

Status: approved

Place: Athens
Date: 1986.02.17 - 21
Participants: see annex 1
Agenda: see annex 2
Documents: see annex 3

1 OPENING OF THE MEETING

Mr Symeonides wished the delegates welcome to Athens. Although Greece is not among the first countries to introduce the new Pan-European system, Greece is fully supporting the work of the group and wishes to see a rapid progress of the work.

2 APPROVAL OF THE AGENDA

The approved agenda appears as Annex 2 to this report.

3 LISTING OF RELEVANT DOCUMENTS

(ref. annexes 2 and 3)

The documents to be considered during the meeting were GSM Doc 1/86 - 20/86. Annex 2 shows to which agenda item the documents belong.

4 REPORT FROM GSM MEETING No 9

The report was corrected and approved. The number of the document is 22/86.

5 REPORT ON IWP 8/13

Mr Barnes gave a summary of the discussions during the latest CCIR SG8 meeting, presenting Doc 14/86 which shows the mandate of a new IWP on land mobile telecommunication systems. The question arose whether GSM should see this as an opportunity to launch the GSM system as a worldwide standard. All agreed that GSM must under no circumstances allow anything to affect the time schedule, and after some discussion the group came to the conclusion that it would not be possible to harmonize with countries outside Europe in doing this. However it is essential to make the GSM system known outside Europe, and in particular in which frequency band the system will operate. The IWP meeting offers a good opportunity for this.

The possibilities for the IWP to find a common worldwide frequency band, and the possibilities of a hybrid satellite/terrestrial system were discussed.

All three GSM WP's will be represented at the Vancouver meeting of the IWP. Mr Stewart was appointed as liaison between GSM and the IWP. A memorandum identifying GSM documents suitable for circulation at the IWP meeting was drafted. All documents will be presented as national contributions.

6 MATTERS RELATED TO WP 1

Mrs Alvernhe gave a report on the progress of the WP: The discussions with SF3 have now come to an end. The documents produced by SF3 will be used as WP1 input documents dealing with service evolution.

Documents 128/85 and 19/86 were presented and the present status of the recommendations was reported.

A fairly long discussion arose on the question of the large number of identity numbers now appearing in the GSM recommendations. The definition of those identities, the use of them and the means by which they are stored need to be clarified. This question was considered to be very important and a matter to be discussed by the GSM main body. WP1 was asked to carry out a special study on the item and to provide a contribution to GSM.

The question of whether automatic or manual roaming (country selector) should be used was discussed. Some delegates claimed that it was necessary from an interference and spectrum utilization point of view that mobile stations do not remain locked to a particular base station in a border area longer than they normally would, and that the network must thus be planned and operated as one network. Others claimed that mobile stations must not lock to base stations belonging to networks for which no subscription has been signed. An automatic roaming might also cause some inconvenience for the mobile station user since he would have to dial different numbers depending on the network he happens to be registered to for the moment. The question needs further study.

For clarification it was stressed that the concepts of "optional" and "mandatory" used in Rec 02.07 means optional resp. mandatory to the manufacturer, not to the network operator. Furthermore it was mentioned that Rec 02.07 is a type approval specification (valid for type approval in all countries) as distinguished from the procurement specifications which might be issued by individual Administrations for their own supply.

The problem of emergency calls in connexion with ID-cards was discussed. In some countries national regulations require the identity of the calling party to be sent along with the emergency call. WP1 needs more information about the existence of such regulations. WP1 will then work out a specific document which lists the alternatives and the consequences. WP3 needs to know if the normal signalling procedure can be used in connexion with emergency calls, if the location of the calling party should be sent along to the emergency center and if a speech path should be set up in all cases.

7 MATTERS RELATED TO WP 2

Mr Maloberti introduced the report of WP2, Doc 8/86. The document raises the question of maximum acceptable delay on the radio path, on which a decision from GSM was asked. Furthermore, WP2 asked for guidance by GSM on the question of what body should be responsible for carrying out the comparative procedure in the future. Since WP2 is now specifying the tools for evaluation, GSM found it natural that WP2 should also carry out the evaluation itself when the time comes.

Mr Natvig introduced Documents 5/86 and 6/86, and answered several questions regarding testing arrangements and procedures.

