

Technical Specification Group Services and System Aspects
Report of Meeting #3, Yokohama, Japan, 26-28 April 1999

Source: Secretary TSG SA (Maurice Pope)

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1 Opening of the meeting

The TSG SA Chairman, Mr. Niels Peter Skov Andersen, welcomed delegates to the 3rd meeting of TSG SA in Shin-Yokohama, Japan. On behalf of the Hosts, ARIB and TTC, Mr. Nobuhiro HORISAKI (Executive Managing Director, TTC) gave an opening address.

2 Approval of the Agenda

The agenda, contained in **Document SP-99088**, was approved without modification.

3 Approval of the meeting report of TSG-SA Meeting no. 2

The report, given in **Document SP-99096**, was approved without modification.

4 Letters / Reports from other groups

Document SP-99166 was unavailable at the start of the meeting, so the SA Chairman presented the main results of the PCG meeting #1:

- The SA Project co-ordination role was approved (see **Document SP-99167**).
- List of external bodies for liaison is being established. (The list is almost complete, and any missing bodies may be added at any time). The groups can liaise with the external bodies who are on the list.
- The Work Item on interworking with IS-41 (feasibility study) was returned to SA for re-working. SA WG1 will update the work item to reflect the discussions which occurred in TSG SA Meeting #2.
- Support requirements for the different TSGs and working groups were noted, organisation started, and a team was created, called the Mobile Competence Centre (located at ETSI) in order to provide support to both 3GPP and ETSI SMG. Resources have been offered from all Partners. Organisation of the work and priorities has been one of the Chairman's tasks, this is dealt with under agenda items 7 and 8.

With this report, **Documents SP-99166** and **SP-99167** were noted.

4.1 TSG-T, TSG-CN, TSG-RAN

As nobody from RAN WG4 was available to introduce the contribution, the SA Chairman introduced **Document SP-99112**, which is a liaison to TSG SA on carrier frequency raster.

Advice on the implications when the full IMT-2000 band is not allocated is requested.

TSG SA noted the document, and noted that any chosen scheme should be flexible enough to allow the extension and addition of frequency bands to 3G. TSG RAN are expected to deal with this liaison from the technical viewpoint.

It was noted that an editorially modified version of this contribution is given in **Document SP-99158**.

Document SP-99120 - liaison from TSG T WG2 on Support of SMS was introduced. The question is aimed at TSGs RAN and CN and it was asked if any responses had been received. The CN Chairman, Mr. Dettner, reported that TSG CN are willing to work on the necessary enhancements to specifications identified as the responsibility of TSG CN (e.g. MAP). The RAN Chairman, Mr. Y Furuya, reported that the liaison had not been treated by TSG RAN, but was expected to be dealt with in RAN WG2 and WG3.

It was also reported that work was ongoing in SA WG1.

* Due to agreements on the specification numbering scheme reached at the meeting, some 3GPP Specifications and Reports have been re-numbered during and following the meeting. Therefore it should be noted that the contributions received at the meeting do not always use the new numbering. Old numbering for specifications is given in this report where relevant.

It was asked if both signalling and GPRS methods would exist in the 3G system. It was reported that both systems are considered necessary.

A request about the April release was asked and it was explained that the specification will be released for information rather than waiting for June, when the document will be more stable, so that comments can be made and included in good time.

The SA Chairman also explained further that the SMS alphabet, etc. had been included, without review of any enhancements that would be needed. The emphasis has been concentrated on the new features and the other features will be elaborated after this meeting. It was further clarified that the term "April Release" was not intended as a release to SDOs, but for the further elaboration of the work with a set of known documents of known status to work from.

Document SP-99125 - liaison on Identification of service capabilities, from T WG2 to SA WG1 (copied to TSG SA) was introduced. T WG2 ask SA WG1 to comment and improve the tables of service capabilities. It was reported that SA WG1 received the liaison after their most recent meeting, but intend to pursue the liaison at their next meeting. TSG SA noted the document and asked SA WG1 to consider the liaison and formulate a response to T WG2.

Document SP-99157 - liaison from TSG RAN asking for the latest information to be provided to ITU TG8/1 on IMT 2000. It was commented that TS 23.07 in the final paragraph of the liaison from TSG RAN to TSG SA should read TS 23.10. Mr. Jarvela, Mr. Courau and Mr. Cooper were tasked to draft a liaison to ITU-R TG 8/1. The drafted liaison, given in **Document SP-99206** was then considered. It was noted that the references to specifications/reports need to be updated. The proposed liaison was approved and will be forwarded to the ITU ad-hoc group of TSG RAN for handling the submission to ITU-R.

Due to the short time scale to send this liaison, Mr. F. Courau volunteered to ensure the liaison was transmitted quickly to the ITU ad-hoc group of TSG RAN.

Document SP-99164 - the liaison from TSG CN on "(Minimum) Scope for a basic UMTS Core Network of Release '99" was presented by the Chairman of TSG CN. Requirements for Release '99 are still unclear, and need to be finalised in order for TSG CN to meet their deadlines (the list of features needs to be closed by the May 1999 meeting of TSG CN). TSG CN therefore liaise their working assumptions to TSG SA for comment and guidance.

Some discussion about the intention of TSG CN to base the 3GPP Release '99 on GSM Release '98 core network resulted. It was clarified that the liaison intended that 3GPP Release '99 will be an evolution of GSM Release '98, containing additional features as far as they are developed. It was commented that UMTS 22.00 gives the service requirements for 3GPP Release '99.

It was summarised that TSG CN require a firm definition of the requirements of 3GPP Release '99 in order for them to meet the deadlines and prioritise their work.

A question was asked on when the finalisation is expected - after this TSG meeting, or in time for the May '99 meeting. It was explained that output from this meeting could be sent to the TSG CN WGs for detailed analysis.

It was decided that this would be revisited after the contents of Release '99 have been discussed under agenda item 6.

It was concluded that the requirements need to be fixed very soon, in order for the specification work to meet the short deadlines that the project schedule imposes. Additional conclusions under agenda item 6 are expected to facilitate this.

It was decided that every effort should be made to provide the requirements in good time. TSG SA noted this requirement of TSG CN and will strive to meet it.

4.2 Partners and their bodies

Document SP-99094 -liaison from ETSI TC HF (Human Factors) on co-operation between ETSI TC HF and 3GPP. The liaison asks for collaboration with the 3GPP Project taking the requirements of people with special needs into account. The liaison was directed at the Terminals groups, and had been dealt with in T WG2 and TWG 3. The list of HF documents was considered useful and WGs were asked to make use of this document and the listed documents where feasible. With this the liaison was noted by TSG SA. This Liaison was also considered in TSG T, which is reported in **Document SP-99169**, and is also reported under 6.3.3.

Document SP-99095 - liaison from ETSI EP TIPHON (Telephony and IP Harmonisation over Networks) on the scope and aims of their WG7 activities (Wireless and mobility aspects of TIPHON scenarios). After some discussion it was concluded that a liaison between ETSI EP TIPHON and 3GPP TSG SA was welcomed, with TSG SA acting as the co-ordination point for any liaisons. It was clarified that informative liaisons from groups to EP TIPHON (e.g., informing of the work of groups in 3GPP) could be sent directly by the WGs, but if any significant work is implied by a liaison, then TSG SA should be consulted in order to assign priorities, so that the overall 3GPP project timing and schedule is not disrupted.

Document SP-99108 from ETSI TC SMG, UMTS 30.00, V3.6.1, the UMTS Work Programme, was presented by the SA WG2 Secretary. It was asked whether SMG intend to transfer the whole SMG work programme to 3GPP, and that ETSI will cease to work on UMTS. It was clarified that ETSI TC SMG would still keep responsibility for the ETSI work on UMTS developments. ETSI SMG will function as the body to control the conversion of 3GPP approved standards into ETSI Specifications for the ETSI SDO.

It was noted that the time scale in the document for SMG#28 was misplaced by one year, upsetting the overall time scale for completion (page 37 of the PDF version). This was acknowledged as an editorial error in the document, which needs correcting.

According to the 2nd meeting of TSG SA, SA WG2 should have a 30.00-like document, and it was decided to transfer this to SA WG2 in order to look at the building blocks needed for the 3GPP items. The common items should be identified and worked on in co-operation with ETSI TC SMG.

The SA WG2 Chairman reported the intention of WG 2 to maintain a 30.00-like document for the management of the 3GPP work programme.

It was decided that the document UMTS 30.00, V3.6.1 would be forwarded to SA WG2 for the creation of a similar 3GPP document, if considered appropriate. Further SA WG2 was requested to identify the work items which are common with ETSI SMG. Input from other groups is requested by SA WG2.

Document SP-99109 from ETSI TC SMG, UMTS 30.01, V3.6.1, UMTS baseline document. This is offered by SMG in the same way as UMTS 30.00. It was asked that these documents (30.00 and 30.01) should be scrutinised and corrected/cleaned up to ensure that they are clear and accurate. During the discussion, it was clarified that the acceptance of documents from Partner bodies does not necessarily mean that they are maintained directly, but that 3GPP takes on board the responsibility for the subjects covered.

It was decided that the document UMTS 30.01, V3.6.0 would be forwarded to SA WG2 in order to decide what is needed in 3GPP from this document and create a similar 3GPP document if thought useful and necessary for the Project.

Document SP-99168 (presentation slides from the UMTS Forum 3GPP co-ordination group) was presented by the co-ordination group Chairperson, Ms. Antonella Napolitano. The presentation gives an overview of the structure of the New UMTS Forum and the position of the 3GPP Co-ordination group within it. From the reports produced by the UMTS Forum, attention was drawn to the new Reports #6, #7 and #8. These can be downloaded from the UMTS Forum web site at <http://www.umts-forum.org>. 4 liaison officers have been appointed in order to co-ordinate the work with each of the 3GPP TSGs.

Document SP-99175 (presentation from the UMTS Forum, from the liaison officer to TSG SA) was presented by the liaison officer, Mr. Andy Watson. The presentation summarised the contents of Report #6. DG13 of the European Commission funded a market forecast for IMT-2000 spectrum requirements, the results and conclusions of which can be found in UMTS Forum Report #8. The ITU TG 8/1 resolved that an extension to 160 MHz was necessary to support IMT 2000 services. The ITU WRC2000 is expected to make a decision on this resolution.

4.3 Others

Document SP-99110 - Consolidated draft work plan for IMT-2000 Network Aspects in ITU-T. This contribution was introduced by the SA Chairman. It was considered premature (within 3GPP) to liaise with ITU-T on the protocol issues. The document was noted.

Document SP-99188 - Report from GSM Association. Mr. Toepfer introduced the report. The GSM Association has decided to join the 3GPP as a Market Representation Partner. The presentation was noted.

Document SP-99121 - GSM Association contribution on Open interfaces Iu, Iub and Iur interfaces. The GSM Association urges 3GPP to embrace objective, fully standardised and open Iu, Iub and Iur interfaces. It was noted that we are striving for this, and were pleased to see the support of the GSM Association to help realise this. With this, the document was noted.

Document SP-99178 - Response Liaison to TSG SA on Inter Operator Handover. The GSM Association does not consider this item as a high priority issue for 3GPP work towards Release '99 (but, should be kept for future development in 3GPP). There was, however, a request for this standardisation from the Regulatory groups, who would offer support for the work in order to realise standards in time for the Release '99. More information on this subject is expected from the reports of SA WG1. The positions of all parties were noted.

5 Reports from TSG-SA Working Groups

5.1 TSG-SA WG1

5.1.1 Report from TSG-SA WG1

Document SP-99098 contains the report from SA WG1 and was summarised in a presentation given by Mr. Cooper, Vice Chairman of SA WG1. The proposed Change Requests, new Work Items and Questions were dealt with under 5.1.2 and 5.1.3. The report from SA WG1 was then approved.

