Technical Specification Group Services and System Aspects   ***TSGS#19(03)0011***
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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

1 General Overview of Progress

The TSG_SA_WG1#18 Plenary Meeting was held in San Francisco, USA from the 20th to 24th January 2003. It was chaired by Mr Kevin Holley (mmO2) and the secretary was Mr Michael Clayton from the MCC. The host was AT&T Wireless Services and Rogers Wireless.

2 External Liaisons

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

Document Number	Title	To	Copy	Sent
S1-030258	UICC temperature Range proposal	SCP	T3, SA, GSMA SCaG	27/01/2003
S1-030268	Reply to LS on MM7 functionality enhancements requested by GSMA SERG	T2, GSMA SERG		27/01/2003
S1-030272	Third Form Factor work status and request for additional requirements	ETSI SCP	GSMA SCAG, T3, SA	27/01/2003
S1-030275	LS to OMA on "Generalised Privacy Capability"	OMA Requirements Group		27/01/2003

3 Change Requests for Rel-4 or earlier

There are no CRs for Rel-4 or earlier.

4 Change Requests for Rel-5

The following CRs are for Release 5.

4.1 Entities of the mobile system (21.905 Rel-5/6)

At an earlier meeting of SA1, the group received a liaison statement from SA5 relating to the definition of Entities of the mobile system. SA1 queried the need for this and received the reponse that the specific entities of the mobile system that are dedicated to the provisioning of a given (set of) service(s) are presented in 3GPP TS 23.002 V5.7.0.

The highlevel grouping of all these entities is a valuable concept for a better understanding of the mobile system and ultimately help to easier identify common requirements and solutions in the area of Telecom Management.

Therefore, based on the advice of SA5, SA1 is presenting CRs to 21.905 Rel-5 and Rel-6 in document SP-030012.

SA	Doc. No.	Spec	CR	Rev	Phase	Cat	Subject	Version-Current	Version-New	SA1 Doc.No.
SP-19	SP-030012	21.905	045		Rel-5	F	CR on Entities of the mobile system	5.5.0	5.6.0	S1-030239
SP-19	SP-030012	21.905	046		Rel-6	A	CR on Entities of the mobile system	6.1.0	6.2.0	S1-030238

4.2 SS SMS transfer over GPRS (22.060 Rel-5)

Support of SMS over GPRS is mandatory in the standard. However, there are commercial issues related to this from an operator perspective which may prevent the support of SMS over GPRS in some networks. If, on the other hand, the UE relies on the support of SMS

over GPRS this may lead to a situation in which the UE is unable to send an SMS at all. This CR proposes a workaround for the behaviour of a mobile attempting to send SMS over GPRS in case this attempt fails, either due to a direct failure indication or rejection from the network, or due to the complete lack of a response.

The CR is provided in document SP-030013 for approval.

SA	Doc. No.	Spec	CR	Rev	Phase	Cat	Subject	Version-Current	Version-New	SA1 Doc.No.
SP-19	SP-030013	22.060	030		Rel-5	F	CR to 22.060 on SS SMS transfer over GPRS	5.2.0	5.3.0	S1-030237

4.3 CAMEL interworking with CLIR and COLR (22.078 Rel-5)

SA1 has received a proposed CR to correct the interworking between CAMEL and CLIR/COLR.

Interaction with CLIR

The stage1 specifies that the CSE shall be able to change the presentation indicator of the calling party number for Mobile Originated (MO) and Mobile Forwarded (MF) calls. The stage 2 specification for CAMEL, however, allows this for MO calls only. The reason for this is because when a call is forwarded the Calling Party Number pertains to the Original Calling Subscriber, who is not the CAMEL subscriber. Hence, the CAMEL service should not be allowed to affect CLIR in this case.

This includes deleting the reference to "IPLMN" as this is relevant for MF calls only. (MO calls are placed in the VPLMN.)

Interaction with COLR

The stage 1 specifies that the CSE shall be able to change the presentation indicator of the connected party number for Mobile Terminated (MT) calls. The stage 2 specification for CAMEL, however, allows this for Mobile Originated (MO), Mobile Forwarded (MF), Mobile Terminated (MT) and Mobile Terminated calls in the VMSC (VT.)

The reason for this is that the CAMEL Service may want to prevent the calling subscriber being presented the connected number when, for instance, if a call is set up but the CAMEL Service connects you to a voice mail box system for a security announcement. The CAMEL Service does not want the calling subscriber to get the Connected Number presented on the display, since the subscriber in that case could call the security destination directly. This kind of functionality may be applied to all call types.

This includes adding a reference to "IPLMN" as the functionality is valid also for MO and MF calls.

The CR is presented, with a companion CR to Rel-6, in document SP-030014 for approval.

SA	Doc. No.	Spec	CR	Rev	Phase	Cat	Subject	Version-Current	Version-New	SA1 Doc.No.
SP-19	SP-030014	22.078	154		Rel-5	F	Correction to CAMEL interworking with	5.9.1	5.10.0	S1-030071

							CLIR and COLR			
SP-19	SP-030014	22.078	159		Rel-6	A	Correction to CAMEL interworking with CLIR and COLR	6.0.0	6.1.0	S1-030287

4.4   Removal of duplicate text in CAMEL TS (22.078 Rel-5)

During the process of editing 22.078, it was found that section 5.3.2.2 contains duplicate text relating to the action that a CSE can perform after it sends instructions to the VPLMN/HPLMN. This change requests is an editorial correction, removing this additional text and is presented in document SP-030015.

There is no mirror CR to release 6 since the duplicate text does not exist in that version.