For the further work of the Joint Experts Group on Speech Coding, GSM was asked to decide on the procedure by which a speech codec should be chosen (Doc 6/86, page 3). After a fairly long discussion on the impact of different bit error patterns, the possible need to match the frame length with the speech codec word length and the possibility to have several candidate codecs passing through the optimization process, the following was decided:

- The speech coding group shall proceed under the assumption that the GSM system will be digital.
- 16 kbit/s gross bit rate shall be made available for the speech codec.
- The output of Phase 1 of the study will be the choice of 2 candidate codecs, possibly one belonging to the LPC family and the other to the subband coding family.
- The choice of candidate codecs will be based on subjective listening tests. A random error channel shall be assumed. An analogue reference based on the NMT 900 system will be used.
- Phase 1 will be finalized by the end of 1986.
- Phase 2 will comprise hardware implementation and optimization of the two candidate codecs, after which a final choice of detailed coding algorithm will be made.
- Phase 2 will be finalized by the end of 1987.

A small working party led by Mr Natvig to deal with the questions of partitioning of delays was set up. The result of the work is reported in Doc 20/86. The conclusions of the group are based on the assumption that a small portion of the traffic (ie the transcontinental traffic) should not be the dimensioning factor. GSM decided to endorse this view. However, since ECS will make satellite connexions common also within Europe, it will be essential that the signalling system provide a possibility to avoid satellite connexions as much as possible.

Mr Temple informed about some technology studies going on within the RACE project. These studies, which are carried out mainly by the semiconductor industry are of interest in connexion with cost and power consumption issues.

8 MATTERS RELATED TO WP 3

Mr Audestad introduced Doc 13/86 telling that several draft specifications have now been almost finalized. The need for some new specifications has also been discovered. This applies for instance to Operation & Maintenance.

The present signalling system specified by WP3 allows for different bit rates to be used on the radio path.

The attention was drawn to Rec 08, "BS to MSC Interface". These Recommendations can not be worked out unless a distribution of functions has been agreed upon. Several possibilities exist, ie the speech codec can be located at the BS or at the MSC which offers different multiplexing possibilities. Rec 08:01 will only list the alternatives without recommending any of them.

The interface matter could be considered as a national matter. However several delegates expressed the view that GSM should decide on the distribution of functions and that the work on the Rec 08-series should be given some priority. This approach was also believed to be in the interest of the industry.

9 REPORT OF JOINT GROUP ON SECURITY

The Chairman introduced Doc 18/86 which reports of the work of the Security group. From the discussion the following was noted:

- WP3 needs more detailed information on the requirements of the Security group to be able to take these aspects into account.
- UK emphasised the need for a high level of protection of the user information, claiming that the protection of the location of the user is of less importance.
- WP3 wished to know if all identities need to be protected. A decision on this matter must be made by GSM.
- More information was needed about the penalties in coast and delay, the impact on the hand-over function, key continuity, etc.
- The problem of protecting the identity when making a mobile terminated call was mentioned.
- The attention was drawn to the problems of system restarts when using temporary numbers.

10 REPORTS FROM ON-GOING EXPERIMENTS

Mr Hovi introduced Doc 17/86 which did not give rise to any discussion.

Mr Mallinder introduced Doc 16/86 about the UK Top-Down study contract with Plessey. The purpose of this study is to check that the system proposals meet the 6 requirements set-up by DTI and British Telecom, and to verify by laboratory tests some of the aspects of the system that otherwise would only be desk-top results.

The "digital radio test bed" mentioned in the document is a laboratory hardware test primarily. Later on the tests will be supplemented with some field tests using mobile equipment. This equipment is still not prototype system equipment but merely laboratory tools.

A preliminary report on the UK Top-Down study will be given at the next WP2 meeting. At this meeting the status of all experiments and experimental systems will be presented and the results will be discussed.

11 REPORT ON COST 207

Mr Failli introduced documents 3/86, 9/86 and 10/86. The documents will be studied by WP 2 at its next meeting.

WORKING PARTIES

The following Working Parties were set-up:

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| A | Mr Mallinder | Planning for the Permanent Nucleus.
Report under agenda item 12. |
| B | Mr Haug | Action Plan.
Report under agenda item 13. |

12 PERMANENT NUCLEUS

The Chairman made a short briefing regarding the offers for a Permanent Nucleus. The following was decided:

- The PN will be located in Paris.
- The coordinator of the PN will be Mr Bernard Mallinder, UK.
- Specifications will be issued in English and French in accordance with the CEPT rules. The Administration of France offered to take care of the translation.
- The PN should start its work in June 1986.

Mr Mallinder made a report on the discussions of WP A: A inventory of the availability of candidates had been made. A problem was identified in that no candidate for the WP1 coordinator position seemed to exist.