5.1.2 Questions for advice and decisions from TSG-SA WG1

Document SP-99161 (revision of Document SP-99107) - Proposed CR presented for Information to TSG SA. These proposals have received wide support in SA WG1, but there is uncertainty over the use of the term QoS (see **Document SP-99162**).

Document SP-99177 - Comments to CR concerning QoS to TS 22.05 (**Document SP-99161**). After some discussion, **Document SP-99162** (QoS requirements; proposals for further work) was introduced. The contribution proposes that TSG SA provide a statement to SA WG1 to continue their work on QoS requirements in TS 22.05 based on the parameters given in CR 22.05 A009r1 (Document SP-99161).

It was decided that SA WG1 should continue to work upon QoS parameters to ensure that UMTS is not the weak link in an end-to-end connection in terms of quality of service requirements.

The liaison statement was produced by a drafting group, lead by Mr. Horst Rauch, resulting in **Document SP-99194** - LS on Principles for Bearer services and Quality of service. The document was presented and following some discussion, it was decided to delete the paragraph beginning "To be flexible ... defined in TS 22.05".

It was also decided to modify the final paragraph to clarify the intention to use the methods defined by the IETF where appropriate. The updated liaison is given in **Document SP-99212** which was approved.

5.1.3 Approval of contributions from TSG-SA WG1

The following CRs to TS 22.00 V3.1.0 were presented in **Document SP-99103**:

CR number	Subject	SA Decision (see comments)
A003r2	Emergency Call handling and potential multiple Emergency Call numbers (indicating emergency service requested).	Postponed. Further study at SA WG1 (1).
A005r2	Optimisation of inter-network signalling.	Approved
A008	Fax Data - Support for Real-Time non-transparent Fax as an option.	Approved (2)
A009	No. of Bearer Services in support of Multicall.	Rejected (3)
A010	Access arrangements.	Approved
A014	Traffic O&M.	Approved

comments

- (1) Discussion on A003r2: Japan have a requirement to support multiple Emergency numbers. More detail on implications needs to be investigated. SA WG1 will look into this in collaboration with TSG CN.
- (2) Discussion on A008: Some study was requested as other methods of meeting the reliable real-time fax service requirements may be found. The implementation of the service requirement is still open to contribution. SA WG1 are asked to qualify the quality requirement of the service.
- (3) The existing text already covers the requirement for Multicall.

The following CRs to TS 22.01 V3.4.0 were presented in **Document SP-99104**:

CR number	Subject	SA Decision
A016	MMI - (mapping of digit keys to alphabetic characters)	Approved
A017	Emergency	Postponed. Further study at SA WG1 (4).

comments

(4) Discussion on A003r2: Postponed with CR to 22.00 A003r2, see comment (1).

The following CRs to TS 22.05 V3.3.0 were presented in **Document SP-99105**:

CR number	Subject	SA Decision
A007	High Quality Speech	Approved
A008	Support of GSM BSs	Approved

The following CR to TS 22.15 V3.0.0 was presented in **Document SP-99106**:

CR number	Subject	SA Decision
A001r1	Charging	Approved

Document SP-99099 Work Item descriptions from SA WG1 for approval:

1 Feasibility study on UMTS Interworking with ANSI-41 networks.

A request to include 2nd Generation into the Scope (by deleting the term 3G from the second paragraph of the Scope) was made. It was stated that this issue was under discussion in the 3GPP2 project, and that some form of liaison with 3GPP2 on this subject would be beneficial. However, this position was not broadly supported. Furthermore, the Scope of the work item was considered in need of some clarification, as it is a feasibility study for interworking with ANSI-41.

It was reported that many organisations are interested in this topic, and a high level of contribution and participation could be expected in this study.

It was decided that the Scope of the Work Item will be modified to take the views expressed into account and to remove the specific 3G text, broadening the study to 2G and 3G. Liaison with other groups should await the outcome of the feasibility study. The revised feasibility study was provided as Document SP-99187.

Document SP-99187 - UMTS Interworking with ANSI-41 networks.

(References to IS-41 should be replaced by ANSI-41, as the standard has now been adopted by ANSI).

Supporting Companies: The SA Chairman asked for 4 companies to replace the text "All WG1 members" for supporting companies. The following companies indicated their support: Lucent, Samsung, Ericsson and Nokia.

ACTION #3/1: The SA Chairman will take this to the PCG for endorsement.

2 Multicall

(Provisional 3G TS 22.135).

The Work Item was approved with the deletion of the first paragraph of the technical scope "Multicall, i.e. the ... 2G to 3G."

Document SP-99100 - Liaison on Inter-operator handover UMTS/GSM and TS 22.29 V2.0.2 (Handover Requirements between UMTS and GSM or other Radio Systems) presented for approval. TS 22.29 has been approved by e-mail in SA WG1.

The liaison on Inter-operator handover was presented for information and was noted by TSG SA.

A concern was expressed on the load on the GSM network if GSM to UMTS handovers are supported. It was clarified that the requirements document provides the possibilities, but does not mandate the implementation of all cases included in the scenarios. The UMTS system should not preclude the functionality, and it is the responsibility of ETSI SMG to decide whether they create specifications to support the handover from GSM to UMTS or other 3G systems. It was agreed that the 3GPP priorities are to define the UMTS-UMTS handover, then for support of UMTS to 2G handover and then to have the capability to receive a handover from a 2G system.

The meeting was reminded that this document had been presented to TSG SA Meeting #2 (as Document SP-99079) and contained the same handover requirements.

The document TS 22.29 V2.0.2 (Document SP-99100) was approved. SA WG1 were asked to look into the impact of handover to and from 2G systems for further update of the TS. The document is placed under TSG SA Change Control.

Document SP-99101 - TS 22.135 V1.0.0, Multicall, presented for Information. The document was noted and delegates are asked to forward comments to SA WG1.

Document SP-99102 - TS 22.21 V1.1.0, VHE, presented for Information. The document was noted and delegates are asked to forward comments to SA WG1.

5.2 TSG-SA WG2

5.2.1 Report from TSG-SA WG2

Document SP-99155 contains the status report from SA WG2 and was presented by the SA WG2 Chairman. Items for approval were dealt with under 5.2.2 and 5.2.3. There were some questions and clarifications about versions of documents within SA WG2.

It was asked when the Release '99 specifications are expected to be completed. It was explained that Section 7 of UMTS 23.20, V1.6.1 (which will become 3G TS 23.121) was the main document for approval for Release '99, along with UMTS 23.30, with approval expected as soon as possible (the target date is May 1999). The stabilising of requirements and architecture for Release '99 is necessary in good time, as work needs to be completed for the Release. Consideration needs to be given on the requirements and architecture for the evolution of Release '99 to allow specification work to start on the post-'99 Release.

TSG SA ask SA WG2 to try to complete, at least from a functional point of view, the SA WG2 requirements in May 1999, in order to hand them to TSG CN. Any feedback received should be considered and the specifications updated accordingly. The resulting specifications shall be presented to TSG SA#4 for approval, in order to have them under change control.

The report from SA WG2 was then approved.

5.2.2 Questions for advice and decisions from TSG-SA WG2

Document SP-99122 contains a Liaison statement from SA WG2 to T WG2 and was presented to TSG SA for information. The liaison is a response to questions from T WG2 on PS and CS implementation issues.

The liaison was noted.

Document SP-99123 contains a liaison statement from SA WG2 to SA WG3 and was presented to TSG SA for information. The liaison asks SA WG3 to clarify the Release '99 Security Features, the required functional entities and to produce a time schedule for the new ciphering algorithm (with fall-back plan in case of late delivery).

The liaison was noted.

The SA WG2 Chairman asked for the Security Architecture documents be sent to SA WG2.

5.2.3 Approval of contributions from TSG-SA WG2

Document SP-99147 - UMTS 23.10, CR A001, presented for approval.

SA WG2 are asked to complete the QoS parameters requirements as quickly as possible, in order that the work can be finalised in TSG RAN in time for their deadlines.

The following CR to UMTS 23.10 V3.0.0 was presented in **Document SP-99147**:

CR number	Subject	SA Decision
A001	UE location identification and Transcoder location in core network	Approved (4)

(1) Placement of the transcoder should be investigated for Release '99 and beyond Release '99.

The SA Chairman pointed out that CRs should be split into subjects in the future, so that the individual changes can be approved separately (and allowing delegates to see which changes are related to which proposed modification). This principle was endorsed by the meeting.

The 3GPP Support group was asked to update documents from ETSI format to 3GPP format. Any changes outside the Front page and Foreword should be minor editorial changes only (e.g. changing SMG-specific terms to 3GPP terms) and should result in a change in the final digit of the version number.

Document SP-99148 - UMTS 30.01, UMTS Baseline document. The document was noted, and it was pointed out that the document should be version 1.2.0.

Document SP-99146 - UMTS 23.01 V3.0.0. No changes have been made since October 1998. The document was noted.

Document SP-99149 - 3G TR 23.920 version 1.6.1 (UMTS 23.20). It was decided to move section 7 to a new document 3G TS 23.121.

Document SP-99150 - 3G TS 23.121 version 1.0.0 was not available at the meeting and will be distributed by e-mail after update by SA WG2. The document is expected to be presented for approval at the TSG SA meeting #4.

SA endorse the split of Section 7 of UMTS 23.20 to become 3G TS 23.121 V1.0.0. WG2 are asked to update it with agreed changes and present it to TSG SA#4 for approval. The document should be sent to relevant WGs for consideration.

Document SP-99151 - UMTS 23.25 V0.1.0 was noted.

Document SP-99152 - UMTS 23.07 V0.3.0 was noted.

Document SP-99153 - UMTS 23.27 V0.1.0 Open Service Architecture. This document has been transferred to SA WG1 for completion with VHE work.

Document SP-99154 - UMTS XX.YY V0.5.0 "Combined GSM and Mobile IP Mobility Handling in UMTS IP CN". This document was noted.

5.3 TSG-SA WG3

5.3.1 Report from TSG-SA WG3

Document SP-99117 contains the report from SA WG3 meeting #2. The SA WG3 Chairman, Mr. Walker, gave a presentation of the progress made by the SA WG3, given in **Document SP-99191**. Items for approval were dealt with under 5.3.2 and 5.3.3. There were some questions and clarifications about versions of documents within SA WG3. With this presentation, the report of SA WG3 was approved.

Document SP-99141 the SA WG3 work item status list was approved (this list is also included in the presentation slides).

5.3.2 Questions for advice and decisions from TSG-SA WG3

Document SP-99142 - Proposed method for acquiring cryptographic algorithms for 3G systems. It is recognised by SA WG3 that a public algorithm will result in many claims that the algorithm has been broken, which will need to be managed in the future. Time schedules for the algorithm was reported as the end of 1999.

The proposed method given in **Document SP-99142** was approved.

SA WG3 Chairman also raised the question of funding for the algorithm specification. TSG SA Chairman agreed to raise this question with the PCG.

ACTION #3/2: The funding for the algorithm specification and verification is to be raised at the PCG by TSG SA Chairman.

There was a request to have the ciphering algorithm as soon as possible, and a time plan is requested from the algorithm designers. It was explained that the requirements specification will go to ETSI SAGE at the end of May 1999, when they will develop a time plan, which should be delivered in the June 1999 meeting of TSG SA. Timely delivery will be dependent upon adequate funding for the work (see Action #3/2).

Document SP-99143 - GSM/UMTS "interworking" with regard to SIM and USIM. This document was presented for discussion. SA WG3 have made some assumptions on the interaction between use of SIM and USIM in GSM and 3rd Generation terminals. SA WG3 ask for confirmation of these assumptions.

The requirement to use the SIM in the 3rd generation terminal was questioned by a number of delegates. Some delegates considered that the insertion of a GSM SIM into a UMTS terminal would only provide a GSM level of Security, rather than the increased UMTS Security, and would provide little advantage to the UMTS Operator. Other delegates saw it as an important service requirement for GSM operators in the future to allow their subscribers to roam to a UMTS-only area (e.g. Japan) and use their SIM card to roam using a UMTS terminal.

