

## **GSM MEETING REPORT (approved)**

Place: Vienna  
Time: 1988.04.25-29  
Participants: See Annex 1  
Agenda: See Annex 2  
Documents: See Annex 3

### **1 OPENING OF THE MEETING**

Mr Simotta opened the meeting, wishing the GSM members welcome to Vienna and wishing the meeting good success.

An amendment to the report of the extra-ordinary meeting of GSM in London was agreed: The last sentence in section 9 "Liaison to SPS-SIG" should read: ".....to increase the call set-up delay for all calls."

### **2 ADOPTION OF THE AGENDA**

The approved agenda appears as annex 2 to this report.

### **3 LISTING OF DOCUMENTS AND RECOMMENDATIONS**

In addition to the recommendations mentioned in this report, the documents listed in annex 3 were considered.

### **4 IMPLEMENTATION OF SCCP RELATIONS**

GSM considered Doc 81/88 from France, and decided to follow the proposal to ask SPS-SIG to develop a test specification for the GSM implementation of SS no 7. A letter to SPS-SIG - Doc 99/88 - was drafted and sent to SPS-SIG.

## 5 DISCUSSIONS ON THE RECOMMENDATIONS

Rec 04.06, version 3.1.0

Mr Audestad reported on the latest amendments to the recommendation. Clarifications were given on the simplified protocols described in Annexes E and F, to the mechanisms for indicating the presence of a fill frame (described in a note in the amendment paper), and the aspects of indicating to layer 2 whether layer 1 is running. A new amendment sheet, on how to indicate for the physical layer if a fill frame should be sent, was elaborated. With those modifications the new version of the recommendation was approved.

Rec:s 03.7 and 03.14

These recommendations will be considered by GSM 19.

Rec 03.11, version 2.0.0

Covering note in Doc 112/88.

Mr Audestad explained that this recommendation is now in a very good shape, very much thanks to the substantial efforts made by the Administration of the Netherlands. Some of the supplementary services are however not specified, due to the absence of the corresponding ISDN specifications on which these services depend totally. This applies for instance to Malicious Call Tracing, Hunt Group, Call Transfer, Call Hold and Reverse Charging.

The following clarifications were given:

Section 61, Advice of Charge: WPl announced that there is a need for future amendments to this section with respect to the presentation of the charging information (currency, units, etc). At the present stage the specification describes a number of optional methods.

Section 71, User-to-user signalling: It was explained that this service differs significantly from the Short Message Service in that it uses a call control channel, FACCH or SDCCH. Problems might occur when this service is used during call establishment in connection with OACSU.

Decision: The recommendation was approved in those parts which are now complete. It was pointed out that new services will be added in the future.

Rec 03.03, version 3.1.1

Covering note in Doc 100/88.

Mr Simmons reported of the amendments made to the recommendation since the last version. Section 4.1 was deleted. Iceland was allocated the colour code 0. Andorra and Gibraltar were not allocated a colour code since those countries do not belong to the CEPT. Finally the recommendation was approved with the agreed modifications.

**Rec 03.13, version 2.1.1**

Covering note in Doc 101/88.

GSM confirmed the earlier decision that DRX is a mandatory function for the network and an optional function for the MS. The recommendation was approved without any modification.

**Rec 09.07, version 2.0.0**

Covering note in Doc 110/88.

Corrections were made to the diagram of page 14. The recommendation was approved, keeping in mind the comments of the covering note.

**Series 08.50 Recommendations**

(These recommendations were submitted for examination only).

**Status report of BEG, Doc 114/88**

A quite long discussion took place on the question whether the A-bis interface is really more simple than the A-interface and whether the late finalization of these recommendations (September 1988) would upset the project schedule. On the former question, it was claimed that the use of LAPD for signalling to the BST and the fact that hand-over functions are not implemented at the BST, would enable the production of less expensive BSTs. On the latter question it was concluded that the A-bis specifications will clearly be too late for the present tendering round, but this was found to be less important since the first procurement will concern the urban areas mainly. Elaboration of the A-bis interface will not cause complications for those Administrations which will not use it, and apparently not for industry either, since the alternative would probably be a large number of national specifications. GSM thus decided to retain the earlier decisions and continue the work on this interface. Priority should be given to the study of the problem of location of transcoders. A report on this matter should be given at GSM 19.

