Source: Chairman, Secretary SA1

Title: Status Report of SA\_WG1 (Services)

**Document for:** Information and Decision

Agenda Item: 7.1.1

## **TSG SA1 STATUS REPORT**

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# 1 General Overview of Progress

The TSG\_SA\_WG1#26 Plenary Meeting was held in Sophia Antipolis, France from the 11<sup>th</sup> to 15<sup>th</sup> October 2004. It was chaired by Mr Michele Zarri (T-Mobile) and the secretary was Mr Michael Clayton from the MCC. The host was ETSI.

#### 2 External Liaisons

The following liaison statements have been sent from SA1 to external bodies.

Document Number	Title	То	Сору	Sent
S1-040962	Cooperation on TISPAN NGN supplementary services	ETSI TISPAN	SA2, CN1, CN3, CN4	18/10/2004

SA1 has managed to cut down its output of liaison statements to nine at this meeting.

# 3 Change Requests for R99

At the last meeting, SA1 received a liaison statement from T3 on USIM support by 2G terminals of Rel-99 and Rel-4. T3 are asking the question whether it is an allowed option for a 2G terminal of Rel-99 or Rel-4 to support a USIM application on a UICC and ask SA1 to clarify this in our specifications. This has been dealt with in the last T and so events have overtaken this issue.

Nonetheless, there is still the need to update the specifications (22.101). The CR to do this was provided for approval in document SP-040725.

Meeti	SA Doc	TS No.	CR No	Rev	Rel	Cat	Subject	Vers.	Vers	SA1 Doc
ng								Curre	New	
								nt		
SP-26	SP-040725	22.101	155	-	R99	F	USIM support by 2G terminals	3.17.0	3.18.0	S1-040966
SP-26	SP-040725	22.101	156	-	Rel-4	Α	USIM support by 2G terminals	4.10.0	4.11.0	S1-040967

#### 4 Change Requests for Rel-4

There are no CRs for Rel-4 other than those related to changes to earlier releases.

#### 5 Change Requests for Rel-5

There are no CRs for Rel-5.

#### 6 Change Requests for Rel-6

The following sections contain CRs to release 6.

#### 6.1 CR on definition of RAT (21.905)

This issue has been on-going on for six months, ever since the RAT was found in the cellular. More than once a suggestion has been made and a flurry of liaison statements has been caused. Some closure is required on this one.

SA1 eventually on some wording but has requested some help from other groups in a liaison statement in S1-040940 (CN1, T3, GERAN, RAN, T and CN). It was decided that unless some significant objections are received by the other groups, it will go to SA for approval. It is not intended to redefine what a RAT is, but rather to describe what we have already. The understanding of SA1 is that the Core Network includes IMS.

To date, SA1 has received replies from:

CN1	SP-040717	N1-042097	S1-050016
T3	SP-040722	T3-040740	S1-050017

T3 proposes the following set of definitions:

- 3GPP RAT: Radio Access Technologies defined by 3GPP, i.e. UTRAN and GERAN.
- Non-3GPP RAT: Radio Access Technologies not defined by 3GPP, but with an interworking possibility with 3GPP network (e.g. IEEE 802.11b, DECT) being defined in 3GPP.
- Radio Access Technology: Radio technology with which it is possible to access 3GPP core networks.

T3 also notes that the term "Radio Access Technology" (or "RAT") is not used across all specs. For instance, the term "Access Technology" is commonly used.

CN1 considers the definition of 'Radio Access Technology' vague because of "3GPP defined interface" and makes unclear which radio technologies are included, overall in case of WLAN technologies such as 802.11.

CN1 would like to request SA1 to consider whether it is seen feasible to add into TR 21.905 the term 'Access Technology' under custody of CN1 and currently specified by TS 23.122.

On the basis of this, SA1 is providing the CR in document SP-040726 for consideration by SA.

Meeti ng	SA Doc	TS No.	CR No	Rev	Rel	Cat	<b>,</b>	Vers. Curre	Vers New	SA1 Doc
								nt		
SP-26	SP-040726	21.905	059	-	Rel-6	F	Definition of Radio Access Technology	6.7.0	6.8.0	S1-040941

## 6.2 CRs to 22.127 to delete requirements of OSA from Rel-6

Once again SA1 has received liaison statements from CN5 related to OSA. CN5 notes that no Stage 3 contributions supporting:

"User Data Management (OSA-GUP support)"

"User-Application Authentication functions"

"IP session function"

have been received. This has been a reason in the past to propose deleting some requirements in the OSA Stage 1 and CN5 has made this request to SA1.

After very careful consideration, SA1 has agreed and is putting forward three CRs to 22.127. They are provided in document SP-040727.