It was pointed out that UMTS 22.01 requires backward compatibility to 2nd generation and SA WG1 might need to change the service requirement if TSG SA decide to remove the requirement.

As a compromise, the SA Chairman suggested the following:

- 1) support access to UMTS access networks while using cards equipped with either the GSM SIM, the UMTS SIM functionality or both, as shown in the diagram in Document SP-99143, and
- 2) allow a serving UMTS operator the option to block access to the UMTS access network when a card equipped only with a GSM SIM is used.

In order to ensure functionality of the above compromise it is recognised that at least the following functionality will be required:

- possibility for the network to detect the type of SIM used,
- possibility for the network to restrict the access of GSM-only SIM user to the GSM access portion of a PLMN.

It was the assumption of the meeting that the companies (operators and their vendors) who require this capability should do the work on the signalling and mechanisms necessary to assure GSM functionality (security, authentication mechanism, services, etc.) are present in the UMTS specifications.

After some questions and clarifications on the proposed compromise, the SA Chairman issued **Document SP-99208** which was then agreed. **SA WG1 are asked to look into the details and implications of these requirements.**

Document SP-99193 - Suggestion on acceptance procedure for the usage of GSM SIM in UMTS. This contribution expresses concerns over the resources and complexity of providing this mechanism. It requests that this functionality is removed from the specifications at the moment, allowing interested companies to create an acceptable technical solution for the compromise before including it.

There was a request for the implications to the GSM specifications to be investigated within SMG.

It was agreed to request all involved groups to comment, and this lead the creation of the liaison contained in Document SP-99213 which asks the addressed groups (SMG1, SMG2, SMG3, SMG9, SMG10, SA WG1, SA WG2, SA WG3, CN WG2, RAN WG2 and T WG3) to comment upon the agreement of TSG SA given in Document SP-99208.

All groups involved are asked to have a dedicated part of their reports to TSG SA#4 to give details of progress on the specification work for the acceptance/rejection of GSM SIM-only cards for access to UMTS Networks.

5.3.3 Approval of contributions from TSG-SA WG3

Document SP-99145 - 3G TS 21.133 version 2.0.0 (3G Security Threats and Requirements) was presented for approval. **The specification was approved** and placed under TSG SA Change Control.

Document SP-99144 - 3G TS 33.102 version 2.0.0 (3G Security Architecture) was presented for approval.

SA WG2 reported that the document has not been seen in SA WG2. The urgency of requirements to meet deadlines was also reported and some support for approving the specification was expressed. It was clarified that approval at this stage is not "Published", but will allow changes to be made via the Change Request mechanism.

The specification was approved and placed under TSG SA Change Control.

SA WG2 (and other groups) were asked to review the document and make comments to SA WG3. Further changes will be tracked via the Change Request mechanism.

5.4 TSG-SA WG4

5.4.1 Report from TSG-SA WG4

Document SP-99126 contains the status report from SA WG4. The SA WG4 Chairman, Mr. Ohana, gave a presentation of the progress made by the SA WG4, given in **Document SP-99127**. Items for approval were dealt with under 5.4.2 and 5.4.3.

An updated list of SA WG4 deliverables is given in **Document SP-99128**. It was reported that the specification numbers given in this report were chosen as provisional identifications before the numbering scheme proposed by the 3GPP support team was known, and the specifications were therefore re-numbered by the 3GPP Support team (see **Document SP-99195**).

It was reiterated that the specification numbers will be allocated from a common point, which rests within the 3GPP Support Team.

With these discussions and agreements, the report of SA WG 4 was approved.

5.4.2 Questions for advice and decisions from TSG-SA WG4

It was reported that Inputs are required from other WGs:

There is on-going exchange of liaison with RAN WG1 on the subjects of:

- Channel coding for mandatory speech service,
- support of unequal error protection.

SA WG4 requested that SA WG2 provide information on Architecture aspects such as transcoder placement, in order to allow SA WG4 to define the in-band signalling solution for Tandem Free Operation (TFO) in the 3G system.

NOTE: The definition of the out-of-band solution is under the responsibility of TSG CN.

The meeting noted that the decision on Transcoder placement was provided in **Document SP-99148** (UMTS 23.30 version 1.2.0 from SA WG2).

SA WG4 have decided to base CS Multimedia Telephony Service on H.324, as shown in **Document SP-99127**. Some question over making the AMR voice codec and the H.263 Video codec the default codecs were raised. It was clarified that this does not restrict the system to only AMR/H.263, but only that these are the default codecs to be supported.

Questions on the choice of H.324 instead of H.323 were raised. It was noted that H.324 is for circuit-switched and H.323 could be used for packet switched. SA WG4 Chairman reported that the PS work is suffering from a lack of contributions, and the interest shown in the TSG SA plenary was encouraging. WG SA4 request that interested parties make contributions to the SA WG4 meetings, with an aim to produce specifications for December 1999.

TSG SA requested contributions from Member companies to the work on PS Multimedia Telephony Service specification. SA WG4 were asked to report the progress of it's part of this work to the TSG SA#4 meeting.

Some further questions on AMR and tandem-Free Operation were asked, and clarified.

5.4.3 Approval of contributions from TSG-SA WG4

Documents for information:

NOTE: **Document SP-99196 to Document SP-99205** contain replacements of the specifications presented below (**Document SP-99131 to Document SP-99140**) where word processor conversions had caused formatting problems in the originally presented documents.

Document SP-99130 - 3G TR "QoS for speech and multimedia codec: Work program and open issues" version 0.1.1 was presented for information.

Document SP-99131 - 3G TS "AMR speech codec; general description" version 1.0.0 was presented for information. (Replaced by **Document SP-99196**).

Document SP-99132 - 3G TS "AMR speech codec; Transcoding functions" version 1.0.0 was presented for information. (Replaced by **Document SP-99197**).

Document SP-99133 - 3G TS "AMR speech codec; Comfort noise aspects" version 1.0.0 was presented for information. (Replaced by **Document SP-99198**).

Document SP-99134 - 3G TS "AMR speech codec; Error concealment of lost frames" version 1.0.0 was presented for information. (Replaced by **Document SP-99199**).

Document SP-99135 - 3G TS "AMR speech codec; Source controlled rate operation" version 1.0.0 was presented for information. (Replaced by **Document SP-99200**).

Document SP-99136 - 3G TS "AMR speech codec Frame structure" version 1.0.0 was presented for information. (Replaced by **Document SP-99201**).

Document SP-99137 - 3G TS "Codec for CS MM telephony service; General description" version 1.0.0 was presented for information. (Replaced by **Document SP-99202**).

Document SP-99138 - 3G TS "Codec for CS MM telephony service; Modifications to H.324" version 1.0.0 was presented for information. (Replaced by **Document SP-99203**).

Document SP-99139 - 3G TS "Codec for CS MM telephony service; Call set-up requirements" version 1.0.0 was presented for information. Comments are expected from SA WG2 and TSG CN, which will be considered in elaboration of this specification in SA WG4. (Replaced by **Document SP-99204**).

Document SP-99140 - 3G TR "Codec for CS MM telephony service; Terminal implementor's guide" version 1.0.0 was presented for information. (Replaced by **Document SP-99205**).

All of the above specifications were noted and are expected to be presented to the TSG SA#4 meeting for approval.

Documents for approval:

Document SP-99129 - Proposed Work Item on 3G Audio-Visual Terminal Characteristics. This work item is planned for completion by December 1999. **This work item was approved.**

5.5 TSG-SA WG5

5.5.1 Report from TSG-SA WG5

Document SP-99171 contains the report from SA WG5 meeting #2 (also provided in Document SP-99192). The SA WG5 Chairman, Mr. Yuhan, gave a presentation of the progress made by the SA WG5, given in **Document SP-99190**. Items for approval were dealt with under 5.3.2 and 5.3.3. There were some questions and clarifications about versions of documents within SA WG3. With this presentation, the report of SA WG3 was approved.

The Chairman of SA WG5, Mr. Albert Yuhan, was elected at their second meeting. No candidates for Vice Chairmen have been received and SA WG5 is looking for candidates to fill these positions.

A liaison to SA WG1 was sent asking for documentation on billing and charging. It was asked if UMTS 22.15 was enough. SA WG5 Chairman responded that it had been received recently and needs to be considered to determine if it is enough for their work.

The SA Chairman requested that the 3GPP Support Team members supporting the WGs should be utilised for requests for documents and informal questions, rather than using the formal liaison procedure for such interactions, in order to improve the speed of questions and information flow between WGs.

5.5.2 Questions for advice and decisions from TSG-SA WG5

Document SP-99172 contains a revised terms of reference for SA WG5 which includes the co-ordination across TSGs of specifications pertinent to 3G system telecommunications management. This modification to the **ToR of SA WG5 was approved** by TSG SA.

Document SP-99173 - 3G TS 32.001 version 1.0.0 "3G Telecom Management principles and high level requirements". This document was not available due to diskette problems and was presented for information (the document was later made available on placed on the FTP server area). Initial completion is expected by June 1999. This was noted by TSG SA.

Document SP-99174 - 3G TS 32.002 version 1.0.0 "3G Telecom Management architecture". This was presented for information and was noted by TSG SA.

Inputs are solicited by SA WG5 for the above 2 documents, which are planned to be presented for approval in June 1999.

5.5.3 Approval of contributions from TSG-SA WG5

Apart from the revised Terms of Reference of SA WG5, no items were presented to TSG SA for approval. It was noted that specifications given in **Documents SP-99173** and **SP-99174** are expected for approval at TSG SA#4 Meeting in June 1999.

5.6 Review of TSG-SA work programme

The SA Chairman gave a summary of the status reported by the working groups:

SA WG1 work planning is considered stable.

SA WG2 still have much work to do, but the schedule is under control and considered achievable.

SA WG3 have 3 documents now under change control and the other work is on schedule.

SA WG4 work is on schedule.

SA WG5 are in need of contributions to it's work in order to meet their time schedules. Delegates are urged to find experts from within their companies to contribute to the work of SA WG5.

Regarding the work of TSG SA, the SA Chairman urged delegates as far as possible, to bring written contributions if they wish to bring up issues at the meeting, in order that others can understand issues quickly and reduce the amount of lost time in the Plenary.

A list will be compiled for the work programme from the work programmes of the WGs. The necessary support from 3GPP Support Team for TSG SA WGs will be sought.

5.7 Letters to other groups

The following liaisons were created for transmission to other groups at the meeting:

Document	Subject	To	Comments
SP-99206	Revision of recommendation ITU-R M.1079	ITU-R (via RAN ITU-ad hoc)	To be editorially modified (by RAN ITU ad-hoc and transmitted by F. Courau.
SP-99212	Principles for Bearer services and Quality of service	TSGs RAN, CN, T, all SWGs	
SP-99213	usage of GSM-only SIM Cards	SMG1, SMG2, SMG3, SMG9, SMG10, 3GPP TSGs: S1, S2, S3, N2, R2, T3	

5.8 Other issues

No contributions were received for this item.

6 Technical co-ordination with TSG-CN, TSG-RAN and TSG-T

6.1 TSG-CN

6.1.1 Report from TSG-CN

Document SP-99207 (replaces SP-99184) contains the presentation of the TSG CN report to TSG SA, and was presented by the TSG CN Chairman. The draft report of the TSG CN#3 Meeting is given in

Document SP-99163 which was noted.

Support arrangements were reported - the CN Plenary needs confirmed support, CN WG1 and CN WG3 have no support and support is needed urgently. CN WG1 deal with 04.08 which requires a large support effort and should not be allowed to get out of control. Mr. Doig (3GPP Support Team) reported that the ETSI General Assembly had allocated extra budget for the MCC Support (which includes the 3GPP Support Team) and that other possibilities are under investigation. The SA Chairman added that having sufficient 3GPP budget is not enough, but Member companies need to offer qualified experts for the work.

Member companies are asked to offer experts to the 3GPP Support team, to ensure that adequate resources are available to provide the necessary support to the 3GPP work.