Mr Mallinder introduced a proposal for a letter to the Directors General of the CEPT Administrations, in which the Administrations are asked to appoint members to the PN. The letter is based on the principle that all Administrations which wish to be represented in the PN shall have this possibility and that all members shall be recruited on an equal basis. The meeting agreed that the Chairman of GSM should send the letter (after some amendments) and that the Terms of Reference of the PN and the WP's as well as information on the conditions of life in Paris should be annexed. (The letter - GSM Doc 21/86 - has now been sent out).

13 ACTION PLAN

Based on Doc 19/86 Annex 2 an action plan had been worked out by WP B. The report was however not finalized. A few items which were not covered by the present Specification Structure had been identified. These items will be covered by reports.

The following distinctions were made:

Prel. draft A document to be used by other Working Parties,
but not mature enough to be approved by
GSM.

Final draft A document to be approved.

Regarding the work to be carried out in the field of Operation & Maintenance, the meeting agreed that a working plan for this task needs to be elaborated. Mr Mallinder undertook to initiate work on this within the Permanent Nucleus. The main purpose of this work is to analyse the consequences of the air interface with respect to O&M functions and to take the O&M into account at an early stage.

A new Action Plan - Doc 22/86 - has been drafted and circulated later.

14 TMS

The Chairman presented a letter from TMS, Doc 2/86, in which TMS asks for information on the meeting schedules of the WP's. He also told that the chairman of TMS is now Mr Lehnich. Mr Lehnich suggests that a "round table discussion" with the TMS industry representatives and GSM shall take place as soon as possible. The idea behind this type of meeting is that it would enable a communication with the industry without having to obtain a common agreed TMS view which has proved to be difficult.

GSM was in favor of such a meeting and decided to invite TMS to the next meeting in Copenhagen. TMS will meet GSM on June 11-12. In order to make the meeting as efficient as possible an agenda should be worked out and TMS should be asked to send their questions to GSM in advance. It was proposed that Rec 01.01 should be presented to TMS and be used as a basis for the presentation of the status of the GSM work.

Regarding the questions of direct contacts between TMS and the WP's, and the proposed circulation of WP documents among industry organisations, several delegates were reluctant to have a multitude of GSM subgroups talking to various industries and circulating documents not agreed by GSM. Other delegates ment that the WP's could very well discuss specialized matters with the industry, and that such discussions were in fact only useful provided that they took place before the decisions of GSM. No agreement on this matter was obtained. Mr Mallinder was asked to work out a proposal for a procedure to handle the WP - industry contacts. The procedure has to be agreed within GSM before the Copenhagen meeting and with the industry later.

The WP chairmen were asked to send copies of the documents they wished to discuss with the industry to all the members of GSM. The documents should be marked "PRELIMINARY".

The problem of patents which was mentioned in two documents, Doc 5/86 section 3 and Doc 11/86 from France, gave rise to a long discussion from which the following was noted:

- The problem is very specialized and the legal aspects of it need to be analysed by experts.
- In order to have a better position for reaching an agreement it is necessary that the problem is sorted out now before the candidate systems area presented and the decision has to be made.
- The requirement of GSM, that essential techniques used in the system shall be available on a royalty-free basis, shall not be presented as negotiable in the contacts with the industry.
- Regarding non-European patents it is very uncertain if anything can be done at all to protect the Administrations and industries from having to pay royalties. It is well known that most speech coding algorithms have their origin in the Bell Laboratories.

GSM agreed on the principle that only systems coming from originators from which a statement along the lines in Doc 11/86 could be obtained will be considered as GSM candidate systems. A written legal text will be elaborated later after consultation of patent experts.

15 ESA

The Chairman informed of his intention to attend a meeting of PTC-SAT dedicated to mobile services and to inform about the progress of GSM during that meeting. Representatives of ESA will also attend the meeting.

In June 3-4 1986 a seminar on mobile services will be arranged by ESA at ESTEC in Noordwijk, Netherlands. Since ESA is not experienced in the operational aspects of a land mobile service, the Chairman thought it would be useful if delegates of GSM could attend that seminar.

16 TRAFFIC MODELS

Due to lack of contributions no discussion took place.

17 ANY OTHER BUSINESS

Mr Failli introduced Doc 12/86 which gives information on the new Italian mobile telephone system with respect to growth, tariffs etc. The meeting agreed that the earlier information of this kind given by other Administrations should be up-dated using the end of 1985 as the reference date, and that the relevant summary documents should also be up-dated. The information should be sent to Mr Melis and Mr Klingler respectively.

Mr Dupuis introduced Doc 7/86, which proposes editorial changes to Doc 73/85. The meeting decided to follow the suggestions of Mr Dupuis. Mr Stewart offered to go through the document in order to check the consistency of it.