Meeti ng	SA Doc	TS No.	CR No	Rev	Rel	Cat	Subject	Vers. Curre nt	Vers New	SA1 Doc
SP-26	SP-040727	22.127	074	-	Rel-6	F	Delete Requirements for IP session function"	6.6.0	6.7.0	S1-040922
SP-26	SP-040727	22.127	072	-	Rel-6	F	Delete Requirements for User-Application Authentication functions"	6.6.0	6.7.0	S1-040920
SP-26	SP-040727	22.127	073	-	Rel-6	F	Delete Requirements for User Data Management (OSA support for GUP)"	6.6.0	6.7.0	S1-040921

## 6.3 CR to 22.141 on "Anonymous subscriptions to Presence lists" (Rel-6)

SA1 has received a liaison statement from CN1 on Anonymous subscriptions to Presence lists. CN1 is asking SA1 to judge if there is a valid use case for anonymous subscription. Currently there is no way for the watcher to specify its privacy preferences for the subscriptions triggered on the RLS. CN1 has proposed a solution to allow watcher to insert an XML body defining its privacy preferences sending a SUBSCRIBE request. IETF posters have expressed the view that no presentity will release presence information to watchers who refuse to identify themselves. SA1 concur with that view.

Therefore, a CR to 22.141 is presented to SP for approval in SP-040728.

Meeti ng	SA Doc	TS No.	CR No	Rev	Rel	Cat		Vers. Curre nt	Vers New	SA1 Doc
SP-26	SP-040728	22.141	018	-	Rel-6	F	Delete Requirements for IP session function	6.6.0	6.7.0	S1-040993

# 6.4 CR to 22.228 on IMS CS Interworking (Rel-6)

At the last meeting a discussion document was received on IMS and CS interworking. IMS currently has no requirement to support all CS services and this is a reasonable position to hold. However, a shortcoming appears for calls which merely transit the network and, to ensure a good service it should be required that the IMS can maintain some ISUP features when transiting the core network between PSTN endpoints. This is not the same as supporting the CS services within the network but maintenance of call integrity by the IMS.

To this end, a CR to 22.228 is being provided in document SP-040729.

Meeti ng	SA Doc	TS No.	CR No	Rev	Rel	Cat	Subject		Vers New	SA1 Doc
SP-26	SP-040729	22.228	026	-	Rel-6	F	IMS Support of CS services	6.6.0	6.7.0	S1-040998

## 6.5 CR to 22.240 on Removal of erroneous use cases (Rel-6)

TSG-SA #25 approved CR 006 (SP-040507) on UE requirements corrections. It removes the requirement of storing GUP components in the terminal, as well as notes that UE management standardisation is handled by the Device management group in OMA. However, the related use cases in Annex A have erroneously not been removed.

In SA1, it was considered that the use cases are still useful but maybe in a different annex.

The CR to 22.240 is provided for approval in document SP-040730.

Me		TS No.	CR No	Rev	Rel	Cat	Subject	Vers. Curre	Vers New	SA1 Doc
								nt		
SP-	26 SP-040730	22.240	007	-	Rel-6	F	Removal of erroneous use cases	6.4.0	6.5.0	S1-040989

# 6.6 CR to 22.242 regarding reference to OMA DRM (Rel-6)

For some time there has been an agreement between 3GPP and OMA that OMA does the DRM work. This was crystallised in an action point on SA1 from SA#25 was to remove text in stage 1 DRM specification and reference OMA requirements description.

Despite some concern expressed at SA1 that this is not the correct course of action, SA1 eventually agreed to put forward the CR to 22.242 in document SP-040731 for approval.

Meeti ng	SA Doc	TS No.	CR No	Rev	Rel	Cat	Subject	Vers. Curre nt		SA1 Doc
SP-26	SP-040731	22.242	003	-	Rel-6		Removing text in DRM stage 1 specification and reference OMA RD	6.2.0	6.3.0	S1-040963

## 6.7 CR to 22.950 on Priority Service support for Emergency Service (Rel-6)

During the Priority SWG of SA1 some inconsistent behaviour for Priority Service support for Emergency Service for Service Users and non-Service Users in both 22.950 and 22.952. This relates to when service user dials an emergency call. With the change, the network operator has the choice if the call is allowed or denied.

The CRs to 22.950 and 22.952 are provided in documents SP-040732 and SP-040733.

Meeti ng	SA Doc	TS No.	CR No	Rev	Rel	Cat	Subject	Vers. Curre nt	Vers New	SA1 Doc
SP-26	SP-040732	22.950	009	-	Rel-6	F	Priority Service optional support for Emergency Service	6.3.0	6.4.0	S1-040979
SP-26	SP-040733	22.952	004	-	Rel-6	F	Priority Service optional support for Emergency Service	6.1.0	6.2.0	S1-040980

# 7 Change Requests for Rel-7

The following sections contain CRs to release 7.

## 7.1 CR 22.038 on Extension of the USAT bearers (Rel-7)

During the WLAN SWG, it was noted that the USAT takes advantage of the data channels available on the ME to exchange data with external entities. With the WLAN being available on certain terminals, this new data channel should be added to the USAT capabilities.

There was some debate as to the reason to add this, but it was noted that if this is not provided then it would be impossible to update the USIM when connected to the wireless LAN. A more general approach could be adopted, but in the meantime, it was decided to accept this as it is for now. There were some concerns from Nokia that the use cases are missing and should be provided.