TSG SA intend to produce a combined list of support requirements across the TSGs, co-ordinated with the 3GPP Support Team.

6.1.2 Questions for discussion in TSG-SA

No contributions were received under this agenda item.

6.1.3 Information on status and changes to deliverables

TSG CN request endorsement of the transformation of GSM (AA.BC) Core Network relevant specifications completely as 3G specifications, using the 3G (AA+20).0BC, as versions 3.0.0, in order that they are placed immediately under change control (in order that changes made after transfer can be traced). Change Requests are proposed to restart at A001 for these newly numbered specifications. This appears to be in line with the proposals given by the Support Team and the version 3.0.0 transformation was endorsed as the best way to track the changes to these well-established and mature documents.

CAMEL support for GPRS PSTN/ISDN interconnect services Work Item is not considered feasible for Release '99. This was noted, recognising that it may still be included if enough support (by contribution and development of the work item) to complete the work is given to CN WG3.

Approved Work Items:

The following work items were approved in TSG-CN meeting #3.

- An asynchronous-to-synchronous HDLC service for circuit switched data (CN Document NP-99110),
- Real-time Fax (Based on non-transparent Fax as in GSM 03.46) in UMTS/IMT-2000 (CN Document NP-99140),

- 3 Fax-options are envisaged by CN:
 - a) Real time non-transparent 03.46 based,
 - b) Real-time non-transparent T.38 based (see 22.45),
 - c) store-and-fwd T.37 based (see 22.45).

(a) was approved because of strong requirements and support for this WI indicated.

The dual support of non-transparent facsimile was questioned. As GSM 03.46 has not been implemented by GSM operators, it should not be chosen purely for interworking reasons. It was confirmed that there were other reasons for the choice.

It is confirmed that the 3GPP will not specify Interworking from Core Network to ISDN. This is considered to be a regional matter.

Other Issues:

UMTS CC/SM - A basis for further analysis was received by TSG CN in a liaison statement from SA WG2 (CN document NP-99142) - the proposal based on a CC/SM protocol run transparently via a PDP-context was agreed by TSG CN as a working assumption. Some work will be needed, but TSG CN considered the liaison statement to SA WG2 as a useful contribution. TSG SA noted the progress of the work.

Approved Specifications/Reports:

No new specifications/reports were approved in TSG-CN meeting #3.

Change Requests:

TSG CN provided a list of CRs agreed by TSG CN. These have been put on hold until the transfer of relevant specifications from SMG has been completed.

Document SP-99186 - List of TSG CN Specifications. This was presented to TSG SA for information. TSG CN will maintain this list. Mr. Doig asked for clarification on the status list, which will be done after the meeting.

All TSG Chairmen to forward their document status lists to Mr. Ian Doig (3GPP Support Team) after the meeting, so that a full status list of the 3GPP work programme can be produced and maintained.

Support from the 3GPP Support Team was requested for the maintenance of the work programmes and status lists of the TSGs and WGs.

6.2 Report from TSG-RAN

6.2.1 Report from TSG-RAN

Document SP-99185 contains the report from TSG RAN Chairman to TSG SA and was presented by the TSG RAN Chairman (Mr. Y Furuya).

The impact on the schedule if modification of key parameters and structures of layer 1 are proposed and accepted at this stage, was questioned. The RAN Chairman replied that the layer 1 and layer 2 are approaching final stages of standardisation status and that if some modification is proposed it will probably have a big impact as the discussions would need to be re-opened in the RAN WGs. Such a process risks to de-stabilise the work. However, the working principle expects that any serious modification proposed would be in the form of a complete (concrete) proposal to avoid re-opening of discussions. Even in this case, the modification would cause a delay of around 2 TSG meetings, which will not allow TSG RAN to fulfil the Release '99 target.

Concerning TDD mode, it was clarified that the received proposal from China has not been included at present, but is on the list for study for a future releases. TSG SA should look into the service requirements which may be fulfilled by the Chinese proposal.

The RAN Chairman reinforced the requirement that a stable technology is needed by the October 1999 meeting in order to meet the December 1999 target.

The TSG RAN Chairman indicated that TSG RAN are committed to the current time schedule and we can expect TSG RAN to fulfil their part of time schedule.

It was questioned if there would be alternative techniques if Hybrid ARQ is missing from Release '99. It was clarified that the functionality provided by Hybrid ARQ would be supported by other parts of the specification. The RAN Chairman explained that TSG RAN have set up milestones on each document in order to fulfil the target for Release '99. If any WG reported that a time scale could not be met, then it was checked whether it was essential or not, if essential, then it was given as priority to the WG, otherwise it was decided not to include the technology in Release '99. (This methodology was agreed in TSG RAN).

Support: It was reported that TSG RAN are lacking Support in all WGs

The SA Chairman reported that he had received information from Adrian Scrase that the funding has been agreed, and it is just a matter of finding the experts. Delegates are asked to look into their companies for experts for the Support work.

Mr. Doig stated that the latest versions of specifications need to be available for inclusion on the server area after each TSG meeting, in order to have a full view of the status of the work at each TSG meeting milestone (i.e. April, June, October and December 1999). The SA Chairman will take this up with the support team.

3G TS 25.301- Radio Interface Protocol Architecture. This is the Access stratum architecture, and not the overall architecture. It was suggested that the title be modified to reflect this, to make it easier for people to find the relevant documents. This was considered unnecessary, as it was generally thought that the scope of this document was clear.

TSG SA consider that it is clear that the document 25.301 deals only with the access stratum architecture.

Following a question about the responsibilities for the split GSM 04.08 in 3GPP, it was clarified that 3G TS 24.008 (CC/MM) is the responsibility of TSG CN and the UMTS equivalent of GSM 04.08 RR-part is the responsibility of TSG RAN.

6.2.2 Questions for discussion in TSG-SA

Questions were dealt with under other agenda items as they arose.

6.2.3 Information on status and changes to deliverables

The status of deliverables are given in the status list, provided in Annex D of this report.

Approved Work Items:

TSG-RAN meeting #3 approved the following work items:

No new work items were reported to the meeting.

Approved Specifications/Reports:

TSG-RAN meeting #3 approved the following specifications/reports:

S2.01 - Radio Interface Protocol Architecture. This was agreed as version 3.0.0 and is placed under TSG RAN Change Control.

6.3 Report from TSG-T

6.3.1 Report from TSG-T

Document SP-99169 contains the report from TSG T to TSG SA. The TSG T Chairman (Mr. S. K. Park) gave a presentation of this report , which is available as **Document SP-99170**.

TSG T made the following proposals to TSG SA:

- Creation of definitions of UE, etc. based on 30.05

It was suggested that the document existing in RAN (25.XX - Vocabulary document) is not a RAN-specific document, and should be transferred to a central point in order to collect all 3GPP definitions together. It was agreed that TSG SA would take over the document, and a request for a volunteer to act as editor was made. Each group should provide their terminology and definitions to SA to update the document.

- Set-up of reflector list on Terminology

The setting up of an e-mail reflector list for Terminology was proposed to TSG SA. Following the above agreement for TSG SA to maintain a definitions and terminology document, the use of a reflector could be considered at a later date, if problems are encountered with consistency of terminology across 3GPP and other groups.

Transfer of specifications from SMG:

A request that a general framework for the transfer of SMG work to 3GPP be set up. Some proposals have been identified, and these need to be confirmed with SMG.

The question of how any documents which remain in SMG will be approved by the 3GPP. It was the understanding that the 3GPP specification should be completely self-contained, except for references to external publicly available documents.

TSG SA Management will negotiate with SMG on a framework for the transfer of specifications.

In response to the Liaison from ETSI TC HF, TSG T Proposed that TSG SA respond with the following:

- That SA WG1 should address the requirements for people with special needs, and T WG3 will then incorporate the identified requirements.

This liaison had been discussed by TSG SA, and a response was not considered necessary (it would only be a confirmation of receipt), however, the WGs were asked to check if any of the requirements could be included in the specifications. SA WG1 should look at the service requirements.

SA WG1 are asked to investigate the requirements for people with special needs and see if anything needs to be included in the specifications.

3G SMS:

There is a request for SA WG1 to investigate the requirements for 3G SMS.

TSG SA ask SA WG1 to investigate the requirements for 3G SMS.

Terminal Features and Performance:

TSG T propose that SA WG1 provide a Service Capability definition (see TSG T#3 document TP-99101). It was reported that work is ongoing in many organisations on this subject.

Document SP-99159 and **Document SP-99160** contain the status of T WG2 and T WG3 documents and were forwarded to TSG SA for information.

6.3.2 Questions for discussion in TSG-SA

Document SP-99180 - report on terminal capabilities status. The TSG T Chairman introduced this liaison statement from TSG T2 to all other WGs which asks for co-operation from all WGs in identifying terminal capabilities. Some discussion over the Liaison ensued. Attention was drawn to **Document SP-99125** which asks SA WG1 to review and evaluate the service capabilities in the document. **Document SP-99209** replaces **Document SP-99180** with the figures visible.

It was clarified that the request is for SA WG1 to fill in the vertical column for each of the service capabilities and other groups to fill in the technical domain implementation capabilities as given in Annex A of **Document SP-99125**, for a set of services as given in the liaison (**Document SP-99209**).

Document SP-99113 - contains a response from TSG-S4 to TSG-T2 and was provided to TSG SA for information.

Document SP-99179 - LS to TSG SA and SA WG1 on services and service capabilities on terminals. This asks TSG SA to specify which services will be mandatory for terminals for Release '99.

SA WG1 were asked to consider the issue and respond to TSG T. The liaison should be interpreted, in the second paragraph, to mean that "From the terminal perspective, the choice of services and services capabilities to implement should not be restricted ...".

It was reported that this had already been discussed in ETSI SMG for the UMTS work and it was agreed that there would be no mandatory terminal capabilities. However, there may be some specified "default" capabilities for specific services when implemented.

Document SP-99181 - Report of ad-hoc meeting on EMC provided for information. This report was noted.

6.3.3 Information on status and changes to deliverables

Approved Work Items:

TSG-T meeting #3 approved some "Revised Work Item descriptions", splitting the work into the following deliverables:

- USIM and IC card requirements for 3GPP (UICC).
- USIM characteristics, containing USIM specific command parameters, file structures, contents of data-fields, application protocol and security functions.
- UICC physical and logical characteristics, containing electrical and physical interface of IC card and terminal, logical characteristics of a telecommunications IC card core standard for UICC (and others).

Approved Specifications/Reports:

TSG-T meeting #3 approved the following specifications/reports:

3GPP specification 21.111 version 2.0.0: "USIM and IC card requirements". This is therefore raised to version 3.0.0 and is subject to change control under TSG-T.

It was reported that the TSG T have agreed to postpone the submission of the first 4 Terminal Logical Test Interface and Terminal Measurement Procedure (FDD and TDD) until June 1999. Lack of contributions are making the TDD work critical and contributions are urgently invited in order to keep to the time scale.

The Protocol Test Specification is being developed in 3 parts:

- Part 1: Terminal Test Specification (prose) - target by 2000
- Part 2: Terminal ICS Proforma - target by 1999
- Part 3: Terminal ATs and IXIT Proforma - target by 2001

A/V terminal characteristics:

In response to a liaison from SA WG4, the view of TSG T is that SA WG4 will develop the test vectors for codec verification which will be used by T1 to produce test specifications. However, T1 have agreed that conformance test specifications for this subject will not be necessary in 3GPP.

After some discussion, it was decided that the TSGs RAN and CN need to define the basic performance characteristics and the requirements for mobile performance can be specified.

TSG T request that liaison with CISPR is added to the list of external liaison bodies for the 3GPP.

Electronic working:

The use of electronic working was reported as very efficient, recommending the use of Networks, Microsoft NetMeetings, RAM Cards, etc.

6.4 Letters to others groups

See section 5.7 of this report.