Mr Lluch introduced Doc 1/86 which proposes inclusion of a paging facility in the GSM system. The document was referred to WP1 for consideration.

Mr Barnes introduced Doc 15/86. Since the content of the document was already covered by earlier discussions no further discussion took place.

Mr Maloberti wished to know if WP2 was allowed to receive representatives of the industry during the WP meetings. GSM decided that representatives of the industry could attend the WP meetings for presentation and discussion of their own candidate systems.

Mr Failli stressed the importance of circulating the contributions in due time. This is of particular importance now that specifications will be submitted to GSM for approval.

Mr Failli informed about the intention of SIP to arrange a seminar on mobile communications in June 1986. The location of the seminar has not yet been defined.

Mr Hovi suggested that a new Working Party to deal with technology and realisation should be established. The Administration of UK supported this view and offered to make a contribution on the subject for the next meeting of GSM.

Mr Klingler suggested that VAX-mail should be used in the GSM work in the future for distribution of documents etc.

For the next GSM meeting the group decided that interpretation from English was not necessary.

18 NEXT MEETING

The following meeting schedule was agreed:

Meeting no 11:	1986.06.09--13, Copenhagen.
Meeting no 12:	Madrid, the week starting on 29/9. Number of days to be defined later.

19 CLOSING OF THE MEETING

The Chairman thanked the Greek Administration and the secretariat for their excellent work and nice meeting arrangements.

The meeting was closed.

CEPT-CCH-GSM
Meeting no 10
Athens, 1986.02.17 - 21

List of participants

Chairman:	T. Haug
Secretary:	T. Beijer
Austria:	E. Tallowitz
Belgium:	L. Taghon
Denmark:	M. Jacobsen P. Meyer G. Ström
Finland:	M. Hovi M. Pasanen
France:	P. Dupuis B. Ghillebaert M. Alvernhe A. Maloberti
FRG:	K. Spindler F. Hillebrand F. Pernice
Greece:	G. Symeonidis T. Thanopoulos G. Hatzopoulos G. Chanis H. Tapinou
Ireland:	J. Dwyer
Italy:	R. Failli
Netherlands:	L. Melis M. van Beveren
Norway:	P. Blikrud J. Audestad J. Natvig
Portugal:	O. Reis Luis

Spain:	C. Lluch A. Benedi
Sweden:	G. Fremin Ö. Mäkitalo
Switzerland:	R. Klingler P. Gfeller
United Kingdom:	S. S. Temple B. Mallinder R. Stewart D. M. Barnes D. S. Cheeseman E. W. Beddoes

CEPT-CCH-GSM
 Meeting no 10
 Athens, 1986.02.17 - 21

AGENDA

Applicable documents (/86)

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EXTRACT FROM GSM DOCUMENT LIST

<u>Doc No</u>	<u>Title</u>	<u>Source</u>
128/85	Report of WP 1, Dec 9-12 1985	GSM WP1
1/86	Inclusion of a radio paging system in the GSM system	Spain
2/86	Letter from TMS	TMS
3/86	COST 207: Sixth report of the working group on propagation	COST 207
4/86	Telex from the delegation of UK	UK
5/86	Report to GSM regarding progress of the Joint Expert Group TR3/COST 207	TR3
6/86	Design requirements for speech codecs	TR3
7/86	Basic requirements for the GSM system	France FRG Ital
8/86	WP2 Paris meeting	WP2
9/86	5th report of COST 207 WG3 Modulation Methods	COST 207
10/86	COST 207, WG3 Modulation Methods: Early information	COST 207
11/86	Industrial property conditions to be included in contracts relating to experimental programmes	France FRG Ital
12/86	Public Land Mobile Telephone Service in Italy	Italy
13/85	Report from WP 3, Jan 1986	GSM WP3
14/85	CCIR SG8 IWP 8/13 Future Public Land Mobile Telecommunication System	UK
15/85	Review of WP structure and the need to progress miscellaneous activities	UK

16/85	Resumé of activities of the UK R&D programme in digital cellular radio	UK
17/85	Experimental system for testing narrow band TDMA scheme	Finland
18/86	Report on the progress of work (Expert group on Security)	Security group
19/86	Report of WP 1	GSM WP 1
20/86	Report of small group to consider speech coder requirements	GSM
21/86	Full time staff for the CEPT/CCH/GSM Permanent Nucleus	GSM
22/85	Report from GSM meeting no 9 (Berlin)	GSM
23/85	GSM Action Plan	GSM
24/85	Report to CCH concerning the work of GSM	GSM
25/85	TMS views on interface configurations for public land mobile communications	TMS
26/85	Letter to GSM regarding an invitation from Mobira	Mobira