Nonetheless, it is provided in document SP-040734 for approval.

|--|

	ng								Curre	New	
- 1									nt		
	SP-26	SP-040734	22.038	025	-	Rel-7	В	Extension of the USAT bearers	7.1.0	7.2.0	S1-040985

# 7.2 CRs to 22.071 on Velocity Service Description and A-GNSS concept (Rel-7)

There are two CRs related to 22.071.

The first is contained a CR on Introducing A-GNSS concept to extend A-GPS to include GALILEO. The GNSS concept should be introduced into the 3GPP LCS specification to extend the GPS concept to include GALILEO. This follows the approval of the Work Item on this topic approved at SA1#24.

The CR 22.071-071 is contained in document SP-040735.

The second is a CR to 22.071 on Velocity Service Description. Many location-based services such as turn-by-turn directions rely upon knowing the UE's velocity (speed and heading). Velocity is already defined in TS 23.032, but is not included in any messaging definitions.

This is corrected in CR 72 in document SP-040735.

Meeti	SA Doc	TS No.	CR No	Rev	Rel	Cat	Subject	Vers.	Vers	SA1 Doc
ng								Curre	New	
								nt		
SP-26	SP-040735	22.071	071	-	Rel-7		Introducing A-GNSS concept to extend A-GPS to include GALILEO	7.0.0	7.1.0	S1-040973
SP-26	SP-040735	22.071	072	-	Rel-7	С	Velocity Service Description	7.0.0	7.1.0	S1-040987

#### 7.3 CR to 22.078 on regarding interworking between CAMEL and SCUDIF (Rel-7)

At SP #24 CRs to Rel-6 & Rel-5 were approved on SCUDIF interaction with CAMEL Call Party Handling (CPH) and CAMEL user interaction (CR 171 and 172). The following CR is a mirror CR to these for Rel-7. In 3GPP Rel-7, the CSE has the capability to select between the preferred bearer service and the less preferred bearer service. That functionality was introduced by CR 168 and is included in TS 22.078 v7.1.0, section 1. Said functionality may need to be specified in further detail for Rel-7, but this needs to be done in a separate CRs.

In the meantime, CR 178 is presented for approval in document SP-040736.

Meeti	SA Doc	TS No.	CR No	Rev	Rel	Cat	Subject	Vers.	Vers	SA1 Doc
ng								Curre	New	
								nt		
SP-26	SP-040736	22.078	178	-	Rel-7	Α	Interworking between CAMEL and SCUDIF	7.1.0	7.3.0	S1-040972

#### 7.4 CR to 22.234 on New features of I-WLAN for Rel-7

Document S1-040943 contained a CR to 22.234 on new features of I-WLAN for Rel-7. According to the agreed principle at SA1#23, service continuity for I-WLAN shall be proposed as a new feature.

There was some concern in SA1 that this does not really fit into the normal approach of the WLAN work which is compartmentalised in the various scenarios. It was also considered to be too simplistic and could allow too much free rein to SA2.

Based on the discussion in this meeting, it was requested that when this is presented it should be clarified to SA that SA1 intends to do more work on this subject and the CR as presented in its present form represents a 'work-in-progress'.

It was also identified that there may be an impact on the RAN, but that this should be judged by those who have the technical expertise to judge.

It is presented in document SP-040737 as CR 010 for approval.

Meeti ng	SA Doc	TS No.	CR No	Rev	Rel	Cat		Vers. Curre nt	Vers New	SA1 Doc
SP-26	SP-040737	22.234	010	-	Rel-7	В	New features of I-WLAN	6.2.0	7.0.0	S1-040995

# 7.5 CRs to CR to 42.068 on Sending a SMS to a Group and a Voice Group Call (Rel-7)

In the last SA1 meeting, there were two documents relating to sending an SMS in conjunction with VCGS. The first contained a CR to 22.068 on sending SMS to a Voice Group Call. It should be noted that support of SMS in VGCS is optional in Rel-7. Hence, the related requirements are subject to the capabilities of the terminal and subject to provisioning of the operator. Also, Statement a) is missing in the case of reception of SMS in a Voice Group Call and Statement b) is expressed in an unclear formulation.

It is presented SA for approval in document SP-040738 as CR 006.

The second document contained a CR to 42.068 on Sending a SMS to a Group. It should be possible to send a short message to a group anytime, even if the group call is not established. This will allow the sending of an SMS when members join the group.

It presented to SA for approval as CR 007 in document SP-040738.

However, subsequent to the SA1 meeting, a liaison statement has been received from EP RT (ETSI Project Railways Telecommunications) (SP-040719, RT-04127r1, S1-050018) indicating that the CR could cause confusion amongst users and should therefore be modified or rejected.

It is left to SA to decide what should be done about this CR.

Meeti ng	SA Doc	TS No.	CR No	Rev	Rel	Cat	Subject	Vers. Curre nt		SA1 Doc
SP-26	SP-040738	42.068	006	-	Rel-7	F	Sending SMS to a Voice Group Call	7.0.0	7.1.0	S1-040948
SP-26	SP-040738	42.068	007	-	Rel-7	В	Sending a SMS to a Group	7.0.0	7.1.0	S1-040991

#### 8 New TSs/TRs

SA1 has two TRs to present for information/approval.

