### SUMMARY OF DISCUSSIONS AND CONCLUSIONS

### OF THE

### FIRST MEETING OF THE NORTH ATLANTIC SYSTEMS PLANNING GROUP

(Paris, 19-21 October, 1965)

### INDEX

	Page
List of Participants	2
Introduction	3
Agenda Item 2	3
Agenda Item 3	7
Appendix A	9

### LIST OF PARTICIPANTS

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#### 1. <u>Introduction</u>

- 1.1 . The First Meeting of the North Atlantic Systems Planning Group was held in the ICAO Regional Office, Paris, from 19 to 21 October 1965, under the chairmanship of Mr. P.J.C. Rombouts, the member designated by the Netherlands, who was unanimously elected to the chair.
- 1.2 The present Summary records briefly the discussions and conclusions of the Group on the subjects listed in its Agenda (reproduced in Appendix A).

# Agenda Item 2: Review of the general task allocated to the Group, selection of those matters requiring early attention and proposed manner of dealing with them

- 2.1 It was the understanding of the Group that the concept of systems planning required it, inter alia, continuously to study, monitor and evaluate the performance of the North Atlantic system. This would entail consideration, as necessary, of aspects of the current North Atlantic Regional Plan and related procedures, as well as of the general guide-lines for long term systems planning prepared by the Special NAT Meeting, 1965.
- A detailed inventory of all tasks that would be undertaken by the Group was therefore not considered either feasible or necessary but it was thought desirable, in order to facilitate the organization of the work of the Group, to list particularly significant aspects of its task which might in many cases require substantial study and, as necessary, the organized collection of data. Most of such subjects had, for the greater part, been specifically entrusted to the Group by recommendations of the Special NAT Meeting or were included in the guide-lines for long term systems planning developed by the Special NAT Meeting. It was further considered that the Group should be free to include in this list other matters which it considered of an equally significant nature in relation to systems planning.

### 2.3 Consideration of "significant" tasks

### 2.3.1 Further development of systems criteria (reference: Rec. 3b/1 of SP NAT Meeting, 1965)

The Group agreed on the inclusion of this subject in its list. It was noted that some States on the Group had initiated work related to this subject and it was expected that any State, as it achieved progress, would inform other members. It was the general consensus that the development of simple and meaningful criteris was a complex subject. Some members believed that some aspects of the system, e.g. communications, might require separate assessment.

### 2.3.2 Long term planning (reference: Rec. 5/1 of SP NAT Meeting, 1965)

The Group agreed that long term planning did not constitute a separate specific task but that the long term planning guide-lines developed by the Special NAT Meeting helped to define the time scale in which the Group should operate, i.e. a period of 10 years constantly renewed within which the Group should work both from the point of view of monitoring progress in the application of already agreed measures and their effects on the system, and of evaluating the need for future modifications and improvements. It was noted that conclusions of future meetings of the Group might point to the need for modification of the tentative 10-year programme developed by the Special NAT Meeting. (It was understood that the development of future changes to the Regional Plan would be effected through the normal ICAO planning machinery).

# 2.3.3 Improvement of logical methods for determing separation minima (reference: Rec. 6 i/l of SP NAT Meeting, 1965)

The Group noted that Rec. 6 i/l had envisaged the study of mathematically based methods for assessing separation minima as related to, and furthering, the work in progress with respect to Rec. 7/l of the RAC/OPS Division. The Group believed however that its studies in this respect should be related specifically to NAT conditions and requirements and not directly linked to Rec. 7/l which had been somewhat differently oriented. In any event, the deadline for States' submissions in relation to work on Rec. 7/l had already expired. It was the consensus of Group members that an agreed mathematical method of assessing collision risks could be a valuable aid in making responsible decisions on separation minima.

# 2.3.4 Future planning for NAT Fixed Services (reference: Recs. 6 vi/9 and 6 vi/10 of SP NAT Meeting, 1965)

In including this subject in the list, the Group noted that the possible developments in fixed communications outlined in the Report of the Special NAT Meeting should be taken into account in future studies of this matter.

# 2.3.5 Consideration of up-dated traffic forecasts (Section 2a-1 of the Report of SP NAT Meeting, 1965)

It was noted that the availability to the Group of the updated traffic forecasts to be prepared by Canada, the UK and the US was essential to its task. Not only movement statistics but their distribution among different types of aircraft were of interest, not least in relation to the anticipated introduction of SST aircraft into NAT operations during the current 10-year framework (1965-1975) of the Group's work.

### 2.3.6 Separation minima

Apart from the mathematical method studies mentioned in para. 2.3.3, the Group agreed that it must keep under continuous review all aspects of the application of reduced separation minima already agreed, the development of revised separation minima now under active study (e.g. vertical separation) and the development of further related studies. In connection with the latter point, it was noted that it was desirable to evaluate the accuracy of track-keeping in the North Atlantic, particularly in the central part of the principal area where reliable data were most difficult to obtain, and that the US was examining the possibility of collecting data on this though no specific programme had been developed at the present time. With regard to vertical separation, the US was developing a report on its domestic programme for reduced vertical separation which would be made available to interested States.

The Group received information to the effect that, due to delays in the transmission to the UK of the data required for the evaluation of altimeter errors (reference Rec. 6 i/5 of SP NAT Meeting, 1965), the time scale of the programme for assessing the feasibility of introducing reduced vertical separation above FL 290 had been altered and, due to resulting conflicts with the scheduled dates for other meetings, the Limited NAT RAN Meeting envisaged in Rec. 6 i/6 could not be held before April/May 1966. It was therefore unlikely that reduced vertical separation (if endorsed by the Meeting) could be applied during the 1966 peak traffic season.