6.5 Content of April release

The content of the April Release will be defined on the status list as described under agenda item 7.2. The full set of documents in the April release will be placed on the FTP server.

6.6 Other issues

The SA Chairman indicated that he had identified the following cross-TSG issues during the presentations from the TSGs:

- Handover ,3G-3G and 3G-2G-3G,
- Cell selection, Cell re-selection along with mobility management.

The SA Chairman questioned whether it would be sufficient to work on these issues in each group independently, or whether a workshop approach should be taken?

There was support for the workshop approach, to discuss issues and allocate work to relevant areas.

It was agreed that workshops would be held either 09-10 or 10-11 June 1999 in Sophia Antipolis, hosted by ETSI. An invitation will be sent to SA WG1, SA WG2 and SA WG3, RAN WG2, CN WG1, CN WG2, SMG2 and SMG3.

7 Project Management

7.1 Review of work programme

It was noted that there are discussions in CN in May 1999 and an objective to set up a clear work programme in June 1999. A list will be created containing the Release '99 work items for the June 1999 meeting.

7.2 Handling of April release

Document SP-99124 provides an example of a status list for 3GPP "releases" after TSG SA meetings. Mr. Doig from the 3GPP Support team gave a presentation of the principles. The presentation is given in **Document SP-99211**. He further explained that a set of specifications corresponding to the status list will be made available on the 3GPP server.

A request for latest drafting versions was made, it was explained that the FTP area presented was a snapshot of status after each TSG (SA) meeting. Updated working drafts between meetings are the responsibility of the editors and the working groups. An area for uploading such drafts could be provided, but maintenance of this area would be the responsibility of the editors.

There was much support for the status list approach. It was pointed out that in order to put the documents on the server after each meeting, they need to be made available by the editors immediately after each TSG meeting.

TSG/WG Chairmen and editors are asked to ensure that the versions of specifications and reports given in the status list are provided to the Support Team in order to complete the April set of Specifications on the FTP Server.

Document SP-99210 provides the first draft version of the specification list produced for the April Release, taking information from the TSG meetings.

This is a draft list and requires updating with some missing data. Corrections to the data given is requested urgently, and should be forwarded to the Support Team (Mr. I. Doig).

The status list was welcomed as useful and important document. Each TSG Chairman should check the contents of the list and report to Mr. Doig. A corrected and updated list is targeted for Friday 7 May 1999.

Document SP-99183 (Replaces Document SP-99093) provides the document numbering scheme proposed for 3GPP specifications and reports. The scheme is based upon the GSM numbering scheme, and expanded to allow additional capacity (the GSM numbering scheme is reaching saturation).

Documents are numbered with an AB.cde scheme:

Digit "c" may indicate:

c = 0: transferred GSM document (GSM WX.YZ then becomes 3G (W+20)X.0YZ)
e.g. GSM 04.08 becomes 3G TS 24.008

c = 8 or 9: 3GPP Report

c = other: 3GPP specification

Other details of the system are explained in the contribution.

The proposed specification and report numbering system was approved as a principle, and the principle of central allocation of numbers by the 3GPP Support Team was also approved. This decision will be forwarded to the PCG for endorsement.

From version 3.0.0, the master document for the specification or report belongs to the Support Team, and update of the specifications/reports is the responsibility of the Support Team.

7.3 Working methods

Document SP-99111 (Replaces **Document SP-99092**) - Proposal on the introduction of Working Methods functions within 3GPP. The document proposes that TSG SA appoint somebody to follow the Support Team in the issues concerning Working Methods.

It was explained by the TSG SA Chairman that the 3GPP Management Team (TSG Chairs and Vice Chairs) have met to discuss Working Methods and the results had been presented to the meeting.

The need for PCG to have involvement in such matters was questioned. It was proposed that TSG SA approve the working methods for their work, and MCC would have a large role in implementation of the methods.

It was clarified that the 3GPP have both Working Procedures and Working Methods of the 3GPP and the two should not be confused.

It was proposed also that the responsibility should lie with TSG SA, and such responsibilities for the Working Methods should lie with the SA Management. The process should be that experience is gained by the support team and by the officials of the groups. This experience should be used to co-ordinate the working methods by gathering the issues into a focal point and designing Working Methods to satisfy all the needs of the TSGs and WGs of 3GPP. This was proposed as the way forward.

The TSG Chairs would collect the issues and feed back to the 3GPP Support Team, in order to maintain the Working Methods as needed and in a controlled way.

This proposal was approved as the way of managing the Working Methods in 3GPP.

Document SP-99114 - Reviewing 3GPP Specifications. This was presented by BT, and proposes that a formal process of review of requirements documents be introduced once a document reaches version 3.0.0.

It was recognised that this has been established during the meeting. With this the document was noted.

Document SP-99115 - TSG SA Work relating to Release 99. This proposes that the work of TSG SA and the overall work plan of 3GPP for the Release 99 requirements are frozen at the June 1999 meeting of TSG SA. TSG SA should initiate the necessary actions at this April meeting to determine the capabilities expected for Release 99, to be reviewed at the June 1999 meeting.

It was agreed that these actions have been taken during this meeting, and a set of Release 99 capabilities are expected at the June 1999 meeting.

It was also clarified that UMTS 22.05 should be one of the requirement documents upon which the requirements are based upon, but is not the only requirements document to be used.

A request that documents which are considered stable enough are sent to the technical groups in order that there is time for review before approval of the documents.

It was agreed that requirement specifications should be reviewed in the light of time scales for the production of related specifications. The requirements should then be refined, if necessary, to allow the production of a set of specifications, which it would be feasible to produce within the project time scales.

7.4 Other issues

Document SP-99116 - Beyond Release 99 - This document proposes the instigation of discussions on the requirements for the 2nd release of 3GPP Specifications, including capabilities, and time scales at the June 1999 meeting of TSG SA. 3GPP Members are encouraged to contribute to the June 1999 meeting on these issues.

This invitation was welcomed, as the Scope of the next release needs to be considered. The contribution was noted and delegates asked to make contributions on this to the next meeting of TSG SA.

8 Project support

Document SP-99182 - Proposed priorities for the 3GPP Support Team. This was contributed by the TSG Chairmen and presented by the TSG SA Chairman. The document details the priorities considered necessary for the efficient use of the 3GPP resources.

Priority 1 is for the update of documents (reports and specifications) after TSG meetings. This implies that support to WGs cannot be guaranteed if the WG holds a meeting directly after a TSG meeting.

Other priorities are listed in the document and were detailed by the Chairman.

Co-ordination with the other groups supported by MCC members was questioned, so that their meetings did not occur just after each other. It was explained that this is a matter of optimisation within the MCC group to avoid such clashes as far as possible.

It was also stated that all TSGs and WGs need support from the Support Team at their meetings.

The TSG SA Chairman will report to the MCC management that support is needed from the 3GPP Support Team for at a minimum the TSG and WG meetings.

9 Postponed issues from earlier in the meeting

All postponed issues were dealt with and the resulting agreements are reported in the relevant sections of this report.

10 Workplan and future meetings

Document SP-99189 (replaces Document SP-99165) from the TSG Chairmen, list the proposed meeting dates for the TSGs. The compression of all meetings into a single week is for study with experience, so these meetings may need to be modified).

The document was noted. (some corrections were also noted: TSG T#4 and TSG RAN#4 will be 17-18 June 1999, rather than 16-18 June and TSG T#5 will be 07-08 October 1999 and not 06-08 October).

A summary of the meeting dates are given below:

TSG	No.	Date	Venue	Host
CN	#4	25-28 May 1999	Sophia Antipolis, France	ETSI
RAN	#4	16-18 June 1999	Miami, U.S.A	T1
T	#4	17-18 June 1999	Miami, U.S.A	T1
SA	#4	21-23 June 1999	Miami, U.S.A	T1
CN	#5	06-08 October 1999	Korea (to be confirmed)	TTA
RAN	#5	06-08 October 1999	Korea (to be confirmed)	TTA
T	#5	07-08 October 1999	Korea (to be confirmed)	TTA
SA	#5	11-13 October 1999	Korea (to be confirmed)	TTA
CN	#6	13-15 December 1999	Sophia Antipolis, France	ETSI
RAN	#6	13-15 December 1999	Sophia Antipolis, France	ETSI
T	#6	13-15 December 1999	Sophia Antipolis, France	ETSI
SA	#6	15-17 December 1999	Sophia Antipolis, France	ETSI
CN	#7	13-15 March 2000		
RAN	#7	13-15 March 2000	Host required	
T	#7	13-15 March 2000		
SA	#7	15-17 March 2000		
CN	#8	05-07 June 2000	Germany (to be confirmed)	Mannesmann
RAN	#8	05-07 June 2000	Germany (to be confirmed)	Mannesmann
T	#8	05-07 June 2000	Germany (to be confirmed)	Mannesmann
SA	#8	07-09 June 2000	Germany (to be confirmed)	Mannesmann
CN	#9	25-27 September 2000		
RAN	#9	25-27 September 2000	Host required	
T	#9	25-27 September 2000		
SA	#9	27-29 September 2000		
CN	#10	11-13 December 2000		
RAN	#10	11-13 December 2000	Host required	
T	#10	11-13 December 2000		
SA	#10	13-15 December 2000		

Handover workshop: either 09-10 June 1999 or 10-11 June 1999, in Sophia Antipolis, Hosted by ETSI.

11 Any other business

There was no other business signalled.

12 Closing of meeting

The Chairman, Mr. Niels Peter Skov Andersen, thanked the Hosts for the excellent organisation support and facilities. The 3GPP Support Team were thanked for their hard work in ensuring the smooth running of the meeting. Delegates were thanked for their hard work and co-operation in the meeting and the meeting was closed.

Annex A: Co-ordinates of TSG and WG Officials

Position	Name	Company	e-mail	Telephone	Fax	(Mobile Tel.)
TSG SA Officials:						
Chairman	Niels Andersen	MOTOROLA	npa001@email.mot.com	+45 43 48 81 10	+45 43 48 82 76	+45 4018 4793
Vice Chairman	Gary Jones	Omnipoint	gjones@omnipoint-corp.com	+1 301 951 2524	+1 703 715 2365	+1 201486 0949
Vice Chairman	Armin Toepfer	Mannesmann	armin.toepfer@d2privat.de	+49 211 533 2838	+49 211 533 2804	+49 172 2100 748
Secretary	Maurice Pope	3GPP Support Team	maurice.pope@etsi.fr	+33 4 92 94 4259	+33 4 92 38 5259	
TSG SA WG1 Officials:						
Chairman	Alan Cox	Vodafone	alan.cox@vf.vodafone.co.uk	+44 1635 673 332	+44 1635 583 019	+44 385 200 147
Vice Chairman	David Cooper	Telecom Modus Ltd	david.cooper@t-modus.co.uk			
Vice Chairman	Tommi Kokkola	Nokia Corporation	tommi.kokkola@ntc.nokia.com	+358 40 50 40 734	+358 9 511 68080	+358 40 50 40 734
Secretary	Roger Tarazi	3GPP Support Team	roger.tarazi@etsi.fr	+33 4 92 94 4228	+33 4 92 38 5228	
TSG SA WG2 Officials:						
Chairman	Teuvo Jarvela	Nokia Corporation	teuvo.jarvela@nmp.nokia.com	+44 1252 865 163	+44 1252 865 065	+44 385 525 683
Vice Chairman	Yukio Hiramatsu	NTT	hiramatu@magnet.netlab.ntt.co.jp	+81 422 59 6024	+81 422 60 7429	+81 50 137 8536
Vice Chairman	Vacancy					
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Vice Chairman (Temp Secretary)	Adam Barenzweig	Lucent Technologies	madadam@lucent.com			
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TSG SA WG5 Officials:						
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Vice Chairman	Vacancy					
Vice Chairman	Vacancy					
Secretary 1	Michael Sanders	3GPP Support Team	michael.sanders@etsi.fr	+33 4 9294 4290	+33 4 92 38 5290	

