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EANPG/37-REPORT

INTERNATIONAL CIVIL AVIATION ORGANIZATION

REPORT OF THE THIRTY-SEVENTH MEETING

OF THE

EUROPEAN AIR NAVIGATION PLANNING GROUP

(Paris, 12 to 15 September 1995)

PREPARED BY THE EUROPEAN AND NORTH ATLANTIC OFFICE OF ICAO SEPTEMBER 1995

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AGENDA ITEM 5: ANY OTHER BUSINESS

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INTRODUCTION

i.1 Place and Duration

i.1.1 The Thirty-Seventh Meeting of the European Air Navigation Planning Group (EANPG/37) was held in the European and North Atlantic Office of ICAO from 12 to 15 September 1995.

i.2 Attendance

i.2.1 The meeting was attended by its fourteen Members, by Representatives of fifteen States located in or having aircraft on their registers which operate in the EUR Region, by one non-Contracting State and by observers from nine international organizations.

i.2.2 A list of participants is given on page i-9.

i.3 Officers and Secretariat

i.3.1 Mr J.A.P. Koren, Chairman of the EANPG, presided over the meeting throughout its duration.

i.3.2 Mr Christian Eigl, ICAO Representative, European and North Atlantic Office, was Secretary of the meeting and was assisted by the following professional staff from the Organization:

Mr Bo Barrefors
Mr Gunnar Finnsson (ICAO HQ)
Mr Vincent Galotti
Mr Victor Kourenkov
Mr Daniel Oudin
Mr Alfred Suban
Mr Milan Sugovic
Mr Hassan Tehrani (ICAO HQ)
Mr Thierry Tostain
Mr Jacques Vanier

i.4 Working languages

i.4.1 The discussions were conducted in English, French and Russian. Documentation was issued in English.

i.5 Agenda

i.5.1 The following Agenda was adopted:

Agenda Item 1: Election of the Chairman and Vice Chairmen of the EANPG

Agenda Item 2: Follow-up action by the EANPG and its contributory bodies

Agenda Item 3: CNS/ATM policy developments in the EUR Region

Agenda Item 4: Management of the Work of the EANPG

Agenda Item 5: Any other business.

i.6 Comments by States and international organizations

i.6.1 Comments received from States prior to the meeting were reviewed and it was decided to examine them in detail under Agenda Item 4.

i.7 Action on the Report of EANPG/36

i.7.1 The Group was informed that the Council and the Air Navigation Commission (ANC) had noted the report of EANPG/36 and had taken specific action on certain Conclusions and Decision 36/10. It was noted that with regard to Conclusion 36/11 and Decision 36/10 dealing with the establishment of a Satellite Distribution System (SADIS) Operations Group and the development of a SADIS cost allocation and recovery (SCAR) mechanism respectively, the Council took action on 5 and 6 January 1995 (C 145/24). In this context, the Secretary General was requested to proceed with the establishment of the SADIS Operations Group and endorsed the scheme developed by the EANPG SCAR Task Force. These issues were considered in greater detail under Agenda Item 2.

i.7.2 In addition, the Council had noted Decision 36/13 concerning the designation of Toulouse for the provision of volcanic ash trajectory advisories.

i.8 Activities of the EANPG Task Force

i.8.1 The Group was informed that the EANPG Task Force had met in Paris on 18 and 19 April 1995 with the objective of reviewing the outcome of the Special European Regional Air Navigation (EUR RAN) Meeting (Vienna, 5 - 14 September 1994). The Task Force also met on 11 September 1995 to finalize its preparations for EANPG/37. Detailed discussions of the results of the meeting were held under Agenda Item 4.

i.9 Conclusions and Decisions

i.9.1 The EANPG records its action in the form of Conclusions and Decisions with the following significance:

Conclusions

Conclusions deal with matters which, in accordance with the Group's terms of reference, merit directly the attention of States or on which further action will be initiated by ICAO in accordance with established procedures.

Decisions

i.9.2 Decisions deal with matters of concern only to the EANPG and its contributory bodies.

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LIST OF CONCLUSIONS

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LIST OF DECISIONS

LIST OF PARTICIPANTS /LISTE DES PARTICIPANTS

Members of the EANPG and Contracting States/ Membres du GEPNA et Etats contractants

ALGERIA/ALGERIE

Mr Farouk Hamed Abdelouahab

ARMENIA/ARMENIE

Mrs Anait Torosian
Mr Eduard Pilosian

BELARUS/BELARUS

Mr Victor Martynenko

***BENELUX STATES/ETATS DU BENELUX**
Belgium/Belgique
Luxembourg
Netherlands/Pays-Bas

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Mr Ton Kool (Netherlands/Pays-Bas)
Mr Jacques Linssen (Belgium/Belgique)

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Mr Tanatzi Tanatziev
Mr Plamen Tassev
Mr Dimitre Ivanov

CROATIA/CROATIE

Mr Enver Musinović

***CZECH REPUBLIC/REPUBLIQUE TCHÈQUE**

Mr Ladislav Mika
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Mr George Stamboulidis

HUNGARY/HONGRIE

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Mr Mohamed Fahim

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Mrs Conceição Ferreira
Mr Victor Veres

ROMANIA/ROUMANIE

Mr Antonio Licu

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FEDERATION DE RUSSIE**

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Mr Viktor Demieduk
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Mr Yevgeny Korolev
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Non-Contracting States and International Organizations/ Etats non-contractants et Organisations internationales

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Mr Michael Tarrant

IAOPA

Mr Ronald Campbell

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Mr George Oliver
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IFALPA

Mr Ernst Scharp

IFATCA

Mr Günter Melchert

INMARSAT

Mr Fintan Ryan

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LIST OF ABBREVIATIONS

ICAO abbreviations and acronyms are contained in ICAO PANS ABC (Doc 8400), the ICAO Lexicon (Doc 9294) and other relevant terminology material. The acronyms listed hereunder have been chosen from those which are specifically related to activities of the EANPG and/or are most frequently found in this report in order to assist in its reading.

ACC	Area Control Centre
ACDB	Airports Characteristics Data Bank
ACI	Airports Council International
ADF	Aeronautical Digital Forecast
ADS	Automatic Dependent Surveillance
ADSP	Automatic Dependent Surveillance Panel
AFI	Africa - Indian Ocean
AFS	Aeronautical Fixed Service
AFTN	Aeronautical Fixed Telecommunication Network
AIC	Aeronautical Information Circular
AIM	ATFM Information Message
AIP	Aeronautical Information Publication
AIS	Aeronautical Information Services
AISAP	Eurocontrol AIS Automation Panel
AISG	Aeronautical Information Services Group
AIS/MAP	Aeronautical Information and Charts
AM	amplitude modulation
AMCP	Aeronautical Mobile Communications Panel
AMS	Aeronautical Mobile Service
ANC	Air Navigation Commission
ANM	ATFM Notification Message
ANP	Air Navigation Plan
ANSEP	Air Navigation Services Economics Panel
AOP	Aerodrome Operations
AOPG	Aerodrome Operations Group
APANPIRG	ASIA/PAC Air Navigation Planning and Implementation Regional Group
APATSI	ECAC Task Force on the Airport/Air Traffic System Interface
APIRG	AFI Planning and Implementation Regional Group
APT	Eurocontrol EATCHIP Airspace Planning Team
ARB	Authoritative Representative Body
ARN	Air Traffic Services (ATS) Routes and Associated Navigation Means
ASM	Airspace Management
A-SMGCS	Advanced Surface Movement Guidance and Control Systems
ASPP	Aeronautical Fixed Service (AFS) Systems Planning for Data Interchange Panel
ATC	Air Traffic Control
ATFM	Air Traffic Flow Management
ATIS	Automatic Terminal Information Service
ATM	Air Traffic Management
ATMG	Air Traffic Management Group
ATN	Aeronautical Telecommunication Network
ATS	Air Traffic Services
AWO	All Weather Operations
AWOG	All Weather Operations Group of the EANPG
AWOP	All Weather Operations Panel