**Rec 08.52, version 0.2.0**

During the discussion on this recommendation, the WP3 chairman expressed concern regarding the functional splitting chosen by BEG, in particular for the random access and contention control mechanisms and for the radio resource management. An other concern was the choice of LAPD instead of SS no 7 for signalling to the BST. The reason for the concern is that LAPD - which is designed for the subscriber line - might not have sufficient restoration procedures. The conversion between SS no 7 and LAPD might also be complicated. No decisions were taken.

**Rec 08.54, version 1.0.0**

The concept of "contradirectional interface" (page 2), which concerns the method of synchronizing the bitstreams in the two directions, was briefly explained. Possible delay problems due to rate adaption will be studied by BEG (page 3).

**Rec 08.56, version 1.0.0**

The possibility of using SS no 7 instead of LAPD will be studied.

**Rec 08.58, version 0.1.0**

No comments were made.

**Rec 08.02, version 2.3.1**

Covering note in Doc 108/88.

Clarification was given to the statements on 2 Mbit/s systems on page 2. Those statements do not preclude the use of transmission systems with lower speeds for the MCS-BSS link, but they merely say that the MSC will see 2 Mbit/s systems as usual for switches. Some small amendments were made to the text, whereafter GSM decided to approve the recommendation with the only comments that

- Encryption of user data should take place in the BSS, as assumed by WP3, and
- Section 8 and the figure on page 15 should be amended to take account of the fact that other arrangements for carrying O&M information should be possible, such as using a separate O&M network. The present figure illustrates one possible arrangement only.

**Rec 08.08, version 3.2.1**

Covering note in Doc 109/88.

This recommendation has been approved at an earlier occasion. After considering the amendments listed in the covering note, GSM decided to approve the new version of the recommendation.

**Rec 04.04, version 2.1.1**

Covering note in Doc 102/88.

Mr Audestad explained the purpose of the recommendation. The recommendation is mainly of a descriptive nature, used for modelling purposes. It was noted that the problems of frame fill are now dealt with in Rec 04.06 entirely, and that hand-over and Radio Resources Management have been moved to Rec 04.08.

Decision: Approved.

**Rec 04.05, version 3.1.1**

Covering note in Doc 103/88.

A discussion took place on the possibility of using a FACCH for supporting the Short Message Service. WP3 does not support this proposal due to problems when operating in a frame stealing mode. The Short Message Service will use the SACCH in order to reduce the complexity which would arise if one would add the necessary mechanisms for using FCCH.

Decision: Approved

**Rec 04.09**

This recommendation was not submitted to the meeting. It was mentioned that its development depends on other recommendations and that it can only be finalized when all other 04-Recs are ready. The recommendation is now scheduled for approval at GSM 19.

**Rec 04.08, version 1.4.3**

Covering note in Doc 106/88.

The recommendation was submitted for information only. Several errors have been discovered which L3EG has not had time to correct. The finalization of certain functions, such as mobility management, depends on the progress on the ISDN recommendations on bearer capabilities.

A final draft will be presented at GSM 19. The present version should be treated with great caution in tendering activities.

**Rec 04.07, version 1.0.0**

Covering note in Doc 105/88.

A final draft will be presented at GSM 19. Comments to the recommendation should be made directly to the L3EG chairman, mr Führman.

**Rec:s 09.09, 09.10 and 09.11**

The status of the recommendations is reported in Doc 111/88.

The status of development of the ISUP and the TUP Plus was explained. The ISUP specifications still need considerable development. TUP Plus will not support all of the GSM services.

**Rec 04.06, version 3.1.1**

Covering note and amendment sheets in Doc 104/88.

The amendments to the recommendation were approved.

**Status report of WP2, Doc 91/88**

Most of the discussion following on the presentation was focused on annexes 3 and 4:

**\* Annex 3, Basic Hand-over and Power Control Procedure**

It was noted that this report was elaborated by a subgroup of WP2 and has not been discussed by the full WP2. It has however been approved by the heads of delegation. The formal approval by GSM of the corresponding recommendation is scheduled for GSM 19. At this meeting only an approval of the general direction is asked.