Annex B: List of documents

Document	Subject	Source	Agenda Item	Replaced by Document
SP-99088	Draft agenda for Meeting #3	Chairman	2	
SP-99089	Withdrawn			
SP-99090	Liaison statement on co-operation between ETSI TC HF and 3GPP	ETSI TC HF	4.2	SP-99094
SP-99091	Draft Report of TSG SA Meeting #2, version 0.0.6	TSG SA Secretary	3	SP-99096
SP-99092	Proposal on the introduction of Wo Me functions within 3GPP	Italtel	7.3	SP-99111
SP-99093	Structure and numbering of the of 3GPP specification series	3GPP Support Group	7.2	SP-99183
SP-99094	Liaison statement on co-operation between ETSI TC HF and 3GPP	ETSI TC HF	4.2	
SP-99095	Liaison to 3GPP SA on ETSI TIPHON Working Group 7 Activities	ETSI EP TIPHON	4.2	
SP-99096	Draft Report of TSG SA Meeting #2, version 0.0.7	TSG SA Secretary	3	
SP-99097	Withdrawn			
SP-99098	Report from S1 to SA#3	SA WG1	5.1.1	
SP-99099	Work Items: 1. WI on UMTS Interworking with IS-41 networks, 2. WI on Multicall	SA WG1	5.1.3	SP-99187
SP-99100	HandOver: LS for information, TS 22.29v2.0.2 for approval	SA WG1	5.1.3	
SP-99101	Technical Specification on Multicall TS 22.[135]	SA WG1	5.1.3	
SP-99102	Provision of Services in UMTS - The Virtual Home Environment (Highlighting release 99 requirement) TS 22.21V1.1.0	SA WG1	5.1.3	
SP-99103	CRs affecting TS 22.00 UMTS Phase 1	SA WG1	5.1.3	
SP-99104	CRs affecting TS 22.01, Service aspects; Service principles	SA WG1	5.1.3	
SP-99105	CRs affecting TS 22.05, Services and Service Capabilities	SA WG1	5.1.3	
SP-99106	CRs affecting TS 22.15, Service aspects; Charging and Billing	SA WG1	5.1.3	
SP-99107	UMTS Bearer QOS Attributes - Service requirements. Proposed Change Request to TS 22.05	SA WG1	5.1.3	SP-99161
SP-99108	UMTS 30.00 - UMTS Work Programme	ETSI SMG	4.2	
SP-99109	UMTS 30.01 - UMTS Baseline document	ETSI SMG	4.2	
SP-99110	Consolidated Draft Work Plan for IMT-2000 Network Aspects in ITU-T	R Pandya, ITU-T WP3/11	4.3	
SP-99111	Proposal on the introduction of Wo Me functions within 3GPP	Italtel	7.3	
SP-99112	Liaison statement on carrier frequency raster	RAN WG4	4.1	
SP-99113	Liaison Statement - Response from TSG-S4 to TSG-T2 on Terminal Capabilities	SA WG4	6.3.2	
SP-99114	Reviewing 3GPP Specifications	BT	7.3	
SP-99115	TSG SA Work Relating to Release 99	BT	7.3	
SP-99116	Beyond Release '99	BT	7.4	
SP-99117	Report of SA WG3 (Security) Meeting #2	SA WG3	5.3.1	
SP-99118	Withdrawn			
SP-99119	Withdrawn			
SP-99120	LS to TSG-T, TSG-RAN, TSG-CN, TSG-SA on Support of SMS	T WG2	4.1	
SP-99121	Open Interfaces; lu, lub and lur	GSM Association Plenary	4.3	
SP-99122	Liaison statement: PS and CS Implementation Issues	SA WG2	5.2.2	
SP-99123	Liaison Statement on R99 Security features	SA WG2	5.2.2	
SP-99124	Example 3GPP Specifications status list	3GPP Support Group	7.2	
SP-99125	Liaison statement from T2 on terminal capabilities	T WG2	4.1	

Document	Subject	Source	Agenda Item	Replaced by Document
SP-99126	TSG-S4 Status Report to TSG-SA#3	SA WG4 Chairman	5.4.1	
SP-99127	TSG-S4 Status Report to TSG-SA#3 (Slides)	SA WG4 Chairman	5.4.1	
SP-99128	Updated List of TSG-S4 Deliverables	SA WG4	5.4.1	SP-99195
SP-99129	Proposed Work Item: 3G Acoustic Audio-Visual Terminal Characteristics	SA WG4	5.4.3	
SP-99130	Work Program and Open Issues for WI S4-2 on QoS for Speech and Multimedia Codec	SA WG4	5.4.3	
SP-99131	TS 26.010 Version 1.0.0 AMR Speech Codec; General description	SA WG4	5.4.3	SP-99196
SP-99132	TS 26.011 Version 1.0.0 AMR Speech Codec; Transcoding functions	SA WG4	5.4.3	SP-99197
SP-99133	TS 26.014 Version 1.0.0 AMR Speech Codec; Comfort noise aspects	SA WG4	5.4.3	SP-99198
SP-99134	TS 26.015 Version 1.0.0 AMR Speech Codec; Error concealment of lost frames	SA WG4	5.4.3	SP-99199
SP-99135	TS 26.016 Version 1.0.0 AMR Speech Codec; Source Controlled Rate operation	SA WG4	5.4.3	SP-99200
SP-99136	TS 26.018 Version 1.0.0 AMR Speech Codec; Frame Structure	SA WG4	5.4.3	SP-99201
SP-99137	TS 26.110 Version 1.0.0 Codec for Circuit Switched Multimedia Telephony Service; General Description	SA WG4	5.4.3	SP-99202
SP-99138	TS 26.111 Version 1.0.0 Codec for Circuit Switched Multimedia Telephony Service; Modifications to H.324	SA WG4	5.4.3	SP-99203
SP-99139	TS 26.112 Version 1.0.0 Codec for Circuit Switched Multimedia Telephony Service; Call Set-Up Requirements	SA WG4	5.4.3	SP-99204
SP-99140	TR 26.115 Version 1.0.0 Codec for Circuit Switched Multimedia Telephony Service; Terminal Implementor's Guide	SA WG4	5.4.3	SP-99205
SP-99141	Status of SA WG3 deliverables	SA WG3	5.3.1	
SP-99142	Proposed method for acquiring cryptographic algorithms for 3G systems	SA WG3	5.3.2	
SP-99143	Discussion Document on GSM/UMTS "interworking" with regard to SIM and USIM	SA WG3	5.3.2	
SP-99144	Reserved for Security Architecture document version 2.0.0	SA WG3	5.3.3	
SP-99145	Reserved for Security Threats and Requirements document version 2.0.0	SA WG3	5.3.3	
SP-99146	UMTS 23.01 V3.0.0	SA WG2	5.2.3	
SP-99147	Change Request to UMTS 23.10 V3.0.0	SA WG2	5.2.3	
SP-99148	UMTS 23.30 V 1.2.0.	SA WG2	5.2.3	
SP-99149	TRS 23.20 V. 1.5.1	SA WG2	5.2.3	
SP-99150	TS 22.121	SA WG2	5.2.3	
SP-99151	UMTS 23.25 V. 0.2.0	SA WG2	5.2.3	
SP-99152	UMTS 23.07 V0.3.0	SA WG2	5.2.3	
SP-99153	UMTS 23.27 V. 0.1.0	SA WG2	5.2.3	
SP-99154	UMTS XX.yy, Mobile IP, V. 0.5.0	SA WG2	5.2.3	
SP-99155	TSG S2 Status Report	SA WG2	5.2.1	
SP-99156	Reserved for SA WG2 (not received)	SA WG2		
SP-99157	Liaison Statement from TSG RAN	TSG RAN	4.1	
SP-99158	Liaison Statement from TSG RAN	TSG RAN	4.1	
SP-99159	Work Programme of TSG T WG 2, status after TSG T Meeting #3	T WG2 Secretary	6.3.1	
SP-99160	Work Programme of TSG T WG 3, status after TSG T Meeting #3	T WG3 Secretary	6.3.1	
SP-99161	Qos requirements CR2205 A	SA WG1	5.1.2	
SP-99162	QoS requirements; proposals for further work	Rapporteur	5.1.2	
SP-99163	Draft meeting report of CN#3 Plenary	3GPP Support Group	6.1.1	
SP-99164	LS on (Minimum) Scope for a basic UMTS Core Network	SMG3/TSG_CN	4.1	
SP-99165	Proposed meeting schedule for 3GPP TSGs	TSG Chairman	10	SP-99189

Document	Subject	Source	Agenda Item	Replaced by Document
SP-99166	PCG#1 Draft meeting report	PCG	4	
SP-99167	Managing the TSG project coordination group	PCG	4	
SP-99168	UMTS Forum_3GPP Co-ordination Group_	Chairperson 3GPP Co-ordination Group	4.2	
SP-99169	Report from TSG-T	TSG T Chairman	6.3.1	
SP-99170	Progress report TSG T	TST T Chairman	6.3.1	
SP-99171	SA WG5 #2 meeting report	SA WG5 Chairman	5.5.1	
SP-99172	WG5 Terms of Reference	WG5	5.5.2	
SP-99173	3G Telecom Management principles and high level requirements	WG5	5.5.2	
SP-99174	32.002 V. 1.0.0.	WG5	5.5.2	
SP-99175	UMTS Forum Report to 3GPP TSG SA (Plenary) #3 On Spectrum Activities	Technical Advisor to UMTS Forum	4.2	
SP-99176	Not allocated			
SP-99177	Comments to CR concerning QoS of TS22.05	T-Mobil	5.1.2	
SP-99178	Inter Operator Handover	GSM Association Plenary	4.3	
SP-99179	Proposed LS to SA and S1 (Services and service capabilities on terminals)	TSG T	6.3.2	
SP-99180	Report of the current status on terminal capabilities	TSG T	6.3.2	SP-99209
SP-99181	Report of Ad-Hoc on EMC	TSG T	6.3	
SP-99182	Proposed priorities for the 3GPP Support team	TSG Chairmen	8	
SP-99183	Structure and numbering of the of 3GPP specification series	3GPP support	7.2	
SP-99184	TSG CN Status report	TSG CN	6.1.1	SP-99207
SP-99185	TSG RAN#3 Chairman's report	TSG RAN Chairman	6.2.1.	
SP-99186	Specifications in TSG N version 4	TSG N Chairmen (Ian Park, Norbert Klehn, Harald Dettner)	6.1.3	
SP-99187	Work Items: 1. WI on UMTS Interworking with IS-41 networks, 2. WI on Multicall	SA	5.1.3	
SP-99188	Report from GSMA (GSM Association) Plenary held in Helsinki, 20-23.04	Armin Toepfer, Mannesmann Mobilfunk	4.3	
SP-99189	Proposed meeting schedule for 3GPP TSGs.	TSG Chairmen	10	
SP-99190	TSG-SA WG5 (Telecom Management) Report Summary	A. Yuhan, SA WG5 Chair	5.5.1	
SP-99191	Report to SA Meeting # 3,	Chairman 3GPP TSG-SA WG3	5.3.1.	
SP-99192	SA5 #2 WG Meeting Report (= SP-99171)	Chair, TSG-SA WG5	5.5.1	
SP-99193	Suggestion on acceptance procedure for the usage of GSM SIM in UMTS	Telia, NTT DoCoMo, Vodafone, Telenor, Ericsson, Fujitsu, Sonera, Nokia, Lucent Technologies, T-Mobil, NEC Technologies, Mitsubishi Electric, Motorola, Siemens.	5.3.2	
SP-99194	LS on Principles for Bearer services and Quality of service	TSG SA	5.1.2	
SP-99195	New Updated List of TSG-S4 Deliverables	SA WG4	5.4.1	
SP-99196	New TS 26.010 Version 1.0.0 AMR Speech Codec; General description	SA WG4	5.4.3	
SP-99197	New TS 26.011 Version 1.0.0 AMR Speech Codec; Transcoding functions	SA WG4	5.4.3	
SP-99198	New TS 26.014 Version 1.0.0 AMR Speech Codec; Comfort noise aspects	SA WG4	5.4.3	
SP-99199	New TS 26.015 Version 1.0.0 AMR Speech Codec; Error concealment of lost frames	SA WG4	5.4.3	
SP-99200	New TS 26.016 Version 1.0.0 AMR Speech Codec; Source Controlled Rate operation	SA WG4	5.4.3	
SP-99201	New TS 26.018 Version 1.0.0 AMR Speech Codec; Frame Structure	SA WG4	5.4.3	