SA	Doc. No.	Spec	CR	Rev	Phase	Cat	Subject	Version-Current	Version-New	SA1 Doc.No.
SP-19	SP-030015	22.078	156		Rel-5	D	Removal of duplicate text in procedure describing 'subscribed dailled services'	5.9.1	5.10.0	S1-030254

4.5   Removal of $(CAMEL4)$ markers (22.078 Rel-5/6)

Histrocially, TS 22.078 used 'markers' between CAMEL phases to highlight the differences with sucessive CAMEL releases in the form of $(CAMEL4$).

Within CAMEL Phase 4, the use of this indication seems to be inconsistent, e.g. "5.7 Mid call procedure $(CAMEL4$)" but "5.3.1 Procedure when dialled digits have been collected" is mentioning "Mid call event (DTMF or out of band information)." in the subclause text. However this "Mid call event..." text is not marked as "CAMEL4$" although it should be. Furhter, two occurances of markers for CAMEL phase 3 still exist.

These change request proposes the removal of the CAMEL phase markers completely and are provided in document SP-030016.

SA	Doc. No.	Spec	CR	Rev	Phase	Cat	Subject	Version-Current	Version-New	SA1 Doc.No.
SP-19	SP-030016	22.078	157		Rel-5	F	Removal of $(CAMEL4)$ markers	5.9.1	5.10.0	S1-030135
SP-19	SP-030016	22.078	158		Rel-6	A	Removal of $(CAMEL4)$ markers	6.0.0	6.1.0	S1-030136

4.6   SIM access to IMS (22.101 Rel-5)

Requirements on access to the IMS services via existing R99/R4 USIMs were agreed by SA1 to enable a smoother customer transition towards new IMS services.

However it seems more and more realistic that at the launch of IMS services, a number of operators will still be supporting 2G SIMs.

Moreover, operators should be given flexibility in planning SIMs replacements and not be forced by incoming SIM-uncompatible new IMS services.

Requiring support of GSM SIM for IMS changes the way security for IMS is performed when accessing IMS via SIM but other methods based on GSM SIM algorithms (e.g. EAP SIM) could be applied to IMS authentication to enable access via legacy SIMs as well, although they don't guarantee mutual authentication like IMS AKA.

The CR is provided for Rel-5 in document SP-030017. It should be noted here that this situation cannot go on for ad infinitum. SA1 has not provided a CR for Rel-6, but requests guidance from SA on if this requirement is appropriate for Rel-6.

SA	Doc. No.	Spec	CR	Rev	Phase	Cat	Subject	Version-Current	Version-New	SA1 Doc.No.
SP-19	SP-030017	22.101	118		Rel-5	F	CR to 22.101 on SIM access to IMS (Rel-5)	5.8.0	5.9.0	S1-030282

On the subject of the SIM, SA1 investigated the issue of its support in Rel-5. In this instance, a CR was produced that adds a note clarifying that, in 22-series SIM refers to Rel 4 and that if SIM is supported all mandatory features need to be supported.

This CR, and an equivalent for Rel-6 are provided in document SP-030148.

SA	Doc. No.	Spec	CR	Rev	Phase	Cat	Subject	Version-Current	Version-New	SA1 Doc.No.
SP-19		22.101	116	-	Rel-5	F	CR to 22.101 Rel 5 on SIM support	5.8.0	5.9.0	S1-030256
SP-19		22.101	117	-	Rel-6	A	CR to 22.101 Rel 5 on SIM support	6.2.0	6.3.0	S1-030257

4.7   Correlation between service class and traffic class (22.105 Rel-5/6)

During the last SA1 meeting an LS from SA2 (S1-021997) was discussed asking if a statement about the correlation between service classes and traffic classes should be added to TS 22.105. In the discussion it was agreed to have such statement for Release 5 onwards to prevent any misunderstanding due to the same terminology used for the service classes and traffic classes.

The CRs for Rel-5 and Rel-6 are presented in document SP-030018 for approval.

SA	Doc. No.	Spec	CR	Rev	Phase	Cat	Subject	Version-Current	Version-New	SA1 Doc.No.
SP-19	SP-030018	22.105	040		Rel-5	F	Correlation between service class and traffic class	5.2.0	5.3.0	S1-030273
SP-19	SP-030018	22.105	041		Rel-6	A	Correlation between service class and traffic class	6.0.0	6.1.0	S1-030274

5   Change Requests for Rel-6

The following sections contain CRs to release 6.

5.1   Delay Criteria and Service Examples (22.060 Rel-6)

SA1 is presenting two CRs to 22.060 on Delay Criteria and Service Examples.

The first provides some service examples which may be supported by either PTP or PTM bearers.

In the second,it was identified that the specification of the delay criteria does not explicitly cover the case where the intial SDU to establish communications contains user data.

The CRs are provided in document SP-030019 for approval.

SA	Doc. No.	Spec	CR	Rev	Phase	Cat	Subject	Version-Current	Version-New	SA1 Doc.No.
SP-19	SP-030019	22.060	028		Rel-6	D	Service Examples	5.2.0	6.0.0	S1-030251
SP-19	SP-030019	22.060	029		Rel-6	C	Delay Criteria	5.2.0	6.0.0	S1-030252

5.2 Applicability of barring capability to the Location Service (22.071 Rel-6)

It would appear that there is no description to bar an Location Service usage of a Target UE by network operators in current stage1. There is a need for operators to have a barring capability of LCS in a similar way to the barring capability available for SMS. This is especially so in the roaming case, this barring function would be essential for operators to limit their financial exposure to defaulters.

The CR is provided in document SP-030020 for approval.