The earlier decision from Florence on the question of mandatory or optional use of the function was confirmed. It was proposed that the third paragraph of section 1 should be amended to reflect the full agreement. The majority of GSM felt however that commercial issues should not be addressed in a technical specification. The third paragraph was replaced by a sentence saying "The basic solution is not mandatory for network operators".

GSM noted that the present basic solution does not cover all possible configurations of BSSs.

Decision: The broad ideas of the annex were endorsed.

**\* Annex 4, C/I Performance**

Besides the annex, Doc 122/88 from UK was considered. The ideas of the document received general support, except that the proposed square brackets were not found desirable. After some discussion, GSM agreed on the figure  $9 \pm 0.5$  dB (tolerance) as the MS C/I requirement. The figure should be taken as a working assumption.

**Rec 05.03, version 3.3.0**

Besides the recommendation itself, a comment to the recommendation (Doc 82/88) from the Administration of Italy - proposing to add two tables from Rec 06.10 for more clarity - was discussed. GSM decided to approve the recommendation. The proposals of Doc 82/88 were adopted. A note should be added to point out that the first table also appear in Rec 06.10.

**Rec 05.05, version 1.2.1**

This recommendation was submitted for examination only. Regarding table 1 it was clarified that not all parameters need to be measured for the type approval.

**Status report of WP3, Doc 92/88**

It was reported that Recs 08.09 and 03.06 remain unresourced. The need for the recommendations was discussed. Decisions:

- The content of Rec 03.06 will be transferred to the Series 11 recommendations. The Administrations were asked to send delegates to the Series 11 meeting on May 30 with the specific task to contribute to the elaboration of that recommendation.
- Rec 08.09: decision postponed till after the OMEG discussion.
- Rec 08.09: BSEG will be asked to take on the task of elaborating the recommendation, provided input material from OMEG on the messages to be coded is received. Some information already exists in Rec's 12.11 and 12.07. The work on the recommendation shall aim for a minimum of manufacturer dependence.

On a question regarding how to indicate what is mandatory and optional in the specifications, it was decided to point out optional features only. This applies for instance to the A-bis interface.

The remaining part of the discussion concerned the short message services. Some criticism was raised against the unacknowledged services, such as cell broadcast. No decisions were taken.

## Status report of WP4, Doc 93/88

A discussion arose on the possible need for extra protection of certain important bits. It was proposed that the bits should be put in order of importance and be mapped on the physical channel in order to benefit from the fact that the FEC protects some bits better than others. WP4 will study the relative importance of the status bits defined in Rec 04.21 compared to the data bits, and will study the filtering of the status bits.

It was decided to adopt as a general principle not to transmit anything (=idle) when there is no useful information to be sent. Such a DTX function for data traffic would further reduce the interference level. Supervisory frames need to be sent at some occasions however, but not continuously. As a consequence of the decision, WP4 will study the possibility to use DTX for non-transparent data services.

A proposed letter to SPS-SIG (Doc 121/88) was discussed. As a clarification to the second paragraph of page 4, it was explained that the acknowledgement mentioned in the paragraph concern the transportation of information through the network, and not a user acknowledgement. Some smaller amendments to the document were introduced. Most of the discussion was focused on the principle of using SS no 7 for carrying user data. This question was felt to be of a political nature, and the matter of principle should be sorted out before the technical issues are addressed. As a result of the discussion, sections 4.1, 4.2, and 4.3 were deleted and the text under Section 4 was amended.

GSM decided to send the letter to SPS-SIG with the agreed amendments.

### Rec 03.70, version 0.0.1

Covering note in Doc 115/88. No comments were made.

### Rec 07.02, version 3.2.0

Covering note in Doc 119/88.

The modified version of the recommendation was approved, with the comments that section 2.2 needs to be amended due to the study on filtering of status bits mentioned above, and that end-to-end synchronization needs further study.

### Rec 07.04

GSM decided to delete this recommendation as proposed in Doc 118/88.

### Recs 04.22 and 08.21, version 1.0.0

Covering note in Doc 113/88.

The two recommendations are identical. GSM thus decided to retain Rec 04.22 and delete the other.