#### 8.1 TR 22.978 (v1.0.0) on All-IP Network (AIPN) Feasibility Study (Rel-7)

TR 22.978 document studies the feasibility of the progression of the 3GPP system to an All-IP Network (AIPN). More specifically, this document:

- a) Identifies and describes the objectives and user, business and technological drivers for progression of the 3GPP system to an AIPN;
- b) Defines and develops the end-user and network operator aspects of an AIPN;
- c) Identifies the capability expansion required to introduce the AIPN concept into the 3GPP system; and,
- d) Evaluates whether an AIPN should be standardised within 3GPP, and in the case of a positive conclusion identifies the subsequent steps to be taken to achieve this by defining the scope, target, and roadmap for work to be undertaken within Rel-7 and future 3GPP releases.

There are some outstanding issues still, but work is ongoing to solve this issues.

It is presented in document SP-040739 for information.

# 8.2 TR 22.979 (v1.0.0) on Feasibility study on Combined CS Calls and IMS Sessions (Rel-7)

TR 22.979 studies the service requirements associated with a multimedia service combining a CS call with one or more IMS services (or vice versa), while appearing as a single service to both end-users. The feasibility study addresses the high-level requirements and use cases such for combinational service including charging and user experience.

It remains to be decided if the first listed requirement in section 9.2, "It shall be possible to add a CS speech call to an IMS session, thereby creating a combinational service.", actually belongs to phase 2 or if it instead should be part of phase 1 requirements.

There are no contentious issues.

The TR is being presented in document SP-040740 officially for information, but SA1 is requesting SA to consider this TR for approval thereby putting the last open issue under change control.

#### 9 WIs from SA1

SA1 has one updated WI and two new WIs to present for approval.

#### 9.1 Update to GUP WI

SA would not be the same plenary if the GUP work item were not updated and so SA1, true to form, is presenting it in document SP-040741.

The reference to MeXE is deleted, the text in MMI is deleted, and the timescale and existing TSs are updated. Other updates include some editorial changes and the addition of supporting companies.

Since the last SA1, a liaison statement has been received from CN4 with a proposed update of the GUP WI (NP-040471, N4-041620, S1-050027); it remains to be seen what the result of CN is on this issue.

#### 9.2 New WI for Combinational Services

At SA #24 a work item was approved called Feasibility Study on "IMS services using CS bearers" Building Block (revision of SP-04044). This work has been done and the TR resulting from this is being proposed for Information (and approval) in SA document SP-

040742 (see section 8.2).

In order to implement the TR recommendations and requirements, a new WID has been created whose deliverables would consist of 1 or more CSICS Technical Specifications.

# 9.3 New WI on CAMEL Trunk Triggers

SA1 is also presenting a new WI on CAMEL Trunk Triggers. CAMEL is currently defined for mobile originated & mobile forwarded calls in the VMSC, mobile terminated calls in the GMSC and VMSC and gsmSCF initiated new call or new party in an existing call. There are, however, some existing and new service scenarios that would benefit from CAMEL being defined for trunk originated calls at the MSC.

Also, some GSM-R operators want to use CAMEL to provide number translation functions in multi-vendor GSM-R networks. In addition to mobile originated calls, this requires CSE interaction for calls from fixed terminals (received over a trunk interface at the MSC) and calls from foreign GSM-R networks (received over a trunk interface at the MSC).

So, this WI is to enable CSE interaction for trunk-originated calls at the MSC/SP-040.

It is presented in document SP-040743 for approval.

#### 10 Other Issues

# 10.1 Proposal for update of TSs from Rel-5 to Rel-6

As per normal at the end of a release, SA1 has reviewed its specification set and identified those that would benefit from being raised to release 6. Document SP-040744 contains the result of this.

It is presented to SA for approval.

#### 10.2 Chairmanship of SA1

The chairman of SA1, Michele Zarri, has now completed his first term of office. Therefore, a call for candidates has been issued and sent on the SA1 and SA leaders list email exploders, with a view to having a vote at SA1 #27. Since this is his first term of office, Mr Zarri is eligible to stand again for a second term.

#### 10.3 GERAN's Generic Access WID

SA1 has responded to the liaison statement from GERAN on the Generic Access work stating that the shortcomings identified by GERAN are not so substantial as to require the work to stop

At the same time SA1 notified GERAN that the GAN technical solution may have not insignificant impacts on other work ongoing in SA1 and has asked for some clarification on how to progress the work on these areas in the most efficient way

#### 10.4 TISPAN LS on supplementary services

TISPAN is in the process of standardising some supplementary services for the NGN. SA1 at present believes that the capabilities of the IMS are adequate to allow the creation of supplementary services, but has started a liaison with TISPAN to assess the need to introduce new requirements in this area.

# 11 Meetings of SA1

# 11.1 Meetings since last SA

The following meetings have been held since SA #25.

Meeting	Date	Place	Host
SA1#26	11 – 15 October 2004	Sophia Antipolis, FR	ETSI

# 11.2 Planned meetings

SA1 has the following meetings scheduled, so far.