SA	Doc. No.	Spec	CR	Rev	Phase	Cat	Subject	Version-Current	Version-New	SA1 Doc.No.
SP-19	SP-030020	22.071	049		Rel-6	B	Applicability of barring capability to the Location Service	6.2.0	6.3.0	S1-030277

5.3 Corrections to re-introduction of enhancements of dialled services in CAMEL 4 (22.078 Rel-6)

The procedure for enhanced subscriber dialled services when no relationship exists with the CSE (as proposed in SP-020817) should be identical to the procedure when dialled digits have been collected for normal CAMEL call set up request (ie O-CSI triggered call). The change request in SP-020817 that re-introduced the procedures for the "Enhancements CSE capabilitiy for Dialled Services" was based on text that pre-dated additional changes to the normal CAMEL call set up request, namely the possibilty that the CSE could continue handling of the call party without routeing the call to the destination (for CPH purposes. SA1 anticipate the CPH capabilities will be applicable to dialled services. This purpose of this change request is to have identical capabilities for the following cases:

Call triggered by a O-CSI
Call triggered by a D-CSI (and not previously triggered by an O-CSI)

The CR is provided in document SP-030021 for approval.

SA	Doc. No.	Spec	CR	Rev	Phase	Cat	Subject	Version-Current	Version-New	SA1 Doc.No.
SP-19	SP-030021	22.078	155		Rel-6	F	Corrections to re-introduction of enhancements of dialled services in CAMEL 4	6.0.0	6.1.0	S1-030075

5.4 Simultaneous connection to 3GPP systems and I-WLANs (22.101 Rel-6)

In SA1, it was identified that there are use cases when simultaneous access to the 3GPP system and an I-WLAN are required. For example, for an integrated WLAN/3GPP device

the user will want to maintain the WLAN connection when an incoming call is received. The user should not be forced to drop the WLAN connection to take the voice call.

The CR to make the changes is provided in document SP-030022 for approval.

SA	Doc. No.	Spec	CR	Rev	Phase	Cat	Subject	Version-Current	Version-New	SA1 Doc.No.
SP-19	SP-030022	22.101	114		Rel-6	B	Simultaneous connection to 3GPP systems and I-WLANs	6.2.0	6.3.0	S1-030215

5.5   Clarification of the charging entity WLAN & when Roaming (22.115 Rel-6)

During the last SA1, a contribution was received which contained new text on WLAN interworking for clarification in section 4, 4.2, and a new section 5.2.6 of TS 22.115 Rel-6.

Interworking means between WLAN and 3GPP system should be able to support many-to-many relationship between the two systems (i.e. the specifications should allow that one WLAN can interwork with several 3GPP systems and one 3GPP system can interwork with several WLANs). But today are only fixed operators and mobile operators included in TS 22.115. The purpose of this document is to clarify these issues.

At the same time, SA1 is fixing another charging problem. The mechanism to charge a subscriber based on TAP records received by the HPLMN from the VPLMN will not work anymore in the case that the service logic is "owned" by the HPLMN (e.g. MMS/IMS): In these cases the service actually invoked by the subscriber will be transparent to the VPLMN and consequently TAP records created by the VPLMN cannot provide sufficient detail on the service invocation. This issue was highlighted in a liaison statement from GSMA CPWP (see LS S1-030125).

The CRs are provided in document SP-030023 for approval.

SA	Doc. No.	Spec	CR	Rev	Phase	Cat	Subject	Version-Current	Version-New	SA1 Doc.No.
SP-19	SP-030023	22.115	008		Rel-6	B	CR to TS 22.115 - Clarification of the charging entity WLAN	5.2.0	6.0.0	S1-030184
SP-19	SP-030023	22.115	010		Rel-6	B	CR to 22.115 on roaming awareness for charging	5.2.0	6.0.0	S1-030286

5.6   Clarification of prioritisation and preferred delivery (22.140 Rel-6)

The current version of 22.140 contains a requirement for MM prioritisation that is ambiguous. It currently implies that MM prioritisation is something that will provide prioritised handling of the MM by the network. The delivery of that prioritised handling, when possible at all, is very complex. Some readers have also interpreted the requirement to be a method to tag a MM with an importance level.

The SA1 Messaging SWG discussed this and agreed that the proposed new wording for prioritisation is the MMS requirement. The change is provided in document SP-030024 for approval.

SA	Doc. No.	Spec	CR	Rev	Phase	Cat	Subject	Version-Current	Version-New	SA1 Doc.No.

SA	Doc. No.	Spec	CR	Rev	Phase	Cat	Subject	Version-Current	Version-New	SA1 Doc.No.
SP-19	SP-030024	22.140	024		Rel-6	C	Update to 22.140 to clarify prioritisation	6.0.0	6.1.0	S1-030267

5.7 Clarification of network status attribute description in Presence (22.141 Rel-6)

Currently it is stated within the Presence Stage 1 (TS 22.141) that the network status attribute of the Presence Service describes the 'connectivity of the device'. This text is unclear and insufficiently describes information this attribute may include. Therefore, the text describing the network status attribute within Chapter 5.3 is clarified.

The CR is presented in document SP-030025.

SA	Doc. No.	Spec	CR	Rev	Phase	Cat	Subject	Version-Current	Version-New	SA1 Doc.No.
SP-19	SP-030025	22.141	017		Rel-6	C	Clarification of network status attribute description within Presence Service Stage 1	6.1.0	6.2.0	S1-030066

5.8 MBMS Cell broadcast in shared network (22.146 Rel-6)

In the current dynamic market place network sharing is an important tool for operators to reduce investment cost. This is valid especially for sparsely populated regions where just one WCDMA carrier is enough for supporting the generated traffic.