Section 5.2.2.8 might need to be amended due to the DTX decision.

On Section 5.2.3.6 it was noted that WP4 has assumed that SREJ will be used. The French Administration made a reservation to this assumption, referencing additional complexity.

The method of defining the protocol (textual or formal) was discussed. It was noted that textual specifications are most frequently used in the CEPT. Further study is required. The need for a liaison with the 11.10-group was pointed out.

#### Rec 09.05, version 1.0.1

(For examination). Some clarifications were given.

#### Rec 08.01, version 1.1.1

Covering note in Doc 107/88.

Section 4.4 needs to be amended to take into account the possibility to use a separate network for O&M-purposes.

#### Rec 04.10, version 1.0.0

Covering note in Doc 84/88. (Note from secretary: The recommendation with version no 0.4.1 was presented as a first draft as agreed by WP3. The version number was changed before the presentation in GSM to 1.0.0.)

The difference between Registration, Invocation and Activation was clarified. It was noted that User-to-user signalling is defined as a supplementary service by WP1. The service however also appears in Rec 04.08 as a standard signalling procedure. Clarification on this subject is required.

#### Status report of SCEG, Doc 79/88

Specific questions were raised to GSM, which were answered as follows:

- The specification approach for the VAD, described in section 1.1.4 was endorsed. This specification is needed by mid 88. The verification specification could come later.
- The PN accepted the task of distributing the disketts containing the test sequences. The data is organized in standard DOS files, there is no need for up-dating and there are no copyright problems involved.
- On the question of the half rate codec a longer discussion took place. GSM was informed that CCITT SG XVIII will specify a codec, probably at 16 kbit/s, and that the SCEG people might be involved in that activity. It was felt that from a GSM point of view this work was not interesting, while the development of a half-rate codec was considered urgent. The delegates were encouraged to defend the interests of GSM within their respective Administrations to make sure that the SCEG resources will not vanish. SCEG was asked to produce a program for the next 2 years, so that contact is not lost, and that they work out an overall program for implementation of a half-rate codec in the mid 90'ies.



**Rec 06.10, version 2.1.0**

Mr Natvig presented the document which will be a TM recommendation besides being part of the GSM series.

Mr Failli asked whether SCEG had examined the patent situation, since the Patent Panel had advised the group not to approve the recommendation at the present time, in the light of certain recently discovered patent problems. Mr Natvig replied that since the advice from the Patent Panel was received only a few days earlier, SCEG had not been able to perform such an investigation.

GSM decided, after clarification of some minor details, to approve the recommendation from a technical point of view, but to keep in mind that there could be problems later concerning patent rights. It was reported that the Administration of France, Italy and UK were examining this, and would attempt to present a consolidated view at GSM 19. It was decided to include a note that one of the tables also appears in Rec 05.03.

**Rec 06.11, version 1.0.1**

(For examination). Mr Natvig pointed out that it is not perfectly clear from the text of the present version of the recommendation what is mandatory and not in this recommendation.

A discussion arose on the desirability of making the speech extrapolation technique mentioned in the recommendation mandatory. It was explained that there was plenty of room for improvements compared to the reference method, and that SCEG thus would like to see this method as a lower benchmark only. The comparison of alternative methods with the reference method was not considered to be a major problem. GSM endorsed the view of SCEG and decided to retain the approach proposed by SCEG, provided that SCEG produces a document on the methods to be utilized for the comparison.

Some minor amendments to the text were agreed.

**Rec 06.12, version 1.0.0**

(For examination). Some amendments were made.

**Rec 06.31, version 1.0.0**

(For examination). An amendment was made to section 1.1 in order to bring more clarity on the use of DTX in the MS and BS respectively.

**Rec 11.10, version 1.0.0**

Covering note in Doc 96/88.

The discussion was focused on the question of using compliance tests as opposed to performance tests (page 2 of the covering note). Some delegates claimed that important information about the real performance of the MSs would be lost by using this method, information which could otherwise be used for network planning and for fine-tuning of the specifications. Besides, it was questioned that the compliance test method would really reduce the total amount of testing significantly. On the other hand, it was stressed that the purpose of type testing is to decide whether an equipment shall be approved or not, and this purpose should not be mixed with other interests.