# **SA1 Plenary**

	Meeting	Date	Place	Host
	SA1#27 SA1#28 SA1#29 SA1#30	17 – 21 January 2005 04 April – 08 April 2005 27 June – 01 July 2005 October 2005 tbd	South Africa Hong Kong, China Europe North America	Vodacom China Mobile European friends of 3GPP
SA	1 SWGs			
	AIPN SWG	13 – 14 January 2005	London, UK	European friends of 3GPP

# **Annex 1: Documents provided to this Plenary**

Tdoc	Title	source	Agenda	Doc for
SP-040723	Presentation of SA1 to SA #26	SA WG1 Chairman	7.1.1	Information
SP-040724	Status Report of SA1 to SA #26	SA WG1 Chairman	7.1.1	Information
SP-040725	CRs to 22.101 on USIM support by 2G terminals of Rel- 99 and Rel-4 (R99, Rel-4)	SA1	7.1.3	Approval
SP-040726	CR to 21.905 on definition of RAT (Rel-6)	SA1	7.1.3	Approval
SP-040727	CRs to 22.127 to delete requirements from Rel-6	SA1	7.1.3	Approval
SP-040728	CR to 22.141 on "Anonymous subscriptions to Presence lists" (Rel-6)	SA1	7.1.3	Approval
SP-040729	CR to 22.228 on IMS CS Interworking (Rel-6)	SA1	7.1.3	Approval
SP-040730	CR to 22.240 on Removal of erroneous use cases (Rel-6)	SA1	7.1.3	Approval
SP-040731	CR to 22.242 regarding reference to OMA DRM (Rel-6)	SA1	7.1.3	Approval
SP-040732	CR to 22.950 on Priority Service support for Emergency Service (Rel-6)	SA1	7.1.3	Approval
SP-040733	CR to 22.952 on Priority Service support for Emergency Service (Rel-6)	SA1	7.1.3	Approval
SP-040734	CR 22.038 on Extension of the USAT bearers (Rel-7)	SA1	7.1.3	Approval
SP-040735	CRs to 22.071 on Velocity Service Description and Introducing A-GNSS concept to extend A-GPS to include GALILEO (Rel-6)	SA1	7.1.3	Approval
SP-040736	CR to 22.078 on regarding interworking between CAMEL and SCUDIF (Rel-7)	SA1	7.1.3	Approval
SP-040737	CR to 22.234 on New features of I-WLAN for Rel-7	SA1	7.1.3	Approval
SP-040738	CRs to CR to 42.068 on Sending a SMS to a Group and a Voice Group Call (Rel-7)	SA1	7.1.3	Approval
SP-040739	TR 22.978 (v1.0.0) on All-IP Network (AIPN) Feasibility Study (Rel-7)	SA1	7.1.3	Information
SP-040740	TR 22.979 (v1.0.0) on Feasibility study on Combined CS Calls and IMS Sessions (Rel-7)	SA1	7.1.3	Information
SP-040741	Update to GUP WI	SA1	7.1.3	Approval
SP-040742	New of WI for Combinational Services	SA1	7.1.3	Approval
SP-040743	New WI on CAMEL Trunk Triggers	SA1	7.1.3	Approval
SP-040744	Proposal for update of TSs from Rel-5 to Rel-6	SA1	7.1.3	Approval

# Annex 2: CRs provided to this Plenary

Meeti ng	SA Doc	TS No.	CR No	Re v	Rel	Ca t	Subject	Vers. Curre nt	Vers New	Work Item	SA1 Doc
SP-26	SP-040726	21.905	059	-	Rel-6	F	Definition of Radio Access Technology	6.7.0	6.8.0	TEI6	S1-040941
SP-26	SP-040734	22.038	025	-	Rel-7	В	Extension of the USAT bearers	7.1.0	7.2.0	WLAN	S1-040985
SP-26	SP-040735	22.071	071	-	Rel-7	С	Introducing A-GNSS concept to extend A-GPS to include GALILEO	7.0.0	7.1.0	A-GNSS	S1-040973
SP-26	SP-040735	22.071	072	-	Rel-7	С	Velocity Service Description	7.0.0	7.1.0	LCS-R7	S1-040987
SP-26	SP-040736	22.078	178	-	Rel-7	Α	Interworking between CAMEL and SCUDIF	7.1.0	7.3.0	SCUDIF	S1-040972
SP-26	SP-040725	22.101	155	-	R99	F	USIM support by 2G terminals	3.17.0	3.18.0	TEI	S1-040966
SP-26	SP-040725	22.101	156	-	Rel-4	Α	USIM support by 2G terminals	4.10.0	4.11.0	TEI4	S1-040967
SP-26	SP-040727	22.127	072	-	Rel-6	F	Delete Requirements for User- Application Authentication functions"	6.6.0	6.7.0	OSA3	S1-040920
SP-26	SP-040727	22.127	073	-	Rel-6	F	Delete Requirements for User Data Management (OSA support for GUP)"	6.6.0	6.7.0	OSA3	S1-040921
SP-26	SP-040727	22.127	074	-	Rel-6	F	Delete Requirements for IP session function"	6.6.0	6.7.0	OSA3	S1-040922
SP-26	SP-040728	22.141	018	-	Rel-6	F	Delete Requirements for IP session function	6.6.0	6.7.0	OSA3	S1-040993
SP-26	SP-040729	22.228	026	-	Rel-6	F	IMS Support of CS services	6.6.0	6.7.0	IMS2	S1-040998
SP-26	SP-040737	22.234	010	-	Rel-7	В	New features of I-WLAN	6.2.0	7.0.0	WLAN- SC	S1-040995
SP-26	SP-040730	22.240	007	-	Rel-6	F	Removal of erroneous use cases	6.4.0	6.5.0	GUP	S1-040989
SP-26	SP-040731	22.242	003	-	Rel-6	F	Removing text in DRM stage 1 specification and reference OMA RD	6.2.0	6.3.0	DRM	S1-040963
SP-26	SP-040732	22.950	009	-	Rel-6	F	Priority Service optional support for Emergency Service	6.3.0	6.4.0	PRIOR	S1-040979
SP-26	SP-040733	22.952	004	-	Rel-6	F	Priority Service optional support for Emergency Service	6.1.0	6.2.0	PRIOR	S1-040980
SP-26	SP-040738	42.068	006	-	Rel-7	F	Sending SMS to a Voice Group Call	7.0.0	7.1.0	EGCS	S1-040948
SP-26	SP-040738	42.068	007	-	Rel-7	В	Sending a SMS to a Group	7.0.0	7.1.0	EGCS	S1-040991