It is important that the MBMS broadcast service functions the same way, from a customer point of view, in a shared network as in a non-shared network. Therefore, SA1 is proposing text to define broadcast services separately for the subscribers and inbound roamers of each one of the operators sharing radio network.

The changes are provided in document SP-030026 for approval.

SA	Doc. No.	Spec	CR	Rev	Phase	Cat	Subject	Version-Current	Version-New	SA1 Doc.No.
SP-19	SP-030026	22.146	040		Rel-6	C	CR to 22.146 - MBMS Cell broadcast in shared network	6.1.0	6.2.0	S1-030154

5.9 CRs to PUSH stage 1 on various subjects (22.174 Rel-6)

Since the approval of 22.174 at SA #17, SA1 has been steadily refining it. To this end, a number of changes are presented to SA #19.

The change in CR 006 removes the requirements on MMS as these duplicate a function already available in MMS.

The change in CR 007 deals with the barring of Push Service. The requirement is unclear, and open to misinterpretation and so it is clarified.

The change in CR 008 proposes the removal of 'Null' Interworking Chapter. This has been in the specification for some time and no requirements have been identified.

The change in CR009 proposes the removal of "Null" Feature Interactions chapter. Feature Interactions will be placed in a separate TR in SA1. There is no reason for Push

to do this differently from other SA1 capabilities. Also, no requirements have yet been identified.

Finally, the change in CR 010 deals with the vague requirement for Push Service Independence. Hence, the requirement for independence is made explicit to both IMS and SMS.

The CRs are provided in document SP-030027 for approval.

SA	Doc. No.	Spec	CR	Rev	Phase	Cat	Subject	Version-Current	Version-New	SA1 Doc.No.
SP-19	SP-030027	22.174	006		Rel-6	C	Removal of MMS content	6.1.0	6.2.0	S1-030059
SP-19	SP-030027	22.174	007		Rel-6	C	Barring of Push Service	6.1.0	6.2.0	S1-030250
SP-19	SP-030027	22.174	008		Rel-6	C	Removal of 'Null' Interworking Chapter	6.1.0	6.2.0	S1-030063
SP-19	SP-030027	22.174	009		Rel-6	D	CR to the PUSH Stage 1 TS on the Feature Interactions section	6.1.0	6.2.0	S1-030117
SP-19	SP-030027	22.174	010		Rel-6	F	Push Service Independence	6.1.0	6.2.0	S1-030281

5.10   GUP for IMS subscription management (22.228 Rel-6)

The Generic User Profile (GUP) provides for the generic data model and interfaces for user data handling. The IMS subscription data stored in HSS is one case where GUP can be well applied. The HSS has the Sh interface but its scope is limited in a way that it cannot fulfill e.g. all the management needs.

Therefore, Generic User Profile (GUP) is added to clause 2 'References' and clause 3 'Definitions and abbreviations'. A requirement is added to clause 6 'Standardised service capability approach' that there shall be standardised data and mechanisms which allow the IM CN Subsystem user related data to be managed and read. It is mentioned that GUP provides these mechanisms.

The CR is provided in document SP-030028 for approval.

SA	Doc. No.	Spec	CR	Rev	Phase	Cat	Subject	Version-Current	Version-New	SA1 Doc.No.
SP-19	SP-030028	22.228	018		Rel-6	B	GUP for IMS subscription management	6.1.0	6.2.0	S1-030182

5.11   PSS charging information (22.223 Rel-6)

It was considered in SA1 that the PSS charging information is insufficient in 22.223. Therefore, a number of date elements are added to the required charging information.

The CR to do this is provided in document SP-030029 for approval.

SA	Doc. No.	Spec	CR	Rev	Phase	Cat	Subject	Version-Current	Version-New	SA1 Doc.No.
SP-19	SP-030029	22.233	010		Rel-6	B	PSS charging information	6.1.0	6.2.0	S1-030245

5.12   DRM collaboration with OMA (22.242 Rel-6)

Based on the decision taken at SA #18, that the stage 2 and 3 of DRM will be done in the OMA, SA1 is proposing a modification to the stage 1 in order to point to OMA work. A

notifcation is added to the Scope chapter informing that the Stage 2 and Stage 3 requirements are adopted from the corresponding OMA specifications.

The change is provided in document SP-030030 for approval

SA	Doc. No.	Spec	CR	Rev	Phase	Cat	Subject	Version-Current	Version-New	SA1 Doc.No.
SP-19	SP-030030	22.242	002		Rel-6	B	DRM collaboration with OMA	6.1.0	6.2.0	S1-030248

5.13   Correction of contradictory information (22.243 Rel-6)

SA1 has, for some time now, been discussing the issue of a default codec for DSR. After some consideration, the text in section 4.1 is brought in line with the information provided in Chapter 5 which mentions that either a conventional codec or DSR optimised codec will be the default uplink codec. Moreover, 3GPP SA4 is still debating the choice of codec for speech-enabled services. The current statement pre-supposes a particular kind of codec for these services.

The change is provided in document SP-030031 for approval.

SA	Doc. No.	Spec	CR	Rev	Phase	Cat	Subject	Version-Current	Version-New	SA1 Doc.No.
SP-19	SP-030031	22.243	003		Rel-6	F	Correction of contradictory information (former: 'Removal of references')	6.1.0	6.2.0	S1-030151

5.14   Required message formats for IMS messaging (22.340 Rel-6)

Based on a request from SA4 the text "AMR for audio" is being proposed to be changed into "AMR for speech". Furthermore the references to 26.234 has been updated to reflect the fact that it was split into 3 specifications.

The CR is provided in document SP-030032 for approval.

