** requirements (CRs) December 2000
		QoS for speech and multimedia codec **ICG QoS**. Common Building Block. See IGC QoS documentation.	

	Transcoder-Free Operation (TrFO) **R00** SP-000094	**OoBTC**[10]	**N1** Adding new codecs and the signalling mechanism to negotiate the activation of the fcodecs should be studied for **R00**. Codec Negotiation between UE and MSC. Signalling for **R00** See NP-000085 24.008, 23.009, 23.108 (29.002) Assumption for **R99**: As there is only one Codec, AMR, this does not need to be signalled.
			N2 Codec Negotiation inter MSC, Bearer establishment inter MSC. TS 23.153 **R99** part complete. **R00** capabilities moved to annex. See NP-000127 **Open issues:** Handling of Conference Calls; Handling of Multi Party Supplementary Services; Handling of Handover UMTS to GSM; Handling of Sending a tone or Announcement; Protocol between MSCs (i.e. Iu UP Framing versus I.366).
			S2
			R2 Bearer establishment between UE and RAN, TFC control by RRC
			R3 Bearer establishment between MSC and RNC as well as RNC and Node B, Notification of the Codec mode to RAN, Iu UP control procedure (rate control, initialization, time alignment) .

[10] The Out of Band Transcoder is deleted from the TSG RAN Work Programme as the solution does not involve the UTRAN (i.e. it is not proposed to delete the Out of Band Transcoder function). TSG RAN will not work on this unless it is found to be necessary, at which time a Work Item will be established to deal with this.

		TrFO specification	**N1**
			N4
			R3
			S3 Prevention of user fraud
			S4 26.103 Codec list, 3G equivalent of GSM 08.62
			WG ? Harmonization of TFO and TrFO may be required
	Support of Transcoder in CN R00	WI description and Tdoc S2-99352 Speech Transcoder: Location and Control at the UMTS Core Network Border	
		Transcoder at Edge R00	The TrFO feature is linked (use of BICC, codec negotiation) with the "work item which is due to R00 (same use of BICC and of AAL2 switching). Nevertheless, the specification of the "TrFO/OoBTc" Shall not be delayed in the case the specification of the "Transcoder at the Edge" Work Item were delayed.
		Architectural Model for the 3G Transcoders TR 26.920 ?R00	**S4.**
	Mandatory Speech Codec for Narrowband Telephony Service R99	AMR Specification **R99**	**AMR Characterization Report for 3G R00** June 2000 R99 See TD SP-000021 TS 26.975 v1.1.0
			AMR Characterization Report for 2G (complete) **R99**
			TD SP-000023: GSM 06.76 v2.0.0 (Technical Report) Adaptive Multi-Rate (AMR) Speech Codec; Study Phase Report **R99** completed TSG#7
			AMR - Noise Suppression 2G only **R99** *June 2000*
			AMR – Specification set (complete) **R99**
		Floating Point Implementation for AMR June 2000 **R99** Common Building Block ?	*Verification of the AMR floating point performance* **R99** June 2000

			AMR – floating point C-code **R99** See TD SP-000022: TS 26.104 v0.3.0
	Tandem Free aspects for 3G and between 2G and 3G systems R00	**Tandem Free AMR**	**TFO AMR Specifications** June 2000 R00
		TFO AMR Implementation in UTRAN ?? Inband	**RAN WG** Tasks (CRs) December 2000
		TFO AMR Implementation in CN	**CN WG** Tasks (CRs) December 2000
	Transmission planning in 3G networks R00	*Echo control for speech and multimedia services* March 2000 **R99**	**S4** TD SP-000020: TS 26.915 v1.0.0 Echo Control For Speech and Multi-Media Services **R99** completed TSG#7
			CRs to existing specs **R99** March 2000
		03.50 equivalent Transmission Planning Aspects of the Services in UMTS **R00**	**RWGs** Specifications/Reports **R00**
Messaging	**Multimedia Messaging**	Service Requirements	**T2/S1**: Review of MMS Stage 1 **S1:** Integrated Media Streaming May 2000
		Technical Realization	**T2/S2**: Define Reference Architecture Model **T2:** Fulfill open Requirements of MMS Stage 1 Release 99: e.g. minimum set of media formats, media format conversion, personalization of MMS. **R99** **T2:** Definition of MMS primitives in MMS Stage 2
	Advanced Cell Broadcast	Service Requirements	**S1:** Enhancements to release 99 CBS e.g. Charging requirements, Capacity Enhancements May 2000
		CBC-RNC Protocol	RAN3: Refinements of TS 25.419
	IP Multicast	Service Requirements	