# Annex 3: 3G&GSM TSs and TRs under SA1 responsibility

Spec	Title	Ph1	Ph2	R96	R97	R98	R99	Rel-4	Rel-5	Rel-6	Rel-7
01.02	General Description of a GSM Public Land Mobile Network (PLMN)		4.0.2	5.0.0	6.0.1						
01.48	ISDN-based DECT/GSM interworking; Feasibility study			5.0.1	6.0.1						
01.56	GSM Cordless Telephony System (CTS) (Phase 1); CTS Authentication and Key Generation Algorithms Requirements					7.0.0					
01.60	GPRS requirements				6.0.0						
02.01	Principles of telecommunication services supported by a GSM Public Land Mobile Network(PLMN)	3.2.0	4.6.0	5.5.0	6.2.0	7.1.0					
02.02	Bearer Services (BS) Supported by a GSM Public Land Mobile Network (PLMN)	3.2.0	4.2.2	5.3.2	6.1.1	7.0.2					
02.03	Teleservices Supported by a GSM Public Land Mobile Network (PLMN)	3.4.1	4.3.1	5.3.2	6.0.0	7.0.0					
02.04	General on Supplementary Services	3.7.1	4.9.1	5.7.4	6.1.1	7.1.2					
02.06	Types of Mobile Stations (MS)	3.2.0	4.5.2	5.2.1	6.1.1	7.0.1					
02.07	Mobile Station (MS) Features	3.4.1	4.8.2	5.4.1	6.2.0	7.1.0					
02.11	Service accessibility	3.7.0	4.9.0	5.0.1	6.1.0	7.1.0					
02.16	International Mobile Station Equipment Identities (IMEI)	3.0.1	4.7.1	5.2.0	6.2.0	7.2.0					
02.20	Collection charges	3.0.1									
02.22	Stage 1 for personalisation of GSM ME			5.4.0	6.0.0	7.0.0					
02.24	Description of Charge Advice Information (CAI)		4.5.0	5.0.1	6.0.1	7.0.1					
02.30	Man-machine Interface (MMI) of the Mobile Station (MS)	3.9.0	4.13.0	5.7.1	6.1.0	7.1.1					
02.34	High Speed Circuit Switched Data (HSCSD); Stage 1			5.2.1	6.0.0	7.0.0					
02.40	Procedures for Call Progress Indications	3.2.0	4.5.0	5.0.0	6.0.0	7.0.1					
02.41	Operator Determined Barring		4.5.2	5.1.1	6.0.0	7.0.0					
02.42	Network Identity and Timezone (NITZ); Service Description, Stage 1			5.1.0	6.0.0	7.0.0					
02.43	Support of Localised Service Area (SoLSA); Service description; Stage 1					7.3.0	8.0.0				
02.56	GSM Cordless Telephony System (CTS), Phase 1; Service description; Stage 1					7.2.1	8.0.1				
02.57	Mobile Station Application Execution Environment (MExE) Service description Stage 1					7.1.0					
02.60	General Packet Radio Service Stage 1 Description				6.3.1	7.5.0					
02.63	Packet Data on Signalling channels Service (PDS); Stage 1			5.0.0	6.0.0	7.0.0					
02.66	Support of Mobile Number Portability (MNP); Service description; Stage 1					7.1.0					
02.67	Enhanced Multi-Level Precedence and Pre-			5.1.1	6.1.1	7.0.1					