SA	Doc. No.	Spec	CR	Rev	Phase	Cat	Subject	Version-Current	Version-New	SA1 Doc.No.
SP-19	SP-030032	22.340	001		Rel-6	D	CR to 22.340 on required message formats for IMS messaging	6.0.0	6.1.0	S1-030260

5.15   Addressing progression of priority level (22.950 Rel-6)

For priority calls to be set up properly to or from external networks, the priority level has to be signalled transparently through all networks involved. To achieve this it is specified that the 3GPP eMLPP service shall interwork with priority services supported within the external networks (e.g. the ISDN MLPP service.) For external networks which support priority services that do not require a transparent transfer of the priority level through the network, this implies that network operators need to agree on the mapping of priority level indications between their respective networks.

This should be indicated in the table showing the eMLPP support for the Priority Service. The CR to do this is provided in document SP-030033.

SA	Doc. No.	Spec	CR	Rev	Phase	Cat	Subject	Version-Current	Version-New	SA1 Doc.No.
SP-19	SP-030033	22.950	006		Rel-6	C	CR to TS 22.950 addressing progression of priority level when interworking with external networks	6.1.0	6.2.0	S1-030185

5.16 Network sharing (22.951 Rel-6)

There are two CRs for 22.951.

The first relates to Implementing Network Sharing Requirements in Rel-6. The provision of services and service capabilities, which is possible to offer in a network, should not be restricted by the existence of the network sharing. Also, it should be possible for a core network operator to differentiate its service offering from other core network operators within the shared network and control the access to these service capabilities.

Therefore, SA1 is proposing a change to clarify this.

The second CR relates to Dynamic sharing of inbound roaming subscribers in a shared network. At the moment the facility to allocate inbound international roaming subscribers to one or the other core network operator so that a predetermined share between the sharing partners is achieved is only applied when the subscribers perform the initial registration to the shared network. It is instead more useful to trace regularly this share moving, if necessary, subscribers from one core network operator to another. Some text has been added to section 9.3 to reflect this thinking.

The changes are provided in document SP-030034 for approval.

SA	Doc. No.	Spec	CR	Rev	Phase	Cat	Subject	Version-Current	Version-New	SA1 Doc.No.
SP-19	SP-030034	22.951	001		Rel-6	C	Implementing Network Sharing Requirements in Rel-6	6.0.0	6.1.0	S1-030203
SP-19	SP-030034	22.951	002		Rel-6	B	Dynamic sharing of inbound roaming subscribers in a shared network	6.0.0	6.1.0	S1-030235

5.17 Reflecting Network Sharing Requirements in Rel-6

Still on the subject of network sharing, the following CRs have been elaborated to put into the core specification, the requirements for the feature.

The CR to 22.011 proposes new requirements for handling of roaming issues and selection of core network operator related to network sharing.

The change to 22.101 proposes that service and service capabilities shall not be restricted when network sharing exist. General requirements such as the transparancy to the user when operators sharing networks, which CN operator the user is connected to in a shared network area, charging requirements and network name display requirements are proposed in this CR.

The change to 22.115 puts in the support so that both end user and network sharing partners can be appropriately charged.

Finally, the change to 22.129 deals with service continiuty and handover requirements

between and within the shared networks.

The changes are provided in document SP-030035 for approval.

SA	Doc. No.	Spec	CR	Rev	Phase	Cat	Subject	Version-Current	Version-New	SA1 Doc.No.
SP-19	SP-030035	22.011	050		Rel-6	B	CR to TS 22.011 on Network Sharing Requirements in Rel-6	5.1.0	6.0.0	S1-030236
SP-19	SP-030035	22.101	115		Rel-6	B	Requirements for Network Sharing in Rel-6	6.2.0	6.3.0	S1-030269
SP-19	SP-030035	22.115	009		Rel-6	B	Requirements for Network Sharing in Rel-6	5.2.0	6.0.0	S1-030270
SP-19	SP-030035	22.129	027		Rel-6	B	Netshare CR to TS 22.129 on Requirements for Network Sharing in Rel-6	5.2.0	6.0.0	S1-030271

6   New TSs/TRs

SA1 has the following TSs or TRs to present for information/approval.

6.1   TS 22.240 V2.0.0 on Generic User Profile

TS 22.240 defines the stage one description to the 3GPP Generic User Profile (GUP). It specifies requirements to the 3GPP Generic User Profile, seen primarily from the user, home environment, serving network and value added service provider's points of view.

This was seen for information at SA #18. Since then UE requirements have been added. The content of GUP data has been clarified. Requirements on synchronisation and data consistency have been refined. All editor's notes have been resolved.

There are no outstanding issues.

The TS is presented for approval in SP-03036.

6.1   TS 22.800 V1.0.0 on IMS Subscription and access scenarios

Work in the SA1 IMS group on IMS Subscription and access scenarios has progressed well and SA1 is now ready to present the report for information.

The TR studies scenarios between subscribers and operators, mainly from IMS subscriptions point of view and verifies the compatibility of the possible scenarios within 3GPP Scope. Release 6 includes several work items like IMS enhancements, WLAN interworking that needs to be better understood so that clear requirement can be agreed and relevant technical specifications can be developed in time.

It is provided for information in document SP-030037

7   WIs from SA1

There are a number of WIDs being put forward by SA1 for approval; some are updates and the others are new.

7.1 Updated WIs from SA1

7.1.1 Updated OSA Work Item Description

Document SP-030038 contains an update to the OSA for release 6. The elements either done in Rel-5 or which are not required are deleted, and new elements are presented for Rel-6.