It was mentioned that, in order to test sensitivity, it has been proposed to loop the received bitstream to the transmitter and send it out again for further analysis.

Decision: The final decision was postponed. Administrations should ask the opinion of their test laboratories on the method to be used. A document (Doc 129/88), which explains the question more precisely, was drafted. Answers are expected at GSM 20. As a working assumption, PN should continue the work based on the compliance test approach.

In addition to the discussion above, comments were made to the recommendation on the subjects of amplitudes for the fading simulator, the values for intermodulation rejection, specification of "dedicated SIM", safe radiation and channel locking criteria.

Finally, GSM decided to endorse the proposal to have a joint meeting between the Rec 11.10 group and TM3 as proposed in Doc 127/88.

#### Rec 11.20, version 1.0.0

Covering note in Doc 97/88.

Various comments were made on the present approach to the specification of environmental conditions and the DC power supply characteristics (section 7). The conclusion of the discussion was that the recommendation should seek to reference established standards, preferably the CEPT standards worked out by TM2. It was recognized however that there might be a problem to identify applicable standards, since most of the TM2 standards apply to switching equipment and not BSs.

#### Rec 11.30, version 1.1.0

Release note in Doc 116/88.

The reasons for putting the note "In the case of a discrepancy..." in the release note instead of the scope section were explained. The 11.30-group felt that the note would be better observed if put in the release note.

Section j) of page 3 was deleted.

The reference recommendation mentioned in section 4.2.1 was changed to Rec 02.09.

It was questioned whether the routing cases mentioned as examples in the recommendation were representative. No decision was taken on this matter.

#### Rec 11.40, version 1.0.0

Covering note in Doc 130/88.

The questions on top of page 7 are now less important, considering the decisions on the use of SIM made during the meeting.

It was claimed that more stringent requirements on environmental conditions should apply (section 3.1). However several delegates felt that this was not necessary for a test equipment. GSM decided to leave the question to the 11.40-group.

The radio path simulator should be specified in such a way that reuse of existing fading simulators is not prevented. PN was encouraged to establish a liaison with COST 207 concerning the specification of the radio path simulator.

The structure of the recommendation was questioned. For clarification, it was explained that the present structure has been chosen in order to obtain conformity with NETS 10.

#### Status report of WP1, Doc 90/88

The question of direct contacts between the GSM working bodies and other CEPT bodies was debated. It was found that the present situation requires some flexibility and that GSM has to rely on the judgement of the WBs. However, the GSM delegates should be informed of such activities and receive early copies of the correspondence.

The view was expressed that it was not appropriate to ask SPS-SIG to do a job on the Advice of Charge service as long as the service is not sufficiently defined.

The exact arrangements concerning the Advice of Charge service are not defined and there is not sufficient material to base any technical design work. The purpose of the WP1 contacts with SPS-SIG on this matter is merely to give an early indication that the MAP will most probably be affected by the service.

On section 3.1 it was noted that there is not sufficient knowledge of SS no 7 within WP1 to deal with the problems in Rec 02.23 on tariffs for SS no 7 utilization. Methods for measuring the amount of traffic carried by the SS no 7 do not exist. It was concluded what contacts with an other CEPT body are required and CAC was believed to do some work in this area. A letter to the chairman of CAC was drafted (Doc 133/88).

#### Rec 02.20, version 2.2.0

Section 1.2 caused discussion. Point c) received criticism from several delegates. GSM decided to delete point c).

It was proposed that no charge of airtime should take place and that the charging should be based on the optimized routing cases. However, it was concluded that - considering that the telecom business is now dramatically restructured and it is difficult to foresee what charging and accounting arrangements will apply in a future deregulated environment - all possibilities need to be defined. MOU will make every effort to agree on a more simple charging arrangement.

Concern was expressed on the possibility to implement the Advice of Charge service with the present complicated charging specification.

Some amendments to the recommendation were agreed.

Decision: GSM approved the recommendation, on condition that the substance of the second paragraph of section 2.1 is contained in the corresponding PGT recommendation, approved by T-Com.

#### Rec 02.17, version 1.0.0

In addition to the recommendation, Doc 128/88 was considered.