CAI	CNS/ATM Implementation Committee
CASITAF	Communications, Navigation and Surveillance/Air Traffic Management (CNS/ATM) Systems Implementation Task Force
CBS	Cost Benefit Studies
CCT	EATCHIP Communication Coordination Team
CDG	Charles-de-Gaulle Airport
CEAC/NATO	Committee for European Airspace Coordination/North Atlantic Treaty Organization
CEATS	Central European Air Traffic Services
CEC	Commission of the European Communities
CEU	Central Executive Unit
CFMU	Central Flow Management Unit
CIDIN	Common ICAO Data Interchange Network
CIP	Convergence and Implementation Programme
CIS	Commonwealth of Independent States
CMTP	Common Medium-Term Plan
CNS/ATM	Communications, Navigation and Surveillance/Air Traffic Management
COMG	Communications Group
COSPAS/SARSAT	Space system for search of vessels in distress/search and rescue satellite aided tracking
CRS	Contingency Routeing Schemes
CTMO	Centralized Traffic Management Organization
DGP	Dangerous Goods Panel
DME	Distance Measuring Equipment
DSB	double side band
EAD	European AIS Database
EANPG	European Air Navigation Planning Group
EASIE	Enhanced Air Traffic Management and Mode S Implementation Study Group in Europe
EATCHIP	European Air Traffic Control Harmonization and Integration Programme
EATMS	European Air Traffic Management System
EBAA	European Business Aviation Association
EC	Economic Commission (ECAC)
ECAC	European Civil Aviation Conference
EES	ICAO Meetings on the Integration of Eastern European States into Existing European Air Navigation Strategies
EFP	Spain/France/Portugal
EGNOS	European Geostationary Navigation Overlay Service
EIB	European Investment Bank
ESA	European Space Agency
ESCRAG	interim European SADIS Cost Recovery Administrative Group
EUR	European
EUR ANP	*Air Navigation Plan - European Region* (ICAO Doc 7754)
EUR FCB	European Frequency Coordinating Body
EUROCAE	European Organization for Civil Aviation Equipment
EUROCONTROL	European Organization for the Safety of Air Navigation
EUR PDR	EUR AFTN predetermined distribution
FAA	Federal Aviation Administration (US)
FASID	Facilities and Services Implementation Document
FANS	Special Committee on Future Air Navigation Systems
FCB	Frequency Coordinating Body
FDFM	EUROCONTROL Flight Data and Flow Management Group
FEATS	Future European Air Traffic Management System

FIR	Flight Information Region
FLO	ICAO ATS/ATFM Co-ordination Meetings
FLOEast	ICAO ATS/ATFM Co-ordination Meeting - Europe East
FLOWest	ICAO ATS/ATFM Co-ordination Meeting - Europe West
FMG	Frequency Management Group
FPL	Filed Flight Plan
GATE	Group of Air Traffic Management in the Eastern Part of the ICAO EUR Region
GLONASS	Global Orbiting Navigation Satellite System
GNSS	Global Navigation Satellite Systems
GPS	Global Positioning System
GRIB	GRID point data in binary form (GRIB Code, WMO FM 92-IX)
HMU	height monitoring unit
IACA	International Air Carrier Association
IAOPA	International Council of Aircraft Owner and Pilot Associations
IAR	Institutional Arrangements and Requirements
IATA	International Air Transport Association
IBAC	International Business Aviation Council
ICAO	International Civil Aviation Organization
ICD	Interface Control Document
IFALPA	International Federation of Airline Pilots' Associations
IFATCA	International Federation of Air Traffic Controllers' Associations
IFPS	Initial Flight Plan Processing System
IFRAA	International Federation of Regional Airline Associations
ILS	Instrument Landing System
IMO	International Maritime Organization
IMTEG	(Working Group on) Instrument Landing Systems/Microwaves Landing System (ILS/MLS) Transition Group
JAA	Joint Aviation Authorities
MA	Methods of Application
MASPS	Minimum Aircraft System Performance Specification
MCC	Mission Control Centre
MDD	Meteorological Data Distribution
MET	Meteorology
METAR	Aviation Routine Weather Report (in aeronautical meteorological code)
METG	Meteorology Group of the EANPG
MIDANPIRG	MID Air Navigation Planning and Implementation Regional Group
MLS	Microwave Landing System
MMR	multi-mode receiver
MNPS	Minimum Navigation Performance Specifications
MOTNE	Meteorological Operational Telecommunications Network, Europe
MOTNEG	MOTNE Working Group of the EANPG
MT-SAT	Multi-function Transport Satellite
NAM	North American
NASC	National Aeronautical Information Services (AIS) Centre
NAT	North Atlantic
NAT ADSDG	North Atlantic Automatic Dependence Surveillance Development Group
NAT SPG	North Atlantic Systems Planning Group
NLA	Study Group on New Larger Aeroplanes
NM	nautical mile

NOF	International NOTAM Office
NOTAM	Notice to Airmen
OCP	Obstacle Clearance Panel
OCR	Operational and Certification Requirement
OLDI	On-line Data Interchange Group
OPC	operational control
OPMET	Operational Meteorological (Information)
OPS	operations
PAC	Pacific
PANS	*Procedures for Air Navigation Services* (Doc 4444)
RAFC	Regional Area Forecast Centre
RASC	Regional Aeronautical Information Services (AIS) Centre
RCC	Rescue Coordination Centre
RCM	Statement of Basic Operational Requirements (OR), Planning Criteria (PC) and Methods of Application (MA)
R&D	research and development
RETIM	Réseau de Télécommunications des Informations Météorologiques
RGCSP	Review of the General Concept of Separation Panel
RNAV	Area Navigation
RNP	required navigation performance
ROC	Regional OPMET Centre
RPG	Regional Planning Group
RPL	Repetitive Flight Plan
RTCA	Radio Technical Commission for Aeronautics
RVR	runway visual range
RVSM	reduced vertical separation minimum
SADIS	Satellite Distribution System for World Area Forecast System (WAFS) products in the AFI, EUR and MID Regions and the Western part of the ASIA Region
SAR	Search and Rescue
SARPS	ICAO Standards and Recommended Practices
SCAR	SADIS cost allocation and recovery scheme
SCRAG	SADIS Cost Recovery Administrative Group
SICASP	Secondary Surveillance Radar (SSR) Improvements and Collision Avoidance Systems Panel
SIGMET	information concerning en-route weather phenomena which may affect the safety of aircraft operations
SIGWX	significant weather (forecast)
SMG	surface movement guidance
SMGCS	(Study Group on) Surface Movement Guidance and Control Systems
SNA-SG	Satellite Navigation Application Sub-group
SPECI	Selected Special Weather Report (in aeronautical meteorological code)
SPOC	Search and Rescue Points of Contact
SRD	system research and development
SRMC	Specialized Regional Meteorological Centre
SRR	Search and Rescue Region
SSR	Secondary Surveillance Radar
STDMA	Self-organizing Time Division Multiple Access
SUPPS	*Regional Supplementary Procedures* (Doc 7030)

TAF	Aerodrome Forecast
TARTAR	ICAO Meetings on Transit ATS Routes through the Airspace of the Russian Federation
TMA	Terminal Control Area
TOMA	time division multiple access
TOS	Traffic Orientation Scheme
TWR	Aerodrome Control Tower
UAC	Upper Area Control Centre
VAAC	Volcanic Ash Advisory Centre
VAFTAD	Volcanic Ash Forecast and Dispersion
VHF AMS	very high frequency aeronautical mobile services
VAP	Visual Aids Panel
VOLMET	meteorological information for aircraft in flight
VOR	VHF omni directional radio range
VSAT	Very Small Aperture Terminal
VSM	vertical separation minimum
WAAS	Wide Area Augmentation System
WAFC	World Area Forecast Centre
WAFS	World Area Forecast System
WG	Working Group
WMC	World Meteorological Centre
WMO	World Meteorological Organization
WWW	World Weather Watch

AGENDA ITEM 1: ELECTION OF CHAIRMAN AND VICE-CHAIRMEN OF THE EANPG

1.1 General

1.1.1 In preparation of the 37th Meeting of the Group, the EANPG Task Force had met on 11 September 1995 in the European and North Atlantic Office of ICAO. On this and on previous occasions, the Task Force had considered the question of the Chairmanship of the Group from a functional as well as geopolitical point of view. It considered that the EANPG, under its new terms of reference, had to cover a much wider and diverse field than before. This would be reflected in an enlarged membership which was soon to be proposed to the ICAO Council for approval.

1.1.2 To coincide with the spread of tasks facing the Group, it was felt that the Chairman and the two Vice-Chairmen should be EANPG Members from States located such as to ensure a balanced geographical representation of the Region as a whole. In order to facilitate the discussions of the EANPG under this Agenda Item and to simplify the election process, the EANPG State Members forming the Task Force (the Benelux States, the Czech Republic, France, Germany, Portugal, the Russian Federation, the Scandinavian States and the United Kingdom) unanimously agreed to put forward their nominations for the election of the Chairman and Vice-Chairmen of the EANPG.