Document	Subject	Source	Agenda Item	Replaced by Document
SP-99202	New TS 26.110 Version 1.0.0 Codec for Circuit Switched Multimedia Telephony Service; General Description	SA WG4	5.4.3	
SP-99203	New TS 26.111 Version 1.0.0 Codec for Circuit Switched Multimedia Telephony Service; Modifications to H.324	SA WG4	5.4.3	
SP-99204	New TS 26.112 Version 1.0.0 Codec for Circuit Switched Multimedia Telephony Service; Call Set-Up Requirements	SA WG4	5.4.3	
SP-99205	New TR 26.115 Version 1.0.0 Codec for Circuit Switched Multimedia Telephony Service; Terminal Implementor's Guide	SA WG4	5.4.3	
SP-99206	Proposed liaison to ITU-R on: REVISION OF RECOMMENDATION ITU-R M.1079	TSG SA	4.1	
SP-99207	Revised TSG CN Status report	TSG CN	6.1.1	
SP-99208	SIM/USIM Compromise	Leadership TSG SA	5.3.2	
SP-99209	Report of the current status on terminal capabilities	TSG-T2	6.3.2	
SP-99210	Draft 3GPP Specifications status list April 1999	Ian Doig, 3GPP Support	7.2	
SP-99211	Specification Status Presentation	Ian Doig, 3GPP Support	7.2	
SP-99212	LS on Principles for Bearer services and Quality of service	TSG SA	5.1.2	
SP-99213	Liaison statement on usage of GSM-only SIM Cards	TSG SA	5.3.2	

Annex C: List of attendees

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Annex D: Status list of Specifications and Reports after TSG SA Meeting #3 ("April Release")

Number	Ver at TSG#3	Title	planned Version 3	Frozen @	TSG/WG	Editor	Comment
21.111	3.0.0	USIM and IC card requirements	April 99		T3	Günter Maringer	
21.133	3.0.0	Security Threats and Requirements	April 99		S3	Per Christoffersson	
21.906	3.0.0	O&M requirements	April 99		S1		
22.053	0.1.1	Tandem Free Operation of speech codecs; Stage 1 service description	Dec 99		S4	William Navarro	
22.100	3.2.0	UMTS Phase 1	April 99		S1		
22.101	3.5.0	UMTS Service principles	April 99		S1		
22.105	3.4.0	Services & Service capabilities	April 99		S1		
22.115	3.1.0	Service Aspects Charging and billing	April 99		S1		
22.121	1.2.0	Provision of Services in UMTS - The Virtual Home Environment	June 99		S1	Jumoke Ogunbekum	
22.129	3.0.0	Handover Requirements between UMTS and GSM or other Radio Systems	April 99		S1	David Cooper	
22.135	1.0.0	Multicall Stage1	June 99		S1	Tommi Kokkola	
22.907	3.1.2	Terminal concepts	April 99		S1		
22.924	3.1.1	Charging and accounting mechanisms	April 99		S1		
22.925	3.1.1	Quality of service and network performance	April 99		S1		
22.945	1.0.0	Study of provision of fax service in GSM and UMTS	June 99		T2		
22.960	3.0.1	Mobile multimedia services	April 99		S1		
22.970	3.0.1	Virtual Home Environment Report	April 99		S1	Jumoke Ogunbekum	
22.971	3.1.1	Automatic establishment of roaming relationships	April 99		S1		
22.972	0.0.0	Multimedia	Dec 99		S1		
22.975	3.0.1	Advanced addressing	April 99		S1		
23.003	3.0.0	Numbering, Addressing and Identification	April 99		N1/2		
23.007	3.0.0	Restoration procedures	April 99		N2B		
23.008	3.0.0	Organisation of subscriber data	April 99		N2B		
23.009	3.0.0	Handover procedures	April 99		N2B		
23.010	3.0.0	Public Land Mobile Network (PLMN) Connection Types	April 99		N3		
23.011	3.0.0	Technical Realization of Supplementary Services - General Aspects	April 99		NSS		
23.012	3.0.0	Location registration procedures	April 99		N1		
23.014	3.0.0	Support of Dual Tone Multi Frequency (DTMF) signalling	April 99		N1		
23.015	3.0.0	Technical realisation of Operator Determined Barring (ODB)	April 99		N2B		
23.016	3.0.0	Subscriber data management - Stage 2	April 99		N2B		

Number	Ver at TSG#3	Title	planned Version 3	Frozen @	TSG/WG	Editor	Comment
23.018	3.0.0	Basic Call Handling - Technical realisation	April 99		N2B		
23.022	3.0.0	Functions related to Mobile Station (MS) in idle mode	April 99		N1		
23.032	3.0.0	Universal Geographical Area Description (GAD)	April 99		N1		
23.034	3.0.0	High Speed Circuit Switched Data (HSCSD) - Stage 2	April 99		N1		
23.038	1.0.0	Alphabets & Language	Oct 99		T2	Arthur Gidlow	
23.039	1.0.0	Interface Protocols for the Connection of Short Message Service Centers (SMSCs) to Short Message Entities (SMEs) Service Centres (SMSCs) to Short Message Entities (SMEs)	Oct 99		T2	Arthur Gidlow	
23.040	1.0.0	Technical realisation of SMS Point to Point	Oct 99		T2	Arthur Gidlow	
23.042	1.0.0	Compression algorithm for SMS	Oct 99		T2	Arthur Gidlow	
23.043	3.0.0	Support of Videotext	April 99		N3		
23.044	3.0.0	Support of Teletext in a Public Land Mobile Network (PLMN)	April 99		N3		
23.045	3.0.0	Technical realisation of facsimile Group 3 service- transparent	April 99		N3		
23.046	3.0.0	Technical realisation of facsimile Group 3 service- non-transparent	April 99		N3		
23.054	3.0.0	Shared Interworking Functions - Stage 2	April 99		N3		
23.057	1.0.0	Mobile Station Application Execution Environment (MExE); Functional description; Stage 2	Oct 99		T2	Mark Cataldo	
23.067	3.0.0	Enhanced Multi-Level Precedence and Preemption Service (EMLPP) - Stage 2	April 99		NSS		
23.068	3.0.0	Voice Group Call Service (VGCS) - Stage 2	April 99		N1/2B		
23.069	3.0.0	Voice Broadcast service (VBS) - Stage 2	April 99		N1		
23.070	3.0.0	Routing of calls to/from Public Data Networks	April 99		N3		
23.072	3.0.0	Call Deflection Supplementary Service - Stage 2	April 99		NSS		
23.078	3.0.0	CAMEL Stage 2	April 99		N2A		
23.079	3.0.0	Support of optical routing - Phase 1 - Stage 2	April 99		N2A		
23.081	3.0.0	Line Identification Supplementary Services - Stage 2	April 99		NSS		
23.082	3.0.0	Call Forwarding (CF) Supplementary Services - Stage 2	April 99		NSS		
23.083	3.0.0	Call Waiting (CW) and Call Hold (HOLD) Supplementary Service - Stage 2	April 99		NSS		
23.084	3.0.0	MultiParty (MPTY) Supplementary Service - Stage 2	April 99		NSS		
23.085	3.0.0	Closed User Group (CUG) Supplementary Service - Stage 2	April 99		NSS		
23.086	3.0.0	Advice of Charge (AoC) Supplementary Service - Stage 2	April 99		NSS		
23.087	3.0.0	User-to-User Signalling (UUS) - Stage 2	April 99		NSS		
23.088	3.0.0	Call Barring (CB) Supplementary Service - Stage 2	April 99		NSS		
23.090	3.0.0	Unstructured Supplementary Service Data (USSD) - Stage 2	April 99		NSS		
23.091	3.0.0	Explicit Call Transfer (ECT) Supplementary Service - Stage 2	April 99		NSS		

Number	Ver at TSG#3	Title	planned Version 3	Frozen @	TSG/WG	Editor	Comment
23.093	3.0.0	Call Completion to Busy Subscriber (CCBS) - Stage 2	April 99		NSS		
23.096	3.0.0	Name Identification Supplementary Service - Stage 2	April 99		NSS		
23.101	3.0.0	General UMTS Architecture	June 99		S2		
23.110	3.1.0	UMTS Access Stratum; Services and Functions	June 99		S2		
23.121	1.0.0	Architecture Requirements for release 99	June 99		S2		
23.907	0.3.0	Quality of Service	June 99		S2		
23.920	1.0.0	Evolution of the GSM platform towards UMTS	June 99		S2		
23.923	0.5.0	Combined GSM and Mobile IP mobility handling in UMTS IP CN	Dec 99		S2	Elisabeth Hubbard	
23.925	0.2.0	UMTS Core network based ATM transport	Dec 99		S2		
23.927	0.1.0	VHE, Open Service Architecture	Dec 99		S1		
23.930	1.2.1	Iu Principles	June 99		S2	Bo Axerud	
23.960	0.1.0	Framework of Network functions to support multimedia services in UMTS	Dec 99		S2		
24.008	N/A	Mobile Radio Interface Layer 3 specification (CC/MM)	April 99		N1		Not Available
24.010	3.0.0	Mobile Radio Interface Layer 3 - Supplementary Services Specification - General Aspects	April 99		N3		
24.022	3.0.0	Radio Link Protocol (RLP) for Data and Telematic Services on the (MS-BSS) Interface and the Base Station System - Mobile-services Switching Centre (BSS-MSC) Interface	April 99		N3		
24.065	3.0.0	Mobile Station (MS) - Serving GPRS Support Node (SGSN); Subnetwork Dependent Convergence Protocol (SNDCP)	April 99		N1		
24.067	3.0.0	Enhanced Multi-Level Precedence and Pre-emption service (eMLPP) - Stage 3	April 99		NSS		
24.068	3.0.0	Group Call Control (GCC) Protocol	April 99		N1		
24.069	3.0.0	Broadcast Call Control (BCC) Protocol - Stage 3	April 99		N1		
24.072	3.0.0	Call Deflection Supplementary Service - Stage 3	April 99		NSS		
24.080	3.0.0	Mobile radio Layer 3 Supplementary Service specification - Formats and coding	April 99		NSS		
24.081	3.0.0	Line Identification Supplementary Service - Stage 3	April 99		NSS		
24.082	3.0.0	Call Forwarding Supplementary Service - Stage 3	April 99		NSS		
24.083	3.0.0	Call Waiting (CW) and Call Hold (HOLD) Supplementary Service - Stage 3	April 99		NSS		
24.084	3.0.0	MultiParty (MPTY) Supplementary Service - Stage 3	April 99		NSS		
24.085	3.0.0	Closed User Group (CUG) Supplementary Service - Stage 3	April 99		NSS		
24.086	3.0.0	Advice of Charge (AoC) Supplementary Service - Stage 3	April 99		NSS		
24.087	3.0.0	User-to-User Signalling (UUS) - Stage 3	April 99		NSS		