The discussion on Doc 128/88 led to the decision that the use of SIM shall now be a mandatory feature of the MS, and that only two types of SIM will prevail, both physical, removable units (ie the IC-card and the plug-in module). WP1 was asked to up-date the recommendation accordingly.

Comments and clarifications were given to various details on the recommendation. Amendments were proposed to sections 2.1, 3.1.2 and 3.1.3.

WP1 was also asked to study the possibility to specify the same electrical and logical interface for both types of SIM, leaving the mechanical interface as the only difference.

#### **Rec 02.18, version 1.0.0**

The number of bits required to allow for future GSM bands was discussed and the use of that classmark was explained. As a more general comment it was stated that the views of WP3 (annex D of Doc 92/88) should be considered during the further deliberations on this recommendation. The purpose of the MSCM contents should be stated somewhere in the recommendation. In particular, the classmark on hands-free operation was mentioned.

#### **Rec 02.08, version 1.3.0**

Doc 125/88 proposes to transfer the content of the present recommendation to a report. It was felt that this issue could be better assessed when the substance of the document has been agreed, which needs to take place anyway. Hence, the decision on the matter was postponed.

WP1 was asked to study the possibility of using some of the substance of the text for a recommendation and the rest for a report.

It was noted that Rec 06.xy mentioned in section 3.2.3 does not exist. WP1 has assumed that this recommendation will be produced by SCEG. WP1 was asked to sort out this question with Mr Natvig.

Some objections were raised against the quality of service values for the data services, for which maximum delay and minimum delay values have been mixed in a rather confusing way. WP1 explained that the importance of the maximum values and minimum values depend on the application. When working in echoplex mode for instance, the minimum value is the one perceived by the user as the most important.

#### **Rec 12.00, version 3.0.2**

Doc 98/88, which concerns all of the 12-series of recommendations was considered. No comments were made.

The amendments made to the recommendation were briefly explained. A minor modification to section 1.3 "Authentication Center" was agreed, after which the amended version of the recommendation was approved.

**Rec 12.01, version 0.7.2**

GSM discussed the various possible configurations for transferring O&M information between OMC, MSC and BSS. Both SS no 7 and X25 can be used. The Administration of France wished to have all possibilities specified, claiming that the additional work load was not significant since a common application layer specification could be used. PN recognized the need for a complete specification but some additional resources are required. No specific decision was taken. The PN was asked to study the question further.

**Rec 12.02, version 1.1.7**

On paragraph 2.2.2.1 it was explained that the paragraph concerns the possibility of the subscriber to activate/deactivate/modify his services, irrespective whether the operation takes place via the radio interface. The editor was asked to clarify this in the recommendation.

**Rec 12.03, version 1.1.3**

Covering note in Doc 124/88.

There is a need for more clear distinction between operation and maintenance of security functions on one hand, and the security of the operation and maintenance system on the other.

**Rec 12.10, version 1.3.1**

Covering note in Doc 126/88. No major comment was made.

**Rec 12.11, version 1.0.6**

It was mentioned that resourcing problems exist with this recommendation and that it is delayed also due to problems in the interaction with other recommendations.

**Rec 12.14, version 1.2.0**

Covering note in Doc 117/88. No major comment was made.

**Rec 01.04, version 1.2.0**

GSM noted that conflicting use of terms still exists in the recommendations, and that Rec Q70, which is frequently referenced, is proposed to be deleted and replaced by CCITT Q101.

**Rec 02.21, version 1.6.0**

Comments were made to section 0 (Scope) and to the accounting information elements listed in section 6.1. Some discussion arose on the time requirements for transfer of billing information and accounting information respectively, and it was claimed that transfer of billing information is urgent which is not the case for accounting information. Clear definitions of the two types of informations are needed.

The relationship between Rec 02.21 and 12.05 was also discussed. The meeting concluded that Rec 02.21 should set the requirements and Rec 12.05 should define the technical realisation. Further on, it was decided that 02.21 should get stabilized before the work on 12.05 will continue.

Rec 02.22, version 1.2.1

No comments were made.

## 6 IPR-MATTERS

Docs 88/88 and 94/88 were considered, and particular attention was drawn to the proposal of using ETSI as the legal body to represent the Administrations on patent matters. Doubts were expressed both concerning the time aspect and on the feasibility, considering the legal status of ETSI (non-profit organisation).