7.2 New WIs from SA1

7.2.1 Proposed WID on Priority Multimedia Service

To a large degree, responders to emergency situations (e.g. floods, hurricanes, earthquakes, terrorist attacks) depend on the communication capabilities of public networks to provide critically needed restoration services. Such services may be needed when the communication capability of the serving network may be impaired, for example due to congestion or partial network infrastructure outages, perhaps due to a direct or indirect result of the emergency situation.

Work is underway to provide standardized Priority Service for emergency responders in the context of circuit switched speech communications (e.g. TR 22.950). Similar prioritized service provision is needed for packet (e.g. IP) based multimedia services including data, video, audio, and text transmission capabilities.

The objective of this work item is to develop a feasibility study to consider the concepts, features, and requirements for the support of packet based Priority Multimedia Services.

The WI is presented in document SP-030039 for approval.

8 Open Issues

SA1 has one open issue that requires resolution.

In certain situations the user may want to modify the delivery mechanism according to a set of network, MMS and terminal parameters. The change request 22.140-025 introduces a new requirement to allow the user to specify a per message delivery mechanism. The change request also states that when the user has not set a particular preference for the message delivery, the network can decide on her behalf.

This CR was sent to email approval after the meeting but received a rejection due to the wording of the CR. It was decided in SA1 that whilst the version on email approval was not accepted, agreement may be reached with some further email discussion. Therefore, a revision of this CR may be presented to SA #19 as a joint company contribution.

SA	Doc. No.	Spec	CR	Rev	Phase	Cat	Subject	Version-Current	Version-New	SA1 Doc.No.
SP-19	SP-030024	22.140	025		Rel-6	B	CR to 22.140 on preferred delivery mechanism	6.0.0	6.1.0	S1-030266

9 Other Issues

The time has come for the election of a chairman for SA1. The current chairman Kevin Holley (mmO2) had indicated his intention not to stand for re-election and so SA1 held

and election for a new chairman.

There was one nominations for chairmanship that of Michele Zarri from T-Mobil (UK). Since there were no other nominations, Mr Zarri was elected by acclamation as the next chairman of SA1. The outgoing chairman, and the meeting, congratulated him.

Kevin will be sorely missed, but SA1 wishes him all the best in his new role as chairman of the OMA requirements group.

9.1   Election of Vice Chairmen

It was announced that Tommi Kokkola is finishing at this meeting. Since he has had two terms in office, he is eligible to stand if unopposed. Therefore, delegates were asked to consider nominations subject to a election at the next meeting.

10   Meetings of SA1

10.1   Meetings since last SA

The following meetings have been held since SA #15.

Meeting	Date	Place	Host
IMS	08-09 January 2003	Paris, France	France Telecom
SA1#19	20 -24 January 2003,	San Francisco, USA	AWS with SA2/T2
SWGs IMS	18 – 20 February 2003,	Turin, Italy	TIM
SWGs Priority	6th March 2003	Conference call	

10.2   Planned meetings

SA1 has reviewed the work status in the group and has decided to cut down the number of SWG meetings. Therefore, some changes were made to the meetin schedule for next year. The schedule, so far, is as follows.

SA1 Plenary

SA1#20	07 - 11 April 2003,	Seoul, Korea, hosted by Samsung
SA1#21	07 - 11 July 2003,	Sophia Antipolis, hosted by ETSI
SA1#22	27 - 31 October 2003,	Asia, hosted by NEC et.al.

SA1 SWGs

SA1 SWGs #21	12 - 16 May 2003,	San Diego,USA, North American Friends
SA1 SWGs #22	25 - 29 August 2003,	Sweden, hosted by Telia

Annex 1: Documents provided to this Plenary

Tdoc	Title	Agenda
SP-030010	Presentation of SA1 to SA #19	7.1.1
SP-030011	Status report of SA1 to SA #19	7.1.1
SP-030012	CRs to 21.905 on Entities of the mobile system (Rel-5/6)	7.1.3
SP-030013	CR to 22.060 on SS SMS transfer over GPRS (Rel-5)	7.1.3
SP-030014	CRs to 22.078 on CAMEL interworking with CLIR and COLR (Rel-5/6)	7.1.3
SP-030015	CR to 22.078 on Removal of duplicate text in procedure describing 'subscribed dailled services' (Rel-5)	7.1.3
SP-030016	CRs to 22.078 on Removal of $(CAMEL4)$ markers (Rel-5/6)	7.1.3
SP-030017	CR to 22.101 on SIM access to IMS (Rel-5)	7.1.3
SP-030018	CR to 22.105 on Correlation between service class and traffic class (Rel-5/6)	7.1.3
SP-030019	CRs to 22.060 on Delay Criteria and Service Examples (Rel-6)	7.1.3
SP-030020	CR to 22.071 on Applicability of barring capability to the Location Service (Rel-6)	7.1.3
SP-030021	CR to 22.078 on Corrections to re-introduction of enhancements of dialled services in CAMEL 4 (Rel-6)	7.1.3
SP-030022	CR to 22.101 on Simultaneous connection to 3GPP systems and I-WLANs (Rel-6)	7.1.3
SP-030023	CRs to TS 22.115 on Clarification of the charging entity WLAN & when Roaming (Rel-6)	7.1.3
SP-030024	CRs to 22.140 to clarify prioritisation and preferred delivery (Rel-6)	7.1.3
SP-030025	CR to 22.141 on Clarification of network status attribute description within Presence Service Stage 1 (Rel-6)	7.1.3
SP-030026	CR to 22.146 on MBMS Cell broadcast in shared network (Rel-6)	7.1.3
SP-030027	CRs to 22.174 on various subjects (Rel-6)	7.1.3
SP-030028	CR to 22.228 on GUP for IMS subscription management (Rel-6)	7.1.3