1.2 Election

1.2.1 On the basis of the above nominations, the EANPG unanimously elected the following persons to the EANPG officers' positions:

Chairman	Mr. J.A.P. Koren (Member for the Benelux States)
1st Vice-Chairman	Mr. L. Mika (Member for the Czech Republic)
2nd Vice-Chairman	Mr. V. Shelkovnikov (Member for the Russian Federation)

AGENDA ITEM 2: FOLLOW-UP ACTION BY THE EANPG AND ITS CONTRIBUTORY BODIES

2.1 Introduction

2.1.1 Under this Agenda Item the Group considered the following items:

a) Membership of the EANPG;

b) Air Traffic Management (ATM);

c) Communications (COM);

d) Aerodrome Operations (AOP);

e) Meteorology (MET); and

f) Aeronautical Information Services (AIS).

2.1.2 When discussing this Agenda Item, the Group was also provided information papers which addressed the following issues:

a) progress on Eurocontrol's activities in AIS planning;

b) missions undertaken by the ICAO Secretariat to new Contracting States; and

c) a progress report on the activities of the Central Executive Unit - West (CEU-West) and the Central Flow Management Unit (CFMU).

2.2 Membership of the EANPG

2.2.1 In follow up of the Special EUR RAN (1994) Meeting, the ICAO Representative, European and North Atlantic Office had consulted States to seek nominations for the expanded membership of the EANPG for consideration by the Group and for decision by the ICAO Council. To facilitate this process, States were given guidance for a rational approach to this issue. It was emphasized that States within certain logical geographical groupings should consider the representation of their interests through one State chosen amongst each other and preferably on a rotational basis to be mutually agreed. It had been suggested that such groupings might be established as follows:

a) one State representing the aviation interests of the States in the Baltic area (Estonia, Latvia, Lithuania);

b) one State representing the aviation interests of the States located in the Caucasus area (Armenia, Azerbaijan, Georgia);

c) one State representing the aviation interest of the States located in Middle Asia (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan); and

d) one State representing the aviation interests in the area covered by Bosnia & Herzegovina, Croatia, Slovenia, and The former Yugoslav Republic of Macedonia.

2.2.2 In response, States reacted to a large extent in conformity with this approach and the results of the consultation were presented to the EANPG at this Meeting. Noting that Belarus had already submitted its candidature and had received support at the time of the Special EUR RAN (1994) Meeting, the Group now noted additional submissions requesting Membership from Croatia (also on behalf of Bosnia & Herzegovina and The former Yugoslav Republic of Macedonia), Georgia (also on behalf of Armenia and Azerbaijan), Kazakhstan, Kyrgyzstan and Uzbekistan (the latter supported by Tajikistan) and from Ukraine. The representative of Lithuania informed the Group that the three States in the Baltic area were still in the process of negotiations and their decision would shortly be made known to ICAO.

2.2.3 The representative of Armenia indicated support for representation by Georgia at this time but wished to establish a system of rotation amongst the Caucasian States for the future. The representative of Croatia informed the Group that for administrative reasons it had not been possible so far to submit their candidature, duly supported by the two other States mentioned, to ICAO in writing but advised that the respective official letter would be forthcoming shortly. The Member for Greece questioned the logic of the State grouping indicated by Croatia for their representation at the EANPG and this comment was noted by the Group.

2.2.4 With regard to the submissions from Middle Asia, the EANPG felt that the nomination of one Member from that area, preferably coupled with a mutually agreed scheme of rotation amongst the concerned States, would be most beneficial. In fact, the experience gained with State groupings like the Scandinavian States or the Benelux States as Members of the EANPG had been most encouraging.

2.2.5 With the above in mind, the EANPG agreed to recommend to the ICAO Council the following additional membership for the European Air Navigation Planning Group:

- the Baltic States (represented by one State, chosen by mutual agreement and subsequently in rotation amongst Estonia, Latvia and Lithuania)
- Belarus
- the Caucasian States (initially represented by Georgia and in rotation with Armenia and Azerbaijan as mutually agreed)
- Croatia (also on behalf of Bosnia & Herzegovina and The former Yugoslav Republic of Macedonia)
- the Middle Asian States (represented by one State, chosen by mutual agreement and subsequently in rotation amongst Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan)
- Ukraine.

2.2.6 In this context it was emphasized that rotation amongst the States within the respective groupings should preferably not occur from one EANPG meeting to the next but should rather span reasonable time periods to ensure continuity. In addition, States should bear in mind that they may, in accordance with established procedure, attend any EANPG meeting regardless of formal

membership. Nevertheless, formal Members should be aware of their obligation to fully support the work of the EANPG at all times and through regular attendance of all of its meetings.

2.3 Air Traffic Management

ATS route planning in the Eastern part of the Region

2.3.1 The Group was presented with an oral report on progress made by the Meetings for the Planning and Coordination of Implementation of ATS Routes through the Airspace of the Eastern Part of the ICAO EUR Region, including Middle Asia (TARTAR). The Group noted with satisfaction that the ATS route planning and implementation activities in the eastern part of the Region were progressing successfully and that TARTAR meetings and the meetings of the EANPG Working Group for ATM Planning in the Eastern Part of the ICAO EUR Region, Including Middle Asia (GATE) had been working in close coordination and cooperation with each other. The Group noted that, as a result of this cooperation and upon an invitation by GATE, TARTAR meetings extended their activities from the airspace of the Russian Federation, as originally envisaged, over the whole of the eastern part of the EUR region including Middle Asia. The Group also noted that progress made so far by TARTAR in the entire area was positive and promising, which, it was reported, was confirmed by aircraft operators.

2.3.2 As a consequence of the above mentioned change and in order to reflect properly the geographical extent of TARTAR activities, the full name of these meetings was slightly modified, to read as quoted above. The acronym "TARTAR", being well known, was kept unchanged. Additionally, the terms of reference of TARTAR, originally defined in outline form and included in EANPG Conclusion 36/4, had been elaborated upon by TARTAR/3 and presented to the EANPG for approval.

2.3.3 The Group approved the proposed change to the name as well as the terms of reference of TARTAR, as reflected in **Appendix A.**

Planning and implementation of the Central Executive ATFM Unit (CEU) - East

2.3.4 Under this Agenda Item the Group recalled that the Special EUR RAN (1994) Meeting concluded that the future role of the CEU East should be examined by EANPG. The results of the work carried out by the EANPG working group, GATE, on this subject were presented to the meeting.

2.3.5 The findings of GATE were as follows:

> The overall ATC capacity in the Eastern part of the EUR Region was adequate at present and could be expected to continue meeting air traffic demand for the foreseeable future. Consequently, there was no urgency to resolve this matter and efforts by States should be oriented primarily towards full development and exploitation of ATC capacity.
>
> Due to operational, economical, technical and political problems in the area, planning and implementation of CEU East were extremely complex and GATE was not able to find definitive answers to questions related to the requirement for, and structure, composition, location and working methods of the CEU East.

The subject would be further considered by GATE and EANPG informed on progress made.

2.3.6 In this context, the Secretariat reminded the Group that, once the planning issues relative to CEU-East were resolved, all ICAO ATFM related documentation should be updated to reflect new planning arrangements. This requirement was supported by the representative from Eurocontrol who took the opportunity to offer assistance to States and ICAO in carrying out these tasks.

Development related to CEU-West

2.3.7 The representative from Eurocontrol briefed the Group on recent developments with the CFMU Project. April 1995 saw the achievement of two important events, when the Initial Flight Plan Processing System (IFPS) and the CEU Tactical (TACT) commenced live operation. ATFM tactical operations under the new system have improved quickly thanks to the excellent cooperation between the Flow Management Positions, Flow Management Units, Aircraft Operators and the CFMU. The tactical ATFM operations are being extended and the CFMU will become fully operational for summer 1996.

2.3.8 The Member from the Russian Federation informed the Group on the latest developments in his country. In this regard he reported that the Russian Federation had signed a contract for implementation of a national ATFM unit, and that the Civil Aviation Administrations of six States of the former USSR had signed an agreement to jointly plan for future ATFM facilities and operations in their area. He indicated that these activities would be fully coordinated through GATE.

2.3.9 IATA reported on their full participation and commitment in GATE activities and informed the Group on their efforts aimed at improving air traffic demand forecast method for the Eastern part of the Region which, it was recognized, is an important prerequisite for a successful outcome to the work of GATE.

2.3.10 The Group noted progress report on planning and implementation of the CEU East and encouraged GATE to pursue that matter.

Activities of the Central European Air Traffic Services (CEATS) Group

2.3.11 The EANPG noted an important development initiated and carried out by Austria, Croatia, the Czech Republic, Hungary, Italy, Slovakia and Slovenia who had decided in principle, and subject to formal confirmation, to establish an Upper Area Control Centre (UAC) with responsibility over all or selected portions of their airspaces. This activity had become known as the CEATS Project and had advanced in a very promising manner over the past two years. With full support from the ICAO and Eurocontrol Secretariats, considerable work was undertaken in the legal, financial, institutional, technical and operational fields to the extent that a CEATS Transport Ministers' meeting in October 1995 was now expected to make a final decision on the matter. While overall management was to be carried out by the Directors General of Civil Aviation of the participating States under the auspices of ICAO, Eurocontrol was expected to implement and operate the UAC, once the respective agreements were finalized and ratified.

2.3.12 Although much work was still ahead for all concerned, especially with regard to transition planning, cost assessments and implementation planning for the full CEATS UAC solution, the activity was considered important and encouraging as a common effort of a group of States to share resources, enhance efficiency and reduce costs in accordance with ICAO and ECAC (EATCHIP) principles. The Group requested its Member for the Czech Republic to keep it informed on progress in the future.

2.4 Communications

Outcome of the Special COM/OPS Div (1995) Meeting related to 8.33 kHz Channel Spacing

2.4.1 The Group was informed that the necessary ICAO Standards and Recommended Practices (SARPs), amending Annex 10 for 8.33 kHz channel spacing, developed by the Special COM/OPS Div (1995) Meeting, were being processed. These SARPs were expected to become applicable in November 1996.

2.4.2 The SARPs require that a regional air navigation agreement be included in the Regional Supplementary Procedures (SUPPS, Doc 7030) which would specify:

a) the airspace of operation where 8.33 kHz channel spacing would be implemented;

b) the related implementation time-scales;

c) the carriage of appropriate airborne equipment; and

d) the lead time to assist aircraft operators and equipment manufacturer to prepare for the introduction of 8.33 kHz channel spacing.

2.4.3 The Divisional Meeting had recognized that the co-ordinated VHF Congestion Relief Strategy, recommended by the Special EUR RAN (1994) Meeting (Rec 6/4 of the Special COM/OPS (1995) Div Meeting refers) was a viable immediate solution to the VHF congestion in the EUR Region. It was noted that the EUR Region would follow that strategy in implementing 8.33 kHz channel spacing.

2.4.4 The Divisional Meeting had also recommended that ICAO take the necessary action to ensure that harmonized planning and implementation of new VHF ground and airborne system be developed at regional level. This was to be carried out by the appropriate regional body by co-ordinating the planning and introduction of 8.33 kHz channel spacing with States and users concerned in order to avoid penalty to aircraft operations. In the case of the EUR Region the appropriate regional body was the EANPG.

2.4.5 The Group, while noting the above information, expected that the above points were fully taken into account in the preparation of the plan for the introduction of 8.33 kHz channel spacing in the EUR Region.

Introduction of 8.33 kHz Channel Spacing

2.4.6 The Special EUR RAN (1994) Meeting and the Special COM/OPS Div (1995) Meeting had designated the EANPG as the coordinating body for the planning and introduction of 8.33 kHz channel spacing in certain parts of the EUR Region. In this connection the EANPG was informed that a EUR Frequency Coordinating Body (FCB) Meeting (Paris, 27 June to 7 July 1995) had addressed the question of the progressive introduction of 8.33 kHz channel spacing, taking into account the outcome of the two meetings referred to above.

2.4.7 The FCB meeting considered that the transition to 8.33 kHz channel spacing should be developed on the basis of the following actions:

a) identification of the geographical area to be planned, based on input from individual States;

b) identification of and agreement upon a sub-band to be used for the new environment and what services to include in the planning;

c) development of the necessary guidance material to cater for planning criteria in the new environment, including those situations arising where adjacent areas apply different channel separations;

d) identification and proposal of other 25 kHz assignments for those services which would not apply the new channel separation and which would have to be moved outside that new sub-band;

e) identification of those assignments outside the new sub-band which may be moved into the new environment;

f) identification of those assignments presently inside the new sub-band but which for technical/operational reasons (e.g. offset carrier systems), would have to continue to use 25 kHz channel separation;

g) establishment of an assignment plan for the new sub-band; and

h) establishment of a detailed time schedule for all critical frequency changes in the various steps above for the progressive implementation of 8.33 kHz channels.

2.4.8 Having agreed on the steps to be taken to develop a transition plan, the FCB meeting had discussed the practical aspects of the detailed work which had to be accomplished. In particular, taking into account the severe time constraints, it was considered important to clarify the respective work to be carried out by itself and the related work to be undertaken within EATCHIP.

2.4.9 In order to avoid duplication of effort, the FCB had considered that the detailed work of the preparation of a transition plan to 8.33 kHz should continue to be carried out within EATCHIP. However, the Group had emphasized that, being the sole ICAO technical body in the EUR Region competent in this field, it should retain control over spectrum management, frequency coordination and general frequency planning criteria. This was furthermore necessary since the EUR FCB was composed of frequency experts from all the EUR Region and peripheral States.

2.4.10 It had been reported to the FCB meeting that, within the European Air Traffic Control Harmonization and Integration Programme (EATCHIP), the following programme was being actively pursued or even completed:

a) assessment of the VHF frequency congestion;

b) development of the medium term solution to alleviate VHF frequency congestion; and

c) development of the transition programme for a medium term solution to alleviate VHF frequency congestion.

2.4.11 The FCB meeting had further been informed that, for this first phase of the 8.33 kHz implementation, the work within EATCHIP was being undertaken to:

a) establish which States intended to implement and/or cooperate in the transition to 8.33 kHz channel spacing;

b) establish a list of existing services which were to be transferred to 8.33 kHz operation at or after 1 January 1998 in these States;

c) establish a detailed transition plan in coordination with the user community; and

d) submit this plan to the EANPG for appropriate action as required in accordance with ICAO procedures.

2.4.12 Noting the above the FCB had agreed that it would follow closely the practical work being carried out within EATCHIP through common participation in both EATCHIP work and FCB activities of a number of FCB Members. At the same time, FCB Members were expected to review and comment on the output of the EATCHIP work and, in particular, any draft transition plan. Those comments would be taken into account in the development work of that plan.

2.4.13 The FCB had recognized that it was its role to provide guidance on the following:

a) frequency protection criteria to be used in the transition;

b) the sub-band (and its bandwidth) which should be used in the initial phase of the transition to minimize the impact on all concerned; and

c) the limit of the area (States) and flight levels affected.

2.4.14 Since the related protection criteria were not being developed within EATCHIP, the FCB had agreed that it should develop the separation criteria to be applied between 8.33 kHz services mutually and between 8.33 kHz services and 25 kHz services. Guidance material describing the worst case conditions for various combinations of services and frequency separations had been recommended by the Special COM/OPS Div (1995) Meeting for inclusion in the next amendment to Annex 10. Since detailed protection criteria to be applied in planning activities may not be available at the time of the development of the transition plan, the FCB had advised strongly to apply worst case conditions for the time being.

2.4.15 The FCB had also agreed upon the general mechanism to be established for this planning and considered that the most efficient method of implementation of 8.33 kHz channel spacing would require:

a) identification of a sub-band which should be exclusively dedicated to 8.33 kHz;

b) assignment in this sub-band of as many (8.33 kHz) frequencies as possible;

c) vacating this sub-band from 25 kHz assignments; and

d) assigning 8.33 kHz channel spacing frequencies in the sub-band to free other frequencies for other assignments outside the sub-band.

2.4.16 The FCB was aware that simulations had been carried out to establish the best sub-band and bandwidth for the initial phase of the transition to minimize the negative impact on users and providers. Further work was still required but first results had indicated suitability of the frequency 132 MHz and a bandwidth of 1.2 to 1.5 MHz. In this upper part of the band it was likely to find more ACC/U assignments which are at present the major concern in the VHF congestion.

2.4.17 The FCB had agreed that, as a general indication and again to minimize the impact on States and users, the area where States would be requested to assist in the implementation of 8.33 kHz channel spacing should be limited to a circular area centred at 50N 06E with a radius of 1000 km.

2.4.18 The services to be put on 8.33 kHz channel spacing in the initial phase should be upper airspace services. In the VHF strategy endorsed by Special EUR RAN (1994) Meeting and subsequently by the Special COM/OPS Div (1995) Meeting, the definition of an upper airspace assignment was taken to mean an assignment which is only operationally used above FL 200. This was necessary to reduce the number of users initially affected by the implementation.

2.4.19 The FCB had agreed that, in principle, no shift of "National Aerodromes" assignments should be involved within or outside the area of implementation to 8.33 kHz channel spacing. For efficient implementation, it had considered it necessary that the sub-band be vacated from non-ACC upper airspace assignments. Current ACC/U were to be converted to 8.33 kHz. whilst national aerodromes could remain with the existing assignments.

2.4.20 While confirming that States wanting to continue using 25 kHz channels would not be required to make any changes to VHF ground systems, the FCB had indicated that States in the core area and some States peripheral to that area might be required to shift frequencies so as to vacate the sub-band or permit shifts to and from that sub-band. Those shifts were to be kept to a minimum, affecting only the States within the circular area referred to in paragraph 2.4.17. As an indication 80% of the shifts were likely to be by the States in the core area and only 20% by the peripheral States. The FCB had emphasized that it was **essential** to have the cooperation of all States involved in the shifts.

2.4.21 The FCB had noted that the date, retained by the Special EUR RAN (1994) Meeting at which **progressive** introduction of 8.33 kHz channels spacing was to start, was 1 January 1998. It had also noted that the RAN Meeting had recognized that not all aircraft concerned might be appropriately equipped before the year 2000. Hence the FCB saw the necessity of ensuring that the final plan of the transition should contain a detailed schedule so that both States and aircraft operators would be able to prepare timely for that transition.

2.4.22 Taking into account, for planning purposes, the date of November 1996 when an EANPG meeting was likely to be held at which the final draft transition plan from 25 kHz to 8.33 kHz channel spacing would be presented, the FCB had agreed to hold a special full FCB Meeting, not later than **September 1996**, to examine that plan and to advise the EANPG on its suitability and validity. That meeting would only address the transition issue and would provide full information to the EANPG on the draft plan developed within the EATCHIP. The EANPG would then be in a position to take appropriate action on the basis of advice from the FCB and in accordance with its mandate given by the Special EUR RAN (1994) Meeting Conclusion 3/6 and Special COM/OPS (1995) Recommendation 6/6.

2.4.23 In order to show the plan of actions and the division of work between that carried out within EATCHIP and that within FCB for the preparation of the transition plan from 25 to 8.33 kHz channel spacing, a chart had been developed by the FCB as shown in **Appendix B** to this Agenda

Item. The left hand side of the chart was only shown to indicate the work reported and planned to be carried out within EATCHIP. That had not been discussed by the FCB which considered that it was the prerogative of Eurocontrol to manage that work within EATCHIP.

2.4.24 The EANPG agreed to the framework of the related work as indicated above and endorsed the plan of actions shown in Appendix B to this Agenda Item noting with satisfaction the co-operation and division of the detailed work between the FCB and the work within EATCHIP under the management of Eurocontrol.

2.4.25 The Group also noted with satisfaction the considerable and detailed work which was being carried out within EATCHIP. The progress of this work was confirmed during the meeting.

2.4.26 The Group emphasized that, for efficient use of the spectrum, 8.33 kHz assignments should be restricted to within a specific single sub-band whilst recognizing that initially and for practical considerations, different sub-bands may have to be used. However the aim would be to finally restrict all 8.33 kHz assignments to a single specified sub-band likely to be around 132 MHz.

2.4.27 The Group recognized the need to give States and users as much lead time as possible to prepare for aircraft equipage. However, on account of the constraints due to the congestion, the time schedule indicated for the progressive introduction of 8.33 MHz channel spacing had to start by January 1998. The Group emphasized that every effort should be made to provide as much in advance information as possible of target dates of the various stages of the transition plan so as to facilitate the task for States and aircraft operators in their preparation for the transition.

2.4.28 The Group agreed with the FCB regarding the cooperation from States required to shift frequencies to facilitate the introduction of 8.33 kHz channel spacing. It therefore agreed to formulate the following Conclusion:

CONCLUSION 37/1 - FREQUENCY SHIFTS

That States required to shift frequencies to facilitate the transition from 25 kHz to 8.33 kHz spacing do so within the timescales of the transition plan.

Revised structure of the EUR FCB

2.4.29 In the discussions on the status of the EUR FCB, it was noted that that body pre-dated the establishment of the EANPG. It had not been re-established as a working group of the EANPG, as had been the case with other groups, and therefore it had worked outside the formal ICAO regional structure. It was recognized that its ability to work with a large measure of independence and informality had been advantageous insofar as the body had to work with speed and with organisations outside the framework of ICAO. For this reason, some States felt that its status should remain unchanged.

2.4.30 Others felt that there was no longer a compelling case for the FCB to retain its position outside the EANPG working framework and that the expertise of the specialists involved would be better exploited if its remit was to be expanded to cover policy issues in support of the EANPG.

2.4.31 It was agreed that a means should be sought to establish two-tier Terms of Reference which would enable the frequency coordination work to continue without formality and independently of the formal ICAO approval processes, but which would permit a fuller engagement in the work of

EANPG on technical issues associated with air/ground communications, navigation facilities, the protection of facilities against harmful interference, etc.

2.4.32 Consequently the EANPG agreed that the FCB be re-established as a working group of the EANPG with the Terms of Reference and composition as contained in **Appendix C** to this Agenda Item. The working group would fall under the same rules and working procedures as any other EANPG working group, but it would also be permitted to provide States with services without reference to the EANPG, in matters not directly of concern to the EANPG. For this type of activity, the group should include the participation of frequency experts from all States of the EUR Region and from other States peripheral to the Region.

2.4.33 Accordingly, the meeting formulated the following Decision and Conclusion:

DECISION 37/2 - EANPG FREQUENCY MANAGEMENT GROUP (FMG)

That an EANPG working group (named Frequency Management Group) be established with terms of reference and composition shown in the Appendix C of the Report on Agenda Item 2.

CONCLUSION 37/3 - DISSOLUTION OF THE EUR FCB

That the EUR Frequency Coordinating Body be dissolved.

2.4.34 In this connection the Group noted the establishment, within EATCHIP, of the Authoritative Representative Body (ARB). Its main objective was to assist States to make decisions on VHF frequency planning by applying procedures, assessments and prioritization criteria for the efficient use of the VHF spectrum in that area. It considered that States should fully support the ARB in its work.

Management and production of the EUR ANP COM Tables

2.4.35 The EANPG recognized that for efficient operation of the air navigation system in the Region, it was necessary to have regular availability of the COM Tables of the European Air Navigation Plan (EUR ANP Doc 7754). Since a number of years, because of the financial difficulties within ICAO, those tables had not been produced regularly and the limited service provided had been inadequate and had impeded States from properly meeting their operational requirements when implementing frequency-dependent services. This had been particularly true with respect to Table COM 2 (VHF AMS Assignments) especially due to VHF congestion in the Region.

2.4.36 Early results of simulation experiment on possible transition from 25 to 8.33 kHz channel spacing in the core area of Europe had shown that the processes involved are complex, requiring an accurate database of Table COM 2. Hence the importance of having these tables published regularly.

2.4.37 The Special EUR RAN (1994) Meeting had discussed this matter and recommended (Recommendation 3/7) that ICAO, while retaining the overall responsibility for the management of the COM Tables of the EUR ANP, determine the supporting measures necessary from Eurocontrol organization to enable it to produce those Tables. The EUR FCB, at its last meeting had stated that all planning and coordination of frequency assignments to aeronautical services be based on the COM Tables of the EUR ANP. It also considered that the EUR/NAT Office of ICAO and Eurocontrol, in mutual cooperation, undertake to address all inconsistencies, inaccuracies or other deficiencies in

the COM Tables by first requesting States concerned for the necessary clarifications. In addition, the FCB had invited States to undertake a review of their entries in Table COM 2 and provide the EUR/NAT Office of ICAO with a correct and up-to-date version of their entries free from all errors.

2.4.38 The Group was informed that Eurocontrol, would commit considerable resources to assist ICAO in the production and publication of the COM Tables. For this purpose a technical arrangement between the two organizations had just been concluded and was about to be signed. The work to update and publish Table COM 2 and, later other tables, was to start soon. It was envisaged that Tables COM 2 would be ready by Spring 1996.

2.4.39 The Group welcomed this information. It fully supported the view that the availability of Table COM 2 was an essential element in the introduction of 8.33 kHz channel spacing. There was a need to expedite the publication of an accurate COM 2 Table. For this purpose the Group agreed with the FCB that States should review their entries in that table and provide the EUR/NAT Office of ICAO with a correct and up-to-date version of their entries free from all errors. It also saw a need for this work to be finalized by the end of 1995 in view of the likely date of publication of the table as indicated above. Accordingly, the Group formulated the following Conclusion:

CONCLUSION 37/4 - REMOVAL OF ERRORS FROM TABLE COM 2

That States undertake a prompt review of their entries in EUR Table COM 2 and provide the EUR/NAT Office of ICAO, by the end of 1995, with a correct and up-to-date version of their entries free from all errors.

2.4.40 The EANPG considered that availability of an up-to-date database of existing frequency assignments in the Region (Table COM-2) was an absolute prerequisite for a successful planning and implementation of the new channel spacing. It was therefore vital that the agreed co-operation between EUR/NAT Office of ICAO and Eurocontrol with regard to the production and maintenance of the COM Tables should be realised as soon as possible and that in particular sufficient human resources be allocated to that task. It was noted that Eurocontrol, on its part, was ready to provide all the required technical and human resources in the scope of the technical arrangements referred to earlier. The Group considered that ICAO should, on its part, also make every effort to provide its human resources necessary to ensure the timely production by Spring 1996 (for Table COM 2) and subsequently for the continued maintenance of the EUR Plan COM Tables. Accordingly, the Group made the following Conclusion:

CONCLUSION 37/5 - HUMAN RESOURCES FOR THE MAINTENANCE OF THE COM TABLES

That the EUR/NAT Office of ICAO make available sufficient human resources for the production, by Spring 1996 for Table COM 2 and, subsequently, for the continued maintenance of the EUR ANP COM Tables.

Replacement of the MOTNE Regional Planning Group (RPG)

2.4.41 At its 35th Meeting, the EANPG had discussed the absorption of the MOTNE RPG in its own structure. It had decided to set-up its own working group with the same terms of reference and composition as the MOTNE RPG and at the same time had requested the Air Navigation Commission (ANC) to dissolve the MOTNE RPG. At that time the ANC considered it premature to dissolve the MOTNE RPG before the structure and role of the EANPG was settled at the Special EUR RAN (1994) Meeting. It therefore referred the whole question to the RAN Meeting.

2.4.42 The RAN Meeting had recommended the dissolution of the MOTNE RPG and that its tasks be transferred to the EANPG. It had also stressed that the work of the MOTNE RPG was to continue uninterrupted. Taking into account the new terms of reference of the EANPG and it working arrangements as well as the fact that some members of the MOTNE RPG were from States outside the EUR Region, the RAN Meeting had stated that the MOTNE RPG should be replaced by a working group of the EANPG with the same composition and terms of reference as the MOTNE RPG.

2.4.43 In response to Recommendation 1/5 of the Special EUR RAN (1994) Meeting and taking into account the report of that meeting on this matter, the EANPG agreed to set up its own working group with essentially the same terms of reference and composition as the former MOTNE RPG. It, therefore, formulated the following Decision:

DECISION 37/6 - MOTNE WORKING GROUP

That a working group (named MOTNEG) with the terms of reference and composition indicated in Appendix D of the Report on Agenda Item 2 be set up to deal with the communication aspects related to the collection and dissemination of operational meteorological (OPMET) data in the EUR Region.

2.4.44 The EANPG noted that a meeting of the former MOTNE RPG members was scheduled to be held from 25 to 29 September 1995 to continue with the outstanding work of the MOTNE RPG. Since the EANPG had now created its own working group, the EANPG agreed that the September meeting referred to above should be the first meeting of the EANPG MOTNEG.

Back-up Procedures for outage of the London AFTN/MOTNE Centre

2.4.45 The role of the London AFTN/MOTNE Centre as the gateway for OPMET data supplied to the Satellite Distribution System for World Area Forecast System (WAFS) products in the AFI, EUR and MID Regions and the Western part of the ASIA Region (SADIS) uplink station at Bracknell had been discussed within the MOTNE. It was considered that there was a need to set up procedures for back-up of the London Centre to ensure the provision of OPMET data at the SADIS station in case of a serious outage of that centre.

2.4.46 Noting that all the AFTN OPMET material and the MOTNE Loop material would pass through the London AFTN centre for transmission on the SADIS, it was considered that there would be reliance, by some users, on the SADIS system as the primary source of OPMET data. Therefore there was a need to establish procedures for back-up of the London AFTN Centre in case of serious outage of that centre. At its twenty-first meeting, the MOTNE RPG had already seen this problem and identified the availability of a link between the UK MET Office at Bracknell and the Brussels COM Centre which could be used as back-up in case of such an outage. The EANPG considered the above information and agreed to invite Belgium and the United Kingdom to investigate the use of the link Bracknell/Brussels for back-up purposes as indicated above.

2.4.47 Accordingly, the Group formulated the following Conclusion:

CONCLUSION 37/7 - BACK-UP PROCEDURES IN CASE OF OUTAGE OF THE LONDON AFTN CENTRE

That Belgium and the United Kingdom be invited to set up procedures for the use of the link Brussels-Bracknell to provide OPMET data from Brussels to Bracknell in case of outage at the London AFTN Centre.

Choice of Regional OPMET Centres (ROCs)

2.4.48 At the 21st meeting of the MOTNE RPG the designation and number of Regional OPMET centres had been discussed. This arose in connection with the development, by the MOTNE, of a new OPMET data collection and dissemination system. One of the essential elements of the new system was that there would be a number of Regional OPMET Centres (ROCs). Each ROC was to be connected to a number of National OPMET Centres (NOC), the latter being one per State. The number of and the designation of ROCs required had been discussed at length at the 21st meeting of the MOTNE RPG. It had been agreed by the MOTNE RPG that there should be at least two ROCs. It was also the opinion of the majority of the MOTNE RPG that there should be only two ROCs and that these ROCs should be the centres of Brussels and Vienna. The Group had considered that two centres should be sufficient and simpler to manage. In addition the choice of Brussels and Vienna was considered to be the best choice because those centres had provided the OPMET data banks for many years with excellent service. It had also stated that for reasons of cost- effectiveness, two ROCs were sufficient to guarantee the functionality required.

2.4.49 Some MOTNE members had not agreed, stating that three or more ROCs could equally fulfil the requirement and would not be more technically complex to manage. It had further been considered in their view that technically any number of ROCs, (two or more) had advantages and disadvantages and the choice of ROCs was more of a non-technical consideration. The MOTNE Member from Algeria had explained that it was useful to keep Toulouse as a ROC because of its function as a gateway with the AFI Region. As for the designation of centres, the MOTNE Member from France had stated that the MET centre at Toulouse, which had good experience of database management, was as capable to fulfil the functions of ROC as that of Brussels or Vienna and without any additional cost.

2.4.50 The MOTNE RPG had recognized the excellent service that the MET centre at Toulouse had been giving in the exchange of OPMET data with the AFI Region and that this should continue. However, in the end the group had decided to recommend that there should be two ROCs and had designated the centres of Brussels and Vienna to be those two ROCs. The MOTNE Member from France had objected to that, stating that the decision of the number of ROCs and their designation did not contribute at that stage to the implementation of the new system and therefore should not have been addressed at that meeting. In his view the important elements to be developed were the communication means needed (improved AFTN/ICAO Common Data Interchange Network (CIDIN) and SADIS) as well as centre upgrading. The choice of ROCs was irrelevant at that stage. That position had been supported by at least one other MOTNE Member.

2.4.51 The EANPG was presented with a proposal by France to designate Toulouse centre as an additional ROC. It was further stated by France that Toulouse, because of its close relationship with North Africa (Tunis, Algiers, Casablanca), West Africa (Dakar, Niamey) and East Africa (Nairobi) represents a concentrated storage for data from Africa. Furthermore, Toulouse centre was connected to various parts of the world and was thus able to have additional sources for OPMET data collection. A number of ROCs amounting to three would ensure a better reliability. It would avoid overloading any ROC with requests and thereby contribute towards an improved response time for OPMET databanks users. It was also stated that ROC functions would not imply additional cost for Toulouse beyond what France was already bearing for national OPMET services, but a commitment towards the international aviation community could enhance the position of Toulouse if it was officially designated by ICAO as a ROC. The vast experience as well as the established proficiency of Toulouse in the field of OPMET databank management, added to its special international ties, pointed towards its designation for ROC responsibilities. As for the decision by the MOTNE RPG to designate only Brussels and Vienna as ROCs, the Member from France stated that in preparatory documentation within the MOTNE, Toulouse had been designated as a ROC.

2.4.52 The proposal by France was supported by some Delegates. Others were of the opinion that there were no new elements to support a change of the recommendation by the MOTNE RPG and therefore stated that there should be two ROCs noting, particularly, that with the two ROCs designated the operational requirements were met and cost-effectiveness ensured. The Group was informed that, in a similar situation arising in another Region where a third OPMET databank had been proposed, the ANC had disagreed and referred the matter to the Regional Planning Group concerned for re-consideration.

2.4.53 On the basis of the above discussion, the EANPG could not reach a consensus. It therefore decided not to refer the matter directly to the MOTNEG for reconsideration but instead to seek advice from States and international organizations concerned on the number and the location of Regional OPMET Centres. Accordingly, the Group formulated the following Conclusion:

CONCLUSION 37/8 - EUR REGIONAL OPMET CENTRES

That States be consulted over the number and the location of the Regional OPMET Centres in the EUR Region, taking into consideration the candidature of Toulouse jointly with the MOTNE RPG proposal for Vienna and Brussels and the results be referred to the MOTNEG for further consideration.

2.4.54 The Benelux and Scandinavian States, Finland and IATA expressed disappointment with this revision of a conclusion which had been reached by the MOTNE RPG for the reasons that the revised conclusion would:

a) delay the application of measures proposed by the MOTNE RPG;

b) be in conflict with the position taken by the ANC in respect of the choice of a number of OPMET databanks in another Region; and

c) go against the optimization process for the service needed and accepted in the EUR Region.

2.5 Aerodrome Operations

Advanced Surface Movement Guidance and Control Systems (A-SMGCS)

2.5.1 The Group reviewed draft Operational Requirements and associated Guidance Material, developed by the Aerodrome Operations Group of the EANPG (AOPG), for the planning and implementation of Advanced Surface Movement Guidance and Control Systems (A-SMGCS) in the EUR Region. It recalled that the work of the AOPG on A-SMGCS had been governed by the need to improve the capacity at aerodromes during all weather conditions, while maintaining the required level of safety. This was a matter of particularly concern in the EUR Region where the demand for and implementation of low visibility operations (i.e. instrument precision approach procedures CAT II/III) was on the increase. As weather conditions, traffic density and aerodrome layout may have a different impact from one aerodrome to another, the Group recognized that the planning and implementation need to be based on a modular concept.

2.5.2 While the availability of new technologies, including automation capabilities would help to increase the capacity under low visibility conditions and on complex and high density aerodromes, the Group recognized that the wide range of available, and still evolving, new technologies creates an urgent need to define SMGCS in a technology independent way.

2.5.3 The urgent need for the development and approval of world-wide ICAO provisions (e.g. SARPs and PANS) to ensure harmonized planning and implementation of A-SMGCS on a global basis was stressed by the Group. It noted that the All Weather Operations Panel (AWOP) of the ANC was already engaged in that task, and had already, in accordance with its mandate, adopted the material developed by the AOPG so far on A-SMGCS as the basis for its work. However, recognizing that the outcome of the ANC on A-SMGCS may not be approved nor applicable before some years, the EANPG recognized the need for regional provisions on which the EUR Provider States could initiate the planning and implementation of A-SMGCS, until world-wide provisions become available.

2.5.4 The EANPG noted, that throughout the development of the proposed Operational Requirements and associated Guidance Material, coordination had been established with other bodies also engaged on this matter, mainly European Organization for Civil Aviation Equipment (EUROCAE), through its Working Group 41, and the ECAC Task Force on the Airport/Air Traffic System Interface (APATSI). It also noted that close working coordination had been established between the AOPG and the AWOP. It noted further that the Operational Requirements and associated Guidance Material developed by the AOPG would form integral parts of the future A-SMGCS Document now under development within the AWOP towards the development of world-wide provisions.

2.5.5 The Group considered it essential that such a working coordination between the AWOP and the EANPG be maintained in the future through the established ICAO machinery. In the same vein, it was understood that coordination may also need to be extended to the Visual Aids Panel (VAP) at a later stage.

2.5.6 Although the proposed Operational Requirements for A-SMGCS and the Guidance Material were considered by the EANPG as having reached a certain degree of maturity, the Group nevertheless agreed that both documents still needed further minor improvements as well as editorial modifications before they could be presented to States. That exercise should be finalized by AOPG/11 (Paris, 13 - 16 November 1995).

2.5.7 Furthermore, the EANPG recognized that a strong need existed among States in the EUR Region for an early approved set of ICAO provisions on which to initiate, without any further delay and in a co-ordinated fashion, the planning and implementation of the improvement of SMGCS at international aerodromes. The Group also considered it necessary that outcome of the work on A-SMGCS so far achieved within Europe should be used for the development of relevant ICAO world-wide provisions.

2.5.8 In light of the above discussion, the following Conclusions were endorsed by the EANPG:

CONCLUSION 37/9 - EUROPEAN CONTRIBUTION TO THE DEVELOPMENT OF WORLD-WIDE PROVISIONS ON A-SMGCS

That the proposed Operational Requirements for A-SMGCS, together with the associated Guidance Material, as further refined by AOPG/11, be submitted to ICAO as a coordinated European contribution to the development of relevant ICAO world-wide provisions.

CONCLUSION 37/10 - REGIONAL PROVISIONS ON A-SMGCS

That the ICAO Secretariat circulate to EUR provider and user States, and international organizations the Operational Requirements for A-SMGCS, together with the associated Guidance Material, as refined by AOPG/11, under cover of a formal proposal for amendment to the EUR Air Navigation Plan (EUR ANP).

2.5.9 While the proposed Operational Requirements for A-SMGCS and associated Guidance Material were now considered as having reached a certain degree of maturity, and would be submitted to States for approval for use as the basis for the planning and implementation of A-SMGCS throughout the EUR Region, the Group realized that ongoing development and introduction of those provisions by EUR provider States, as well as the work of ICAO on the subject may necessitate to update this document, and for that reason, should be monitored.

2.5.10 To that effect, the EANPG agreed on the following Decision:

DECISION 37/11 - EANPG MONITORING ACTIVITIES ON A-SMGCS

That the following be included in the EANPG Work Programme:

a) monitor the implementation by EUR States of the approved Regional Operational Requirements and associated Guidance Material with the view to identifying necessary amendments to the Regional provisions;

b) monitor the progress of research and development and trials in the EUR Region with the view to identifying necessary amendments to the Regional Operational Requirements and associated Guidance Material;

c) on the basis of a) and b) above develop, for the EANPG, a coordinated European contribution to the ongoing development of world-wide provisions; and

d) monitor the progress in the development of world-wide provisions in order to identify necessary amendments to the Regional Operational Requirements and associated Guidance Material.

2.5.11 Finally, the Group considered it necessary, at this stage of development, to establish an appropriate educational process in Europe to ensure a wide dissemination as well as a common understanding and use of the proposed Operational Requirements and associated Guidance Material by all parties concerned. It emphasised that such process would also help in the continuous updating and development of provisions for A-SMGCS in the EUR Region. Such an educational process should be based on seminars, and EUR States and international organizations should be invited to support ICAO efforts in this respect.

CONCLUSION 37/12 - ICAO SEMINARS ON A-SMGCS

That as soon as possible after approval of regional provisions, EUR States and international organizations support ICAO efforts to organize seminars on A-SMGCS within the EUR Region.

Transition from ILS to new technologies

2.5.12 Pursuant to Decision TF/2 of the EANPG Task Force meeting in Paris in April 1995, a special coordination meeting of the Aerodrome Operations Group on the EUR ILS/MLS Transition (IMTEG) with Eurocontrol had been held in the Paris Office of ICAO on 30-31 August 1995.

2.5.13 That meeting was convened to develop the most efficient and effective modus operandi of the work to be carried out and coordinated between the EANPG and Eurocontrol, since it was essential that the future work of the EANPG on All Weather Operations (AWO) should be progressed along with other developments, especially in the field of GNSS applications, in Eurocontrol.

2.5.14 The EANPG meeting reviewed reports on Agenda Items 3 and 5 of the Special COM/OPS DIV (1995) Meeting. That material was considered by the Group as the basis and remit for defining the rôle, work programme and associated working structure of EANPG in the planning and implementation of AWO throughout the entire EUR Region. In that context, the meeting noted that the Global Strategy developed by the Special EUR RAN (1994) Meeting was supported by the European Strategy.

2.5.15 In the light of the above, the Group recognized that the prime role of the EANPG in the planning and implementation of AWO in Europe should be to coordinate and direct the implementation of the Global Strategy in that Region.

2.5.16 In addition, the relevant EANPG activities would ensure that the low minima operations in the EUR Region would be sustained while progressing towards the introduction of new technologies. To that effect the following four main activities were identified:

a) action to ensure the continuation of operations based on ILS into the next century and continuation of the effort to maintain CAT III ILS operations as long as operationally acceptable;

b) continuation of MLS work on Category III operations;

c) new programme to advance the work to ensure that GNSS is quickly developed as a non-precision and precision approach aid; and

d) development of relevant operational ATS procedures for simultaneous availability of different technologies for navigation during approach and landing.

2.5.17 In light of the above, the Group recognized that its past activities, which was devoted to managing the transition from ILS to MLS only, would expand into a much wider field of activities. It noted that this work involves other bodies such as Eurocontrol, the Joint Aviation Authorities (JAA), EUROCAE, the European Commission (EC).

2.5.18 In that context, the Group also emphasized the role and activities of the Russian Federation in the future development and use of Global Navigation Satellite Systems (GNSS) for approach and landing.

2.5.19 Noting that the planning involving new technology required a "gate-to-gate system approach", the Group stressed the need for a new methodology to AWO planning and agreed that the work should be entrusted to a new working group of the EANPG, to be named the All Weather Operations Group (AWOG), with the mandate to become the focal point for coordination of AWO planning and development in the EUR Region.

2.5.20 The AWOG would have to ensure a high level of cooperation among the organizations mentioned above as well as the Frequency Management Group (FMG) and the AOPG.

2.5.21 The EANPG was informed that the Eurocontrol Satellite Navigation Applications Sub-Group (SNA-SG) was engaged in four tasks:

a) Institutional Arrangements and Requirements (IAR);
b) Operational and Certification Requirements (OCR);
c) Cost-Benefit Studies (CBS); and
d) System research and development (SRD)

2.5.22 Noting that Eurocontrol's SNA-SG was currently working on an Action Plan to establish what information on GNSS was available and what research and development remain to be done, the EANPG considered that SNA-SG could assist the AWOG in coordinating and organizing research and development activities as vital to the safe introduction of GNSS for all phases of flight including precision approach and landing.

2.5.23 The EANPG considered it essential to establish a detailed work programme on AWO in consultation with all parties concerned. This should, in particular, identify the contribution of Eurocontrol to AWOG, and would require a thorough review of the tasks, resources and timescales involved as well as a clear division of responsibility among the organizations which would provide regular reports to AWOG, in order to eliminate duplication of effort and achieve a structured and harmonized work programme.

2.5.24 Because future ATM systems will provide a "gate-to-gate" concept, in respect to navigation, internal coordination among the various working groups of the EANPG would be necessary especially in the AOPG. The Group noted that APATSI was also engaged in these areas and there was a strong need to channel information from AOPG and APATSI to AWOG and vice versa.

2.5.25 In this context, the Group agreed that a dedicated structure should be established within the EANPG as the focal point in the EUR Region for the coordination and management of the planning and implementation of AWO at international aerodromes.

2.5.26 In conclusion, the Group agreed on the establishment of the proposed All Weather Operations Group of the EANPG (AWOG), with the Terms of Reference and Composition given in **Appendix E** to the Report on this Agenda Item. The Group agreed to disband the IMTEG and expressed its appreciation for its significant and valuable contributions in the past.

DECISION 37/13 - CREATION OF THE ALL WEATHER OPERATIONS GROUP OF THE EANPG

That:

a) **the All Weather Operations Group (AWOG) of the EANPG be established as the focal point and the responsible body for the overall planning and implementation of All Weather Operations in coordination with other interested bodies (e.g. Eurocontrol, JAA, EUROCAE, and EC); and**

b) **the AWOG commence its work in accordance with the preliminary Terms of Reference and Composition described in Appendix E of the Report on Agenda Item 2.**

2.5.27 The Group noted a lack of action by States on the matter of ILS frequency protection. It stressed that, as a matter of urgency, all EUR provider States should take appropriate action with their respective radio regulatory organizations in order to avoid current ILS services being adversely affected by new FM broadcast criteria, which would become effective on 1 January 1998. Considering the short time left ahead, as well as the impact of the management of ILS frequency protection on the introduction of Multi-mode Receiver (MMR), the Group asked the Secretariat to remind all EUR provider States of their obligation and to collect information from those States on the actions they were already undertaken or planned to take on this issue and to provide AWOG with the result of that exercise.

2.5.28 The Group stressed the importance of achieving early progress in the establishment of GNSS based approach and departure guidance services to replace current CAT I and non-precision operations. This would greatly enhance the level of service provided, especially at small aerodromes, and significantly reduce infrastructure costs. In that context, the Group realized that the traditional term "non-precision" may no longer be applicable with the use of satellite technology as some form of vertical guidance would be provided and that the principles governing the definition of aerodrome minima may have to be revisited.

2.5.29 The Group emphasised the need to urgently establish a "Road Map" which would clearly indicate the respective work programmes of all States and bodies engaged in work related to in the EANPG work programme on AWO. This "Road Map" should include objectives, priorities, target dates as well as links, thus providing the necessary "overview" for a coordinated planning and implementation of AWO in the region and avoiding duplication of work.

2.5.30 Although a detailed work programme of the EANPG on AWO still needed to be developed by the AWOG in terms of objective, action and target date, the Group could nevertheless identify main tasks for inclusion in that work programme. These are reproduced in **Appendix E** of the Report on this Agenda Item.

Future role of EANPG in the field of aerodrome operations

2.5.31 The outcome and recommendation of AOPG/10 (Paris, 2 to 5 May 1995), on the work programme of the EANPG on aerodrome operations and its future management were presented to the Group.

2.5.32 ECAC, through APATSI, was engaged in the development of new or revised procedures identified as appropriate to enhance the efficiency and capacity at and around aerodromes. Noting the directives of the ECAC Transport Ministers to APATSI for expeditious implementation of procedures to enhance capacity without prejudicing safety in the ECAC area, the Group emphasized that, should APATSI be engaged in subjects of mutual interest of both ECAC and ICAO, it should develop for the entire EUR Region of ICAO the necessary draft regional provisions (i.e. RCM, SUPPS and/or Guidance Material) with the view to ensuring a coordinated and coherent development of the European Air Navigation system as a whole. In particular, proposals by APATSI to amend ICAO provisions should be followed up by the AOPG for subsequent approval by EANPG, if so required.

2.5.33 The Group considered it necessary that some of the tasks proposed for deletion from the EANPG work programme should be amalgamated under a general new task focusing on the analysis of the implementation of facilities and services at international aerodromes in the new EUR provider States. The work to be done under that task should concentrate on the assessment of the current status of implementation with the view to identifying remedial action required. This activity should be conducted in close coordination with the GATE.

2.5.34 The Group felt that the planning of required facilities and services at international aerodromes required particular attention and support, and should be conducted in the context of a new task, involving a continuous review of Part III-AOP of the EUR ANP, including Tables AOP 1 and 2 and related Tables of requirements (e.g. ARN-2; ATS-2), together with the list of shortcomings. This task should allow for a coordinated regional monitoring of the planning and implementation of facilities and services at international aerodromes and permit the early identification of subjects/topics for which specific action should be recommended to the EANPG as part of its overall work programme, or for policy decisions.

2.5.35 The Group also identified the need to assess the current implementation of low visibility procedures/all weather operations throughout the entire EUR Region and considered it necessary to encourage prompt notification of changes in the status of AWO, in accordance with established provisions. This proposed new task on AWO should be initiated as soon as the result of a regional survey on that issue, conducted by the Secretariat of ICAO, is available.

2.5.36 Air Traffic Services to be provided at international aerodromes, where all weather operations will be required, also needed to be considered in the light of the forthcoming implementation of new approach and landing systems, and in particular the provision of aerodrome flight information service (AFIS) versus the provision of aerodrome control. Work on that subject should take full account of the progress achieved on the above mentioned Task on AWO.

2.5.37 The Group agreed that these two new tasks should form part of the EANPG work programme on AWO, and carried out by AWOG.

2.5.38 The Group also saw a need for an appropriate forum where EUR provider and user States and international organizations concerned could, when necessary, coordinate the planning and implementation of aerodrome operations at international aerodromes (Table AOP-1 and associated Tables of the EUR ANP refer). Such a forum would also permit the necessary dialogue between providers and users on shortcomings on the provision of facilities and/or services at international aerodromes as required under the Table AOP-1 of the EUR ANP.

2.5.39 In conclusion, the Group agreed to maintain the AOPG to coordinate the various technical activities aimed at the development of Aerodrome Operations throughout the EUR Region, in line with the proposed revised Terms of Reference (**Appendix F** to this Agenda Item refers).

DECISION 37/14 - TERMS OF REFERENCE AND COMPOSITION OF AERODROME OPERATIONS GROUP OF THE EANPG

That the Aerodrome Operations Group (AOPG) of the EANPG continue its work along the preliminary new Terms of Reference and Composition indicated in Appendix F of the Report on Agenda Item 2.

EANPG - APATSI inter-relationship

2.5.40 In an effort to eliminate duplication of work and to enhance coordination between the work programmes and activities of the EANPG (in particular its AOPG) and of the APATSI programme of ECAC, the Group reviewed the inter-relationship between these two bodies and the scope of their activities. It was found that coordination had improved over time and that the AOPG work programme and time frames established by the EANPG represented the needs of States in the EUR Region as well as the need for the EANPG to provide guidance to States and input from the European Region to ICAO's world-wide activities.

2.5.41 Concern was expressed at the practicalities of implementation by States