On the specific questions raised on the front page of Doc 88/88, decisions were taken as follows:

- 1 The letter to Philips should be dispatched.
- 2 Decision postponed till annex 4 has been studied.
- 3 The joint GSM-PP meeting should preferably take place in connection with GSM 19.

Mr Failli assured that Italy will take the task of checking whether there is a risk of infringement of the patents listed in Doc 94/88.

## 7 PROJECT MANAGEMENT

Mr Mallinder introduced the latest version of the GSM Action Plan, Doc 86/88. It was proposed to allocate a secondary responsibility for the Recs 08.51 - 08.63 to WP3 or BSEG. GSM decided however not to make this decision in the absence of the WP3 and BSEG chairmen. Further on, the meeting recalled the decision from the Hague that the work on the A-bis interface should not draw resources from BSEG.

Doc 95/88 on resourcing problems and priorities was discussed. The decreasing participation in the working body meetings was confirmed, but this did not seem to be a major problem for most of the working bodies. After adding Rec 04.10 to the list of top priority recommendations, GSM decided that if the working bodies will run into resource problems those recommendations shall be given highest priority.

Docs 87/88 (Program Management Information) and 89/88 (PN Status Report) were presented. No comments were made.

Mr Ghillebaert presented some criticism from the French Administration on the working conditions of the AEG (Doc 85/88). The chairman of SEG reported of the agreements made within SEG on those conditions. As the result of the discussion a letter was drafted to the AEG chairman (Doc 132/88), stating the GSM view on the matter.

**8 ANY OTHER BUSINESS****Cooperation with INMARSAT and EUTELSAT**

The chairman informed GSM that CCTS urges GSM to intensify the cooperation with INMARSAT and EUTELSAT.

GSM decided to set up a small group (the terms of reference being described in Doc 126/87), consisting of one representative of each of the WP's (with the possible exception of WP2) to act as a liaison group with those organisations. Mr Foxman was appointed as coordinator of the group. The first meeting with INMARSAT and EUTELSAT will be convened in Denmark, the report of which will be distributed to GSM.

It was emphasised that this activity must not draw resources from the GSM specification work.

**Encryption algorithm**

A letter from AEG (Doc 131/88) was presented, in which AEG asks GSM to state its preferences on the question of hardware or software implementations of the user data confidentiality algorithm.

Decision: GSM prefers an algorithm suitable for hardware implementation.

**GSM seminar**

Doc 120/88 on the GSM-seminar in October 1988 was considered. It was explained that the aim of the seminar is to attract those engineers within the Administrations and within industry which will work on the the implementation and operation of the system. The invitations will be distributed accordingly.

**9 REPORT OF THE MEETING**

The report of the meeting was corrected and approved.

**10 MEETING SCHEDULE**

GSM 19 20/6 - 23/6, Espo  
GSM 20 24/10 - 28/10, France

**11 CLOSING OF THE MEETING**

The chairman thanked the Austrian Administration for the pleasant meeting arrangements and the magnificent support offered by the Austrian secretariat. The meeting was closed.

## PARTICIPANTS

Chairman	T Haug
Secretary	T Beijer
Austria	E Tallowitz F Hoffenreich (SIEMENS) H E Reiter (SCHRACK)
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Permanent Nucleus	B Mallinder B Haarpaintner E Haase R Hagedoorn S Hansen J Käll P Simmons F Courau
ECTEL-TMS	K Lehnich (SEL) M Micheli (Center)

## AGENDA

- 1 Opening of the meeting
- 2 Adoption of the agenda
- 3 Listing of documents and recommendations
- 4 Implementation of SCCP relations
- 5 Discussions on the recommendations
- 6 IPR matters
- 7 Project Management
- 8 Any other business
- 9 Report of the meeting
- 10 Meeting schedule
- 11 Closing of the meeting