Number	Ver at TSG#3	Title	planned Version 3	Frozen @	TSG/WG	Editor	Comment
24.088	3.0.0	Call Barring (CB) Supplementary Service - Stage 3	April 99		NSS		
24.090	3.0.0	Unstructured Supplementary Service Data (USSD) - Stage 3	April 99		NSS		
24.091	3.0.0	Explicit Call Transfer (ECT) Supplementary Service - Stage 3	April 99		NSS		
24.093	3.0.0	Call Completion to Busy Subscriber (CCBS) - Stage 3	April 99		NSS		
24.096	3.0.0	Name Identification Supplementary Service - Stage 3	April 99		NSS		
25.101	1.0.0	UE Radio transmission and reception (FDD)	Oct 99		R4	Edgar Fernandes	
25.102	1.0.0	UE Radio transmission and reception (TDD)	Oct 99		R4	Meik Kottkamp	
25.103	0.1.0	RF parameters in support of RRM	Dec 99		R4	Howard Benn	
25.104	1.0.0	BTS Radio transmission and reception (FDD)	Oct 99		R4	Johan Sköld	
25.105	1.0.0	BTS Radio transmission and reception (TDD)	Oct 99		R4	Meik Kottkamp	
25.113	N/A	BTS EMC	Dec 99		R4	Simon Pike	Not Available
25.141	0.1.0	Base station conformance testing (FDD)	Dec 99		R4	Howard Benn	
25.142	N/A	Base station conformance testing (TDD)	Dec 99		R4	Howard Benn	Not Available
25.201	2.0.0	Physical layer -General Description	June 99		R1	Antti Toskala	
25.211	2.0.0	Physical channels and mapping of transport channels onto physical channels (FDD)	June 99		R1		
25.212	1.0.0	Multiplexing and channel coding (FDD)	Oct 99		R1		
25.213	2.0.0	Spreading and modulation (FDD)	June 99		R1		
25.214	1.0.0	FDD; physical layer procedures	Oct 99		R1		
25.221	1.0.0	Physical channels and mapping of transport channels onto physical channels (TDD)	Oct 99		R1		
25.222	1.0.0	Multiplexing and channel coding (TDD)	Oct 99		R1		
25.223	2.0.0	Spreading and modulation (TDD)	June 99		R1		
25.224	1.0.0	TDD; physical layer procedures	Oct 99		R1		
25.231	0.2.0	Physical layer; measurements	Dec 99		R1		
25.301	3.0.0	Radio Interface Protocol Architecture	April 99		R2	Wolfgang Granzow	
25.302	2.0.0	Services provided by the physical layer	June 99		R2	Pierre Lescuyer	
25.303	2.0.0	UE functions and inter-layer procedures in connected mode	June 99		R2	Mikko J.Rinne	
25.304	1.0.0	UE procedures in Idle Mode	Oct 99		R2	Tommi Leivonen	
25.321	2.0.0	Medium Access Control (MAC) Protocol Specification	June 99		R2	Armin Sitte	
25.322	1.0.0	Radio Link Control (RLC) Protocol Specification	Oct 99		R2	Daniele Franceschini	
25.331	1.0.0	Radio Resource Control (RRC) Protocol Specification	Oct 99		R2	Stephen Barrett	
25.401	1.0.0	UTRAN Overall Description	Oct 99		R2	Jean-Marie Calmel	
25.410	0.1.0	UTRAN Iu Interface: General Aspects and Principles	Dec 99		R3	Richard Townend	
25.411	N/A	UTRAN Iu interface Layer 1	Dec 99		R3	Per Willars	R3 to provide V2.0.0 for e-mail approval

Number	Ver at TSG#3	Title	planned Version 3	Frozen @	TSG/WG	Editor	Comment
25.412	1.0.0	UTRAN Iu interface signalling transport	Oct 99		R3	Per Willars	
25.413	1.0.0	UTRAN Iu interface RANAP signalling	Oct 99		R3	Jyrki Jussila	
25.414	1.0.0	UTRAN Iu interface data transport & transport signalling	Oct 99		R3	Per Willars	
25.415	0.1.0	UTRAN Iu interface user plane protocols	Dec 99		R3	Alain Maupin	
25.420	0.1.0	UTRAN Iur Interface: General Aspects and Principles	Dec 99		R3	Kevin Hegerty	
25.421	N/A	UTRAN Iur interface Layer 1	Dec 99		R3	Per Willars	R3 to provide V2.0.0 for e-mail approval
25.422	0.1.0	UTRAN Iur interface signalling transport	Dec 99		R3	Per Willars	R3 to provide V2.0.0 for e-mail approval
25.423	1.0.0	UTRAN Iur interface RNSAP signalling	Oct 99		R3	Bjorn Ehrstedt	
25.424	1.0.0	UTRAN Iur interface data transport & transport signalling for CCH data streams	Oct 99		R3	Nicolas Drevon	
25.425	0.1.0	UTRAN Iur interface user plane protocols for CCH data streams	Dec 99		R3	Nicolas Drevon	
25.426	1.0.0	UTRAN Iur and Iub interface data transport & transport signalling for DCH data streams	Oct 99		R3	Sami Kekki	
25.427	0.1.0	UTRAN Iur and Iub interface user plane protocols for DCH data streams	Dec 99		R3	Fabio Longoni	
25.430	0.1.0	UTRAN Iub Interface: General Aspects and Principles	Dec 99		R3	Mick Wilson	
25.431	N/A	UTRAN Iub interface Layer 1	Dec 99		R3	Per Willars	R3 to provide V2.0.0 for e-mail approval
25.432	1.0.0	UTRAN Iub interface signalling transport	Oct 99		R3	Mick Wilson	
25.433	1.0.0	UTRAN Iub interface NBAP signalling	Oct 99		R3	Nobutaka Ishikawa	
25.434	1.0.0	UTRAN Iub interface data transport & transport signalling for CCH data streams	Oct 99		R3	Magnus Aldén	
25.435	0.1.0	UTRAN Iub interface user plane protocols for CCH data streams	Dec 99		R3	Jean-Marie Calmel	
25.831	N/A	Study Items for future release	Dec 99		R3	Per Willars	Not Available
25.921	1.0.0	Guidelines and principles for protocol description and error handling	Oct 99		R2	Jean Dumazy	
25.922	0.1.1	RRM Strategies	Dec 99		R2	Nicola Pio Magnani	
25.923	1.0.0	Location Services (LCS) features	Oct 99		R2	David G Steer	
25.924	0.0.1	ODMA	Dec 99		R2		
25.931	1.0.0	UTRAN Functions, examples on signalling procedures	Oct 99		R3	Enrico Scarrone	
25.832	2.0.0	Manifestations of Handover and SRNS relocation	June 99		R3	Richard Townend	
25.941	0.0.1	RF Introduction	Dec 99		R4	Tadao Takami	

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25.942	0.0.2	RF system scenarios	Dec 99		R4	Nadia Benabdallah	
25.945	0.0.2	Vocabulary for UTRAN	Dec 99		R4	Howard Benn	
26.071	1.0.0	AMR speech Codec; General description	June 99		S4	Erik Ekudden	
26.073	0.1.0	AMR speech Codec; C-source code	June 99		S4	Erik Ekudden	
26.074	0.0.0	AMR speech Codec; Test sequences	June 99		S4	Erik Ekudden	
26.090	1.0.0	AMR speech Codec; Transcoding Functions	June 99		S4	Erik Ekudden	
26.091	1.0.0	AMR speech Codec; Error concealment of lost frames	June 99		S4	Erik Ekudden	
26.092	1.0.0	AMR speech Codec; comfort noise	June 99		S4	Erik Ekudden	
26.093	1.0.0	AMR speech Codec; Source Controlled Rate operation	June 99		S4	Erik Ekudden	
26.094	0.1.0	AMR Speech Codec Voice Activity Detector	June 99		S4		
26.101	1.0.0	AMR speech Codec; Frame Structure	June 99		S4	Jari Haggvist	
26.102	0.2.0	AMR speech Codec; Interface to lu and Uu	Dec 99		S4	William Navarro	
26.110	1.0.0	Codec for Circuit switched Multimedia Telephony Service; General Description	June 99		S4	Barry Aronson	
26.111	1.0.0	Codec for Circuit switched Multimedia Telephony Service; Modifications to H.324	June 99		S4	Barry Aronson	
26.112	1.0.0	Codec for Circuit switched Multimedia Telephony Service; Call Set-Up Requirements	June 99		S4	Harri Honko	
26.121	0.0.0	Technical Specification for Tandem Free Operation within 3G networks	Dec 99		S4		
26.122	0.0.0	Technical Specification for Tandem Free Operation between 3G and 2G networks	Dec 99		S4		
26.901	0.0.0	AMR speech Codec; performance characteristics	Dec 99		S4	Alain Ohana	
26.911	1.0.0	Codec for Circuit switched Multimedia Telephony Service; Terminal Implementor's Guide	June 99		S4	Petri Haavisto	
26.912	0.0.1	Codec for Circuit switched Multimedia Telephony Service; Quantitative performance evaluation of H.324 Annex C over 3G	Dec 99		S4	Olle Franceschi	
26.913	0.0.0	Quantitative performance evaluation of real-time packet switched multimedia services over 3G	Dec 99		S4	Harri Honko	
26.915	0.0.0	Transmission planning aspects of the services in 3G PLMN System	Dec 99		S4	Ian Goetz	
26.920	0.1.1	Architectural Model for the 3G Transcoders	Dec 99		S4	William Navarro	
27.001	3.0.0	General on Terminal Adaptation Functions (TAF) for Mobile Stations (MS)	April 99		N3		
27.002	3.0.0	Terminal Adaptation Functions (TAF) for services using Asynchronous bearer capabilities	April 99		N3		

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27.003	3.0.0	Terminal Adaptation Functions (TAF) for services using Synchronous bearer capabilities	April 99		N3		
27.005	1.0.0	Use of Data Terminal Equipment - Data Circuit terminating Equipment (DTE - DCE) interface for Short Message Service (SMS) and Cell Broadcast Service (CBS)	Oct 99		T2	Lars Novak	
27.007	1.0.0	AT command set for 3G User Equipment (UE)	Oct 99		T2	Lars Novak	
27.010	1.0.0	Terminal Equipment to User Equipment (TE-UE) multiplexer protocol User Equipment (UE)	Oct 99		T2	Lars Novak	
27.060	3.0.0	GPRS Mobile Stations supporting GPRS	April 99		N3		
28.020	3.0.0	Rate Adaptation on the BSS-MSC Interface	April 99		N3		
29.002	3.0.0	Mobile Application Part (MAP)	April 99		N2B		
29.004	3.0.0	Interworking between the PLMN and the CSPDN	April 99		N3		
29.005	3.0.0	Interworking between the PLMN and the PSPDN	April 99		N3		
29.006	3.0.0	Interworking between a PLMN and the ISDN or PSTN for support of Packet Switched data transmission services	April 99		N3		
29.007	3.0.0	General requirements on Interworking between the PLMN and the ISDN or PSTN	April 99		N3		
29.011	3.0.0	Signalling Interworking for Supplementary Services	April 99		NSS		
29.016	3.0.0	Serving GPRS Support Mode SGSN - Visitors Location Register (VLR); Gs Interface Network Service Specification	April 99		N1		
29.018	3.0.0	Serving GPRS Support Mode SGSN - Visitors Location Register (VLR); Gs Interface Layer 3 Specification	April 99		N1		
29.060	3.0.0	GPRS Tunnelling protocol (GPT) across the Gn and Gp interface	April 99		N2B		
29.061	3.0.0	Interworking between the PLMN supporting GPRS and Packet Data Networks (PDN)	April 99		N3		
30.531	0.1.0	Work Plan and Study Items - RAN WG3	Dec 99		R3		
31.101	N/A	UICC physical and logical characteristics	Oct 99		T3	Rune Lindholm	Not Available
31.102	0.1.0	USIM characteristics	Oct 99		T3	Yoshio Honda	
32.101	1.0.0	3G Telecom Management principles and high level requirements	Oct 99		S5	Michael Truss	Handover to TSG SA
32.102	1.0.0	3G Telecom Management architecture	Oct 99		S5	Tommy Berggren	Handover to TSG SA
33.102	3.0.0	Security Architecture	April 99		S3	Bart Vinck	
33.120	3.0.0	Security Objectives and Principles	April 99		S3	Tim Wright	