	emption Service (eMLPP); Stage 1										
02.68	Voice Group Call Service (VGCS); Stage 1			5.2.1	6.0.1	7.0.2	8.1.0				
02.69	Voice Broadcast Service (VBS); Stage 1			5.2.1	6.0.1	7.0.2	8.1.0				
02.71	Location Services (LCS); Stage 1					7.3.0					
02.72	Call Deflection Service description; Stage 1					7.2.1					
02.78	Customized Applications for Mobile network Enhanced Logic (CAMEL); Service definition (Stage 1)			5.6.0	6.6.1	7.2.0					
02.79	Support of Optimal Routeing (SOR); Service definition (Stage 1)			5.2.0	6.0.0	7.0.0					
02.81	Line Identification Supplementary Services; Stage 1		4.6.1	5.1.0	6.0.0	7.0.0					
02.82	Call Forwarding (CF) Supplementary Services; Stage 1	3.6.1	4.5.2	5.0.0	6.0.0	7.0.1					
02.83	Call Waiting (CW) and Call Hold (HOLD) Supplementary Services; Stage 1		4.6.7	5.0.0	6.0.0	7.0.0					
02.84	MultiParty (MPTY) Supplementary Services; Stage 1		4.4.7	5.0.0	6.0.0	7.0.0					
02.85	Closed User Group (CUG) Supplementary Services; Stage 1		4.2.6	5.0.0	6.0.0	7.0.0					
02.86	Advice of Charge (AoC) Supplementary Services; Stage 1		4.1.5	5.0.0	6.0.0	7.0.0					
02.87	User-to-User Signalling (UUS) Service Description; Stage 1					7.1.2					
02.88	Call Barring (CB) Supplementary Services; Stage 1	3.6.1	4.4.3	5.0.0	6.0.0	7.0.0					
02.90	Unstructured Supplementary Service Data (USSD); Stage 1		4.1.1	5.1.0	6.0.0	7.0.0					
02.91	Explicit Call Transfer (ECT)			5.1.1	6.0.0	7.0.0					
02.93	Completion of Calls to Busy Subcriber (CCBS) Service Description; Stage 1				6.0.1	7.0.0					
02.95	Support of Private Numbering Plan (SPNP); Service description; Stage 1			5.2.0	6.0.0	7.0.0	8.0.0				
02.96	Name Identification Supplementary Services; Stage 1				6.0.1	7.0.0					
02.97	Multiple Subscriber Profile (MSP) Service description, Stage 1					7.1.0					
21.905	Vocabulary for 3GPP Specifications						3.3.0	4.5.0	5.8.0	6.7.0	
22.001	Principles of circuit telecommunication services supported by a Public Land Mobile Network (PLMN)						3.2.0	4.3.0	5.0.0		
22.002	Circuit Bearer Services (BS) supported by a Public Land Mobile Network (PLMN)						3.6.0	4.2.0	5.0.0		
22.003	Circuit Teleservices supported by a Public Land Mobile Network (PLMN)						3.3.0	4.3.0	5.2.0		
22.004	General on supplementary services						3.3.0	4.3.0	5.1.0		
22.011	Service accessibility						3.8.0	4.8.0	5.1.0	6.4.0	7.0.0
22.016	International Mobile Equipment Identities (IMEI)						3.3.0	4.2.1	5.0.0		
22.024	Description of Charge Advice Information (CAI)						3.0.1	4.0.0	5.0.0		

22.030	Man-Machine Interface (MMI) of the User Equipment (UE)	3.4.0	4.1.0	5.0.0	6.0.0	7.0.0
22.034	High Speed Circuit Switched Data (HSCSD); Stage 1	3.2.1	4.1.0	5.0.0		
22.038	USIM/SIM Application Toolkit (USAT/SAT); Service description; Stage 1	3.4.0	4.3.0	5.4.0	6.3.0	7.1.0
22.041	Operator Determined Call Barring	3.3.1	4.1.0	5.0.0	6.2.0	
22.042	Network Identity and Time Zone (NITZ) service description; Stage 1	3.0.1	4.2.1	5.1.0		
22.057	Mobile Execution Environment (MExE) service description; Stage 1	3.0.1	4.1.0	5.4.0		
22.060	General Packet Radio Service (GPRS); Service description; Stage 1	3.5.0	4.4.0	5.3.0	6.0.0	
22.066	Support of Mobile Number Portability (MNP); Stage 1	3.2.0	4.0.0	5.1.0	6.1.0	
22.067	enhanced Multi-Level Precedence and Pre- emption service (eMLPP); Stage 1	3.0.1	4.1.0	5.0.0	6.1.0	
22.071	Location Services (LCS); Stage 1	3.5.0	4.6.0	5.4.0	6.7.0	7.0.0
22.072	Call Deflection (CD); Stage 1	3.0.1	4.0.0	5.0.0		
22.078	Customized Applications for Mobile network Enhanced Logic (CAMEL); Service description; Stage 1	3.9.0	4.5.0	5.14.0	6.6.0	7.1.0
22.079	Support of optimal routeing; Stage 1	3.0.1	4.0.0	5.0.0		
22.081	Line Identification supplementary services; Stage 1	3.2.0	4.1.0	5.0.0		
22.082	Call Forwarding (CF) Supplementary Services; Stage 1	3.0.2	4.2.0	5.0.0		
22.083	Call Waiting (CW) and Call Hold (HOLD) supplementary services; Stage 1	3.0.1	4.1.0	5.0.0		
22.084	MultiParty (MPTY) supplementary service; Stage 1	3.0.1	4.1.0	5.0.0		
22.085	Closed User Group (CUG) supplementary services; Stage 1	3.1.0	4.1.0	5.0.0		
22.086	Advice of Charge (AoC) supplementary services; Stage 1	3.1.0	4.0.0	5.0.0		
22.087	User-to-user signalling (UUS); Stage 1	3.1.0	4.0.0	5.0.0		
22.088	Call Barring (CB) supplementary services; Stage 1	3.0.2	4.1.0	5.0.0		
22.090	Unstructured Supplementary Service Data (USSD); Stage 1	3.1.0	4.0.0	5.0.0		
22.091	Explicit Call Transfer (ECT) supplementary service; Stage 1	3.1.0	4.0.0	5.0.0		
22.093	Completion of Calls to Busy Subscriber (CCBS); Service description, Stage 1	3.0.1	4.0.0	5.0.0		
22.094	Follow Me service description - Stage 1	3.1.0	4.1.0	5.0.0	6.0.0	
22.096	Name identification supplementary services; Stage 1	3.0.1	4.0.0	5.0.0		
22.097	Multiple Subscriber Profile (MSP) Phase 1; Service description - Stage 1	3.2.0	4.1.0	5.0.0		