Terminal local features	identified technical *questions* related to terminal local features (no break-down to features, building blocks or work tasks performed yet) • Alternative AT commands • AT commands • UE capabilities • UE Multiplexer • UICC/ME interface • UICC API • 3G terminal characteristics		
Service platforms	**VHE/OSA**	**Evolutions of VHE concepts**	TBD
		Support of VHE/OSA by R00 network entities and protocols (e.g. CSCF, MExE entities)	TBD
		Personal Service Environment (PSE), user profiles and user profile management	PSE architecture and interfaces
			User Profiles definition
			SCFs for user profile access/management by OSA applications
		VHE/OSA management aspects	TBD
		Improvements to VHE/OSA security	Principles and architecture definition
			(possibly) security related SCF(s) definition
		New Network Service Capability Features (N-SCFs) and evolutions of existing ones e.g. GPRS & SMS charging Multimedia SCF(s) Conferencing	SCFs requirements
			SCFs stage 2 specification
			SCFs stage 3 specification
		New Framework Service Capability Features and evolutions of existing ones (F-SCFs) e.g. Interfaces between framework and service capability servers	SCFs requirements
			SCFs stage 2 specification
			SCFs stage 3 specification

		Harmonisation/co-ordination with non UMTS related initiatives (e.g. SPAN3/SPAN6, Parlay group)	TBD
	CAMEL phase 4	**MO calls: Mid call procedure**	TBD
		MO/MF calls: Creation of call parties - Call Party Handling	TBD
		MT calls: Mid Call procedure	TBD
		CSE Initiated call setup	TBD
		Procedures for USSD	TBD
		User Interaction scripts	TBD
		Enhancements to CSE control of call duration – playing of tones	TBD
		Enhancements to Call Forwarding interactions	TBD
		Interactions with Optimal Routing	TBD
	MExE	**AT command support**	TBD
		3rd MExE classmark	TBD
		Interactions with other service platforms building blocks (VHE/OSA, CAMEL), e.g. user profiles, terminal capabilities	TBD
Security	**Integrity protection for user plane data**		
	Core network signalling security		
	FIGS		
	Network wide encryption		
	Secure mobile platform for applications		
	[Study on the evolution of GSM CS algorithms]		
	[GEA 2]		
	„[Mandatory“ GPRS encryption]		
	[Issues arising from GERAN and Iu-ps]		
	MAP/GTP/CAP signalling security		
	Enhanced User Identity Confidentiality		

Billing, charging and management	identified technical *questions* related to billing, charging and management (no break-down to features, building blocks or work tasks performed yet) • Telecom Mgmt - X.25 • Performance Mgmt • Charging issues • Configuration Mgmt • Fault Mgmt • Verify interoperation between S5 O&M and RAN O&M		
Testing	identified technical *questions* related to testing (no break-down to features, building blocks or work tasks performed yet) • Terminal Acoustic Test Spec • UE Test Specs – FDD • UE Test Specs – TDD • UE Test Specs – Protocols • UE Test Specs – ATS • UE Test Environment • UE Test Interface • UE Test Specs – Proforma • UE Electromagnetic Compatibility • UICC Interface Test • UICC Test • Base Station Testing		
Location related issues (Jan Kall, Nokia)	**Support of Localized Service Area (SoLSA)**	**Basic concept of SoLSA (broadcast LSA ids, zone tariffing)**	Creation of Work Item for UTRAN-SoLSA
			UTRAN-SoLSA concept paper /Feasibility study, S1
			Development of SoLSA service descriptions, S1
			Study the usage of LCS information for SoLSA?, S1
		Localized Service Area (LSA) indication (LSA display in UE)	Adapt GSM stage 1 SoLSA for UMTS in S1
			Adapt GSM stage 2 SoLSA for UMTS in S2