SP-030029	CR to 22.223 on PSS charging information (Rel-6)	7.1.3
SP-030030	CR to 22.242 on DRM collaboration with OMA (Rel-6)	7.1.3
SP-030031	CR to 22.243 on Correction of contradictory information (former: 'Removal of references') (Rel-6)	7.1.3
SP-030032	CR to 22.340 on required message formats for IMS messaging (Rel-6)	7.1.3
SP-030033	CR to 22.950 addressing progression of priority level when interworking with external networks (Rel-6)	7.1.3
SP-030034	CRs to 22.951 on Network sharing (Rel-6)	7.1.3
SP-030035	CR to TS 22.011, 22.101, 22.115 and 22.129 on Network Sharing Requirements in Rel-6	7.1.3
SP-030036	TS 22.240 V2.0.0 GUP stage 1 for approval	7.1.3
SP-030037	TR 22.800 V1.0.0 on IMS Subscription and access scenarios	7.1.3
SP-030038	Updated OSA Rel-6 WID	7.1.3
SP-030039	New Work Item Description on ETS (Priority)	7.1.3
SP-030148	CRs to 22.101 on SIM Support in Rel5/6	7.1.3
SP-030		7.1.3

Annex 2: CRs provided to this Plenary

SA Meet	SA Doc.	Spec	CR	Rev	Phase	Cat	Subject	Vers	New Vers	SA1 Doc
SP-19	SP-030012	21.905	045	-	Rel-5	F	CR on Entities of the mobile system	5.5.0	5.6.0	S1-030239
SP-19	SP-030012	21.905	046	-	Rel-6	A	CR on Entities of the mobile system	6.1.0	6.2.0	S1-030238
SP-19	SP-030035	22.011	050	-	Rel-6	B	Netshare CR to TS 22.011	5.1.0	6.0.0	S1-030236
SP-19	SP-030019	22.060	028	-	Rel-6	D	Service Examples	5.2.0	5.3.0	S1-030251
SP-19	SP-030019	22.060	029	-	Rel-6	C	Delay Criteria	5.2.0	5.3.0	S1-030252
SP-19	SP-030013	22.060	030	-	Rel-5	F	CR to 22.060 on SS SMS transfer over GPRS	5.2.0	5.3.0	S1-030237
SP-19	SP-030020	22.071	049	-	Rel-6	B	Applicability of barring capability to the Location Service	6.2.0	6.3.0	S1-030277
SP-19	SP-030014	22.078	154	-	Rel-5	F	Correction to CAMEL interworking with CLIR and COLR	5.9.1	5.10.0	S1-030071
SP-19	SP-030021	22.078	155	-	Rel-6	F	Corrections to re-introduction of enhancements of dialled services in CAMEL 4	6.0.0	6.1.0	S1-030075
SP-19	SP-030015	22.078	156	-	Rel-5	F	Removal of duplicate text in procedure describing 'subscribed dailled services'	5.9.1	5.10.0	S1-030254
SP-19	SP-030016	22.078	157	-	Rel-5	F	Removal of $(CAMEL4)$ markers	5.9.1	5.10.0	S1-030135
SP-19	SP-030016	22.078	158	-	Rel-6	A	Removal of $(CAMEL4)$ markers	6.0.0	6.1.0	S1-030136
SP-19	SP-030014	22.078	159		Rel-6	A	Correction to CAMEL interworking with CLIR and COLR	6.0.0	6.1.0	S1-030287
SP-19	SP-030022	22.101	114	-	Rel-6	B	Simultaneous connection to 3GPP systems and I-WLANs	6.2.0	6.3.0	S1-030215
SP-19	SP-030035	22.101	115	-	Rel-6	B	Requirements for Network Sharing in Rel-6	6.2.0	6.3.0	S1-030269
SP-19	SP-030148	22.101	116	-	Rel-5	F	CR to 22.101 Rel 5 on SIM support	5.8.0	5.9.0	S1-030256
SP-19	SP-030148	22.101	117	-	Rel-6	A	CR to 22.101 Rel 6 on SIM support	6.2.0	6.3.0	S1-030257
SP-19	SP-030017	22.101	118	-	Rel-5	F	CR to 22.101 on SIM access to IMS (Rel-5)	5.8.0	5.9.0	S1-030282
SP-19	SP-030018	22.105	040	-	Rel-5	F	Correlation between service class and traffic class	5.2.0	5.3.0	S1-030273
SP-19	SP-030018	22.105	041	-	Rel-6	A	Correlation between service class and traffic class	6.0.0	6.1.0	S1-030274
SP-19	SP-030023	22.115	008	-	Rel-6	B	CR to TS 22.115 - Clarification of the charging entity WLAN	5.2.0	6.0.0	S1-030184
SP-19	SP-030035	22.115	009	-	Rel-6	B	Requirements for Network Shairng in Rel-6	5.2.0	5.3.0	S1-030270
SP-19	SP-030023	22.115	010		Rel-6	B	CR to 22.115 on roaming awareness for charging	5.2.0	6.0.0	S1-030286
SP-19	SP-030035	22.129	027	-	Rel-6	B	Netshare CR to TS 22.129 on Requirements for Network Sharing in Rel-6	5.2.0	5.3.0	S1-030271
SP-19	SP-030024	22.140	024	-	Rel-6	C	Update to 22.140 to clarify	6.0.0	6.1.0	S1-030267