The Group also received a brief interim report from its Canadian and UK members on the results of the application of 15 minutes' separation (reference Rec. 6 iii/2 of SP NAT Meeting, 1965).

### 2.3.7 Impact of SST operations on NAT systems

The Group considered that the subject would require attention, noting that certain related aspects had been included in the tentative long term planning schedule developed by the Special NAT Meeting, 1965.

#### 2.3.8 Development of ATC procedures

It was noted that the subject presented some short term features related principally to the organized track system and longer term aspects related to the introduction of automation. It is further noted that attention might also have to be given within the Group to related continental transition airspace problems including not only procedural but also infrastructure aspects.

### 2.3.9 Development of aeromobile communications

as possible to "no delay" communications and that this question would require continuing attention both from the point of view of monitoring the existing system, the application of agreed improvements, such as extended VHF range communications and SSB HF, and that of further possible improvements such as satellite communications and the use of ocean stable platforms on the second of which the UK expected to be able to make available to the Group the results of its more recent studies.

It was noted that studies now being undertaken by Ireland and Canada might give valuable information regarding the operation of the existing system and therefore on desirable improvements from the point of view of facilities and procedures.

### 2.3.10 Meteorological services

The Group agreed that a number of developments related to improvements in the meteorological service and listed in the tentative long term planning schedule developed by the Special NAT Meeting would require monitoring by the Group in relation to the overall performance of the NAT system.

Since the resources available to members of the Group would probably not permit attention to be given simultaneously to all the tasks listed in para. 2.3, the Group identified those to which devoting early attention would be most desirable taking into consideration not only relative urgency, which could not in all cases be agreed, but also whether a given subject was at a stage where fruitful action was possible or whether data collection or extensive studies required an early start. Noting also that developments might require further re-examination of this question, the Group came to the conclusion, in the light of the considerations briefly mentioned above, that early attention should be given to the tasks listed in paras. 2.3.3, 2.3.6 and 2.3.9. It further agreed that monitoring of the system (para. 2.3.2) had to be carried out at all stages of the Group's work which also required consideration of the up-dated traffic forecasts mentioned in para. 2.3.5.

### Agenda Item 3: Determination of the working methods of the Group during and between meetings

### 3.1 Convening of meetings of the NAT Systems Planning Group

It was recognized that, in view of the smallness of the Group, it was desirable to ensure that its meetings were attended by a high proportion of its membership. It was accordingly agreed that, subject to the possibility of making necessary administrative arrangements, a meeting could be convened at the request of any one member provided that at least four other members agreed with the proposal. In order to provide the necessary time for preparations, the interval between the date when agreement was reached on the holding of a meeting and the date when the meeting actually convened should normally be of the order of two to three months although, exceptionally, a shorter interval could be accepted if unforeseen circumstances necessitated the convening of a meeting at shorter notice.

The Group noted that, in accordance with Rec. 4/1 of the Special NAT Meeting, 1965, it should meet at least once every eighteen months, the eighteen months' interval being considered to start immediately after a meeting had been held.

It was further agreed that any proposal to extend an invitation to other States or to International Organizations to participate in meetings of the Group would also require the agreement of five Group members.

#### 3.2 Working methods between meetings of the NAT Systems Planning Group

The UK member had suggested to the Group the formation of a limited number of sub-groups which would undertake work on matters on the Group's work programme to facilitate consideration of these matters by the Group as a whole. The suggestion envisaged the formation of the following sub-groups:

Sub-group No.	Composition	Work related to	Remarks
1	Mathematics/ Scientific	Systems criteria Separation minima	ATC cooperation
2	Systems planners	Long term planning ATC procedures, etc.	ATC ) COM ) cooperation MET )
3	COM expents	Telecommunications	ATC ) cooperation where required.

He believed that such an approach would expedite the work of the Group and share the workload by permitting member States to arrange for participation in subgroups dealing with those tasks to which they felt they were best able to contribute.

This approach was favoured by some members while others, believing that the formalization of a sub-group structure might conflict with national arrangements for handling work related to systems planning and presented some other disadvantages, preferred less formal arrangements. These would envisage work being conducted by States either individually or in association with others as circumstances might warrant, keeping other members informed on progress.

The Group felt there was merit in both approaches but considered that it would be desirable to gain more experience before reaching a final decision on this aspect of the organization of its work.

There was general agreement that whichever of the two possible approaches was finally adopted, the responsibility for coordination of such studies as might be undertaken between States would rest with members of the Group and that correspondence, information or studies would be exchanged only between Group members. Nevertheless, attendance at sub-groups or ad hoc meetings of two or more States could be delegated by members of the Group to other members of their national administrations at their discretion.

The Group noted that States forming the Group had, like all other Contracting States, freedom of action to propose amendments to the Regional Plan and supplementary procedures. It was agreed however that, normally, a member of the Group would inform other Group members of intended proposals for amending the NAT Regional Plan, particularly when these involved significant changes.

### 3.4 Dates for next meeting of the NAT Systems Planning Group

Some consideration was given to the possibility of fixing a date for the second meeting of the Group, but a substantial number of members considered it impracticable to decide in advance on an approximate date when a second meeting could be expected to be productive of results. It was however agreed that, if during the twelve months following the conclusion of the first meeting no meeting had been held on the suggestion of a member, the Secretarist would initiate consultations with members with a view to determining a date for the second meeting of the Group.

NAT Systems Planning Group Summary of Discussions of the First Meeting APPENDIX A

### AGENDA

- 1. Election of Chairman.
- 2. Review of the general task allocated to the Group, selection of those matters requiring early attention and proposed manner of dealing with them.
- 3. Determination of the working methods of the Group during and between meetings.
- Any other business.

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