			Adapt SoLSA Core network CRs in CN WGs
			Adapt SoLSA specifications for UTRAN in RAN WGs
			Adapt SoLSA UE and SIM specifications in T WGs
		Preferential access (cell access priority for LSA users)	To be included or adapted in Stage 1, Iu interface and MAP signaling, SA, CN and RAN WGs
		Idle mode support (favouring LSA cells in idle mode)	Adapt GSM specifications for UTRAN and UE S2, RAN and T WGs
		Active mode support (favouring LSA cells in active mode)	Adapt GSM specifications for UMTS, UTRAN and UE SA, CN, RAN and T WGs
		Exclusive access (private cells)	To be studied if supported in UTRAN, S1
		LSA only access (type cordless or WLL)	To be studied if supported in UTRAN, S1
		SoLSA interoperation aspects	GERAN-SoLSA and UTRAN-SoLSA interoperation, S2
	Location Services	**Service description (Stage 1 development in S1)**	Describe new service features, S1: predefined areas, location of all UE in area? accuracy classes?
		Overall system aspects of LCS	Specify new features, S2: predefined areas, location of all UE in area? accuracy classes?
			Exception procedures, S2
		LCS network management	- to be more detailed, S5
		Security aspects of LCS	- to be more detailed, S3
		LCS support in the core network CS domain	Impact of R00 architecture e.g. on MAP signaling for LCS, N4
		LCS support in the core network PS domain (in R00 architecture)	Layer 3 LCS signaling UE (MS) -SGSN (UMTS PS and and GSM-GPRS), N1

			MAP signaling for LCS, N4
		Iu interface support for LCS	Iu development, R3 - assistance data handling
		LCS in UTRA TDD **Work Item: "Support of Location Services in UTRA TDD"**	UTRAN stage 2, R2
			Radio Resource Manage-ment (for LCS TDD), R2
			Location measurements TDD, R1
			Iu, Iur, Iub support for LCS in TDD, R3
		LCS support in UTRAN: **cell coverage based**	Iur transport of cell co-ordinates, R3
		Advanced LCS methods **- OTDOA-IPDL** **- assisted GPS** **Work Item: "Support of Location Services in UTRA FDD"**	LCS signaling UE-SRNC, R2
			Location measurements, R1
			Iur and Iub support for LCS measurements +results, R3
			Stage 3 specifications on assistance data, R2, R3
		LCS interoperation aspects	Co-ordinated development of GSM LCS Phase 2 and UMTS LCS, S2 and SMG2
		LCS application interfaces (LCS-OSA) **(Related to service platforms)**	Service description, S1
			Service specification, S2
			Service specification, N5
		Universal Geographic Area Description (GAD)	Possible update of 23.032, S2
Overall co-ordination and general issues	There are no features, building blocks and work tasks from the overall co-ordination, rather: • Overall Co-ordination • Vocabulary		

Annex: Work Items and Work Item creation (from the 3GPP Working Procedures)

Article 38: Work Items

A 3GPP Work Item is a specification task defined in terms of the following principle parameters:
· title;
· intended output (ie Technical Specifications or Technical Reports);
· impact on other Technical Specifications and Technical Reports;· technical scope, including the field of application of the intended output;
· impact on other 3GPP Work Items;
· the schedule of tasks to be performed;
· the identities of the supporting Individual Members;
· the identity of the Work Item Rapporteurs.

Article 39: Work Item creation

Each proposed new Work Item shall be supported by at least four Individual Members, and their names shall be recorded in the Work Item definition prepared for the TSG approval. One or more persons shall be named as Rapporteur for the proposed Work Item, and the Rapporteur shall act as the prime contact point on technical matters and for information on progress throughout the drafting phases. The supporting Individual Members are expected to contribute to and progress the new work item throughout the drafting phases.
In addition to the above, TSGs shall approve new Work Items, giving all essential parameters. The proposal shall be entered into the 3GPP work programme, clearly marked as a new entry, for which a unique reference identity shall be allocated.