EXTRACT FROM GSM DOCUMENT LIST

Doc. No.	Source	Title
79/88	SCEG	Status report of SCEG
80/88	PN	Report of Recommendation review
81/88	France	Implementation of CCITT no.7 relations between PLMNs
82/88	Italy	Comments to Rec. 05.03 - channel coding
83/88	WP2	Vocabulary and definitions
84/88	Neths	Status report to Rec. 04.10 v.0.4.1
85/88	France	AEG working conditions
86/88	PN	Programme management review: Action Plan
87/88	PN	GSM Programme Management Information
87/88 annex 4 rev 1	PN	Status of GSM Recommendations as at 28 April 1988
88/88	PN/PP	Patent Panel Report
89/88	PN	PN Status Report
90/88	PN	WP1 " "
91/88	PN	WP2 " "
92/88	PN	WP3 " "
93/88	PN	WP4 " "
94/88	PN/PP	Patent search on handover
95/88	PN	Short term resourcing in GSM
96/88	PN/MSBS	Covering note to Rec. GSM 11.10 v.1.0.0
97/88	PN/MSBS	Covering note to Rec. GSM 11.20 v.1.0.0
98/88	PN	GSM 12 series review
99/88	GSM	Letter to SPS/SIG: Implementation of SCCP relations between PLMNs

EXTRACT FROM GSM DOCUMENT LIST

Doc. No.	Source	Title
100/88	PN	Covering note to Rec. GSM 03.03 v.3.1.1
101/88	WP3	Covering note to Rec. GSM 03.13 v.2.1.1
102/88	WP3	Covering note to Rec. GSM 04.04 v.2.1.1
103/88	WP3	Covering note to Rec. GSM 04.05 v.3.1.1
104/88	WP3	Covering note to Rec. GSM 04.06 v.3.1.1 and update sheets
104/88 rev 1	WP3	" " " " " "
105/88	L3EG	Covering note to Rec. GSM 04.07 v.1.0.0
106/88	L3EG	Covering note to Rec. GSM 04.08 v.1.4.3
107/88	PN	Covering note to Rec. GSM 08.01 v.1.1.1
108/88	PN	Covering note to Rec. GSM 08.02 v.2.3.1
109/88	PN	Covering note to Rec. GSM 08.08 v.3.2.1
110/88	WP3	Covering note to Rec. GSM 09.07 v.2.0.0
111/88	WP3	Status of Recs. GSM 09.09, 09.10, 09.11
112/88	Neths	Covering note to Rec. GSM 03.11 v.2.0.0
112/88 rev1	WP3ed.	Status of Rec. GSM 03.11 version 2.0.0
113/88	WP4	Covering note to Rec. 04.22/08.21 v.1.0.0
114/88	BEG	BEG status report
115/88	WP4	Covering note to Rec. 03.70 v.0.0.1
116/88	PN	Release note to Rec. GSM 11.30 v.1.1.0
117/88	PN/OMEG	Covering note to Rec. GSM 12.14 v.1.2.0
118/88	WP4	Deletion of Rec. GSM 07.04
119/88	WP4	Coveringnote to Rec. GSM 07.02 v.3.2.0

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Doc. No.	Source	Title
120/88	FRG, France	Conference for the presentation of the GSM System
121/88	WP4	Liaison statement to SPS-SIG: support of SMS on the GSM system
122/88	UK	C/I performance spec. in Rec. GSM 05.05
123/88	PN/OMEG	Covering note to Rec. GSM 12.13 v.1.2.0
124/88	PN/OMEG	Covering note to Rec. GSM 12.03 v.1.1.3
125/88	WP1	Covering note to Rec. GSM 02.08 v.1.3.0
126/88	PN/OMEG	Covering note to Rec. GSM 12.10 v.1.3.1
127/88	TM3	Liaison statement to GSM on the nature of the mobile station conformity specification
128/88	WP1	SIM implementation options
129/88	GSM/PN	Compliance testing in the GSM Mobile Station Conformity Specifications
130/88	GSM/PN	Covering note to Rec. GSM 11.40 v. 1.0.0
131/88	AEG	Letter to GSM
132/88	GSM	Letter to AEG Chairman
133/88	GSM	Letter to Chairman of CAC
134/88	GSM	(preliminary) Report of GSM 18, Vienna
135/88	WP1	Extract from Doc. GSM 89/86: Annex 2: Draft Recommendation A: Collection charges in GSM PLMN