							prioritisation			
SP-19	SP-030025	22.141	017	-	Rel-6	C	Clarification of network status attribute description within Presence Service Stage 1	6.1.0	6.2.0	S1-030066
SP-19	SP-030026	22.146	040	-	Rel-6	C	CR to 22.146 - MBMS Cell broadcast in shared network	6.1.0	6.2.0	S1-030154
SP-19	SP-030027	22.174	006	-	Rel-6	C	Removal of MMS content	6.1.0	6.2.0	S1-030059
SP-19	SP-030027	22.174	007	-	Rel-6	C	Barring of Push Service	6.1.0	6.2.0	S1-030250
SP-19	SP-030027	22.174	008	-	Rel-6	C	Removal of 'Null' Interworking Chapter	6.1.0	6.2.0	S1-030063
SP-19	SP-030027	22.174	009	-	Rel-6	D	CR to the PUSH Stage 1 TS on the Feature Interactions section	6.1.0	6.2.0	S1-030117
SP-19	SP-030027	22.174	010	-	Rel-6	F	Push Service Independence	6.1.0	6.2.0	S1-030281
SP-19	SP-030028	22.228	018	-	Rel-6	B	GUP for IMS subscription management	6.1.0	6.2.0	S1-030182
SP-19	SP-030029	22.233	010	-	Rel-6	B	PSS charging information	6.1.0	6.2.0	S1-030245
SP-19	SP-030030	22.242	002	-	Rel-6	B	DRM collaboration with OMA	6.1.0	6.2.0	S1-030248
SP-19	SP-030031	22.243	003	-	Rel-6	F	Correction of contradictory information (former: 'Removal of references')	6.1.0	6.2.0	S1-030151
SP-19	SP-030032	22.340	001	-	Rel-6	D	CR to 22.340 on required message formats for IMS messaging	6.0.0	6.0.1	S1-030260
SP-19	SP-030033	22.950	006	-	Rel-6	C	CR to TS 22.950 addressing progression of priority level when interworking with external networks	6.1.0	6.2.0	S1-030185
SP-19	SP-030034	22.951	001	-	Rel-6	C	Implementing Network Sharing Requirements in Rel-6	6.0.0	6.1.0	S1-030203
SP-19	SP-030034	22.951	002	-	Rel-6	B	CR to 22.951 (Network Sharing) Dynamic sharing of inbound roaming subscribers in a shared network	6.0.0	6.1.0	S1-030235

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

Spec	Title	Ph1	Ph2	R96	R97	R98	R99	Rel-4	Rel-5	Rel-6
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			
02.72	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				
02.94	Follow Me Service description; Stage 1						8.0.0			
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	4.4.0	5.5.0	6.1.0
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	4.2.0	5.0.0	
22.011	Service accessibility						3.8.0	4.8.0	5.1.0	
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	
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						3.2.0	4.1.0	5.2.0	
22.041	Operator Determined Call Barring						3.3.1	4.1.0	5.0.0	
22.042	Network Identity and Time Zone (NITZ) service description; Stage 1						3.0.1	4.1.0	5.0.0	
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	5.2.0	
22.066	Support of Mobile Number Portability (MNP); Stage 1						3.2.0	4.0.0	5.0.0	6.0.0
22.067	enhanced Multi-Level Precedence and Pre-emption service (eMLPP); Stage 1						3.0.1	4.1.0	5.0.0	6.0.0
22.071	Location Services (LCS); Stage 1						3.4.0	4.4.1	5.1.1	6.2.0
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	5.9.1	6.0.0
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						3.0.1	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	
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	

Number	Title								
22.100	UMTS Phase 1					3.7.0			
22.101	Service aspects; Service principles					3.13.0	4.6.0	5.8.0	6.2.0
22.105	Services and service capabilities					3.10.0	4.3.0	5.2.0	6.0.0
22.115	Service Aspects Charging and billing					3.3.0	4.0.0	5.2.0	
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	6.2.0
22.129	Handover requirements between UTRAN and GERAN or other radio systems					3.6.0	4.4.0	5.2.0	
22.135	Multicall; Service description; Stage 1					3.4.0	4.3.0	5.0.0	
22.140	Multimedia Messaging Service (MMS); Stage 1					3.1.0	4.2.0	5.4.0	6.0.0
22.141	Presence service; Stage 1								6.1.0
22.146	Multimedia Broadcast/Multicast Service (MBMS); Stage 1								6.1.0
22.174	Push service; Stage 1								6.1.0
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; Stage 1							5.6.0	6.1.0
22.233	Transparent end-to-end packet-switched streamng service; Stage 1							5.0.0	6.1.0
22.242	Digital Rights Management (DRM); Stage 1								6.1.0
22.243	Speech recognition framework for automated voice services; Stage 1								6.1.0
22.250	IP Multimedia Subsystem (IMS) Group Management; Stage 1								6.0.0
22.340	IP Multimedia Subsystem (IMS) messaging; Stage 1								6.0.0
22.800	IP Multimedia Subsystem (IMS) subscription and access scenarios								0.0.5
22.934	Feasibility study on 3GPP system to Wireles Local Area Network (WLAN) interworking								6.1.0
22.940	IP Multimedia Subsystem (IMS) messaging; Stage 1								6.0.0
22.941	IP based multimedia framework; Stage 0							0.7.0	
22.944	Service requirements for UE functionality split							5.1.0	
22.950	Priority service feasibility study								6.1.0
22.951	Service aspects and requirements for network sharing								6.0.0
22.971	Automatic establishment of roaming relationships					3.1.1			
22.975	Advanced addressing					3.1.0			
22.976	Study on PS domain services and capabilities							2.0.0	
22.977	Feasibility study for speech-enabled services								6.0.0
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						4.0.0	5.0.0	

									4.1.0	5.0.1	
	1; Service description; Stage 1										
42.068	Voice Group Call Service (VGCS); Stage 1							4.1.0	5.0.1		
42.069	Voice Broadcast Service (VBS); Stage 1							4.1.0	5.0.1		