22.100	UMTS Phase 1			3.7.0				T
22.101	Service aspects; Service principles				4.10.0	5.13.0	6.8.0	7.0.0
22.105	Services and service capabilities			3.10.0		5.2.0	6.2.0	
22.115	Service Aspects Charging and billing			3.4.0	4.1.0	5.4.0	6.4.0	
22.121	Service aspects; The Virtual Home Environment; Stage 1			3.3.1	4.1.1	5.3.1		
22.127	Service Requirement for the Open Services Access (OSA); Stage 1				4.4.0	5.5.0	6.6.0	
22.129	Handover requirements between UTRAN and GERAN or other radio systems			3.6.0	4.4.0	5.2.0	6.1.0	
22.135	Multicall; Service description; Stage 1			3.4.0	4.2.0	5.0.0		
22.140	Multimedia Messaging Service (MMS); Stage 1			3.1.0	4.3.0	5.4.0	6.6.0	
22.141	Presence service; Stage 1						6.2.1	
22.146	Multimedia Broadcast/Multicast Service (MBMS); Stage 1						6.6.0	
22.174	Push service; Stage 1						6.2.0	
22.226	Global text telephony (GTT); Stage 1: Service description					5.2.0		
22.228	Service requirements for the Internet Protocol (IP) multimedia core network subsystem (IMS); Stage 1					5.6.0	6.6.0	7.0.0
22.233	Transparent end-to-end packet-switched streamng service; Stage 1					5.0.0	6.3.0	
22.234	Requirements on 3GPP system to Wireless Local Area Network (WLAN) interworking						6.2.0	
22.240	Service requirements for 3GPP Generic User Profile (GUP); Stage 1						6.4.0	
22.242	Digital Rights Management (DRM); Stage 1						6.2.0	
22.243	Speech recognition framework for automated voice services; Stage 1						6.4.0	
22.246	Multimedia Broadcast/Multicast Service (MBMS) user services; Stage 1						6.2.0	
22.250	IP Multimedia Subsystem (IMS) Group Management; Stage 1						6.0.0	
22.340	IP Multimedia Subsystem (IMS) messaging; Stage 1						6.1.0	
22.800	IP Multimedia Subsystem (IMS) subscription and access scenarios						6.0.0	
22.934	Feasibility study on 3GPP system to Wireles Local Area Network (WLAN) interworking						6.2.0	
22.940	IP Multimedia Subsystem (IMS) messaging; Stage 1						6.0.0	
22.944	Service requirements for UE functionality split					5.1.0		1
22.949	Study on a generalized privacy capability						6.0.0	1
22.950	Priority service feasibility study						6.3.0	
22.951	Service aspects and requirements for network sharing						6.1.0	
22.952	Priority service guide						6.1.0	
22.953	Multimedia priority service feasibility study							0.3.0

22.971	Automatic establishment of roaming relationships			3.1.1				
22.975	Advanced addressing			3.1.0				
22.977	Feasibility study for speech-enabled services						6.0.0	
22.978	All-IP feasibility study							0.4.0
22.979	Feasibility study on combined Circuit Switched (CS) calls and IP Multimedia Subsystem (IMS) sessions							0.2.0
42.043	Support of Localised Service Area (SoLSA); Service description; Stage 1				4.0.0	5.0.0		
42.056	GSM Cordless Telephony System (CTS), Phase 1; Service description; Stage 1				4.0.0	5.0.0		
42.068	Voice Group Call Service (VGCS); Stage 1				4.1.0	5.0.1	6.0.0	7.0.0
42.069	Voice Broadcast Service (VBS); Stage 1				4.1.0	5.0.1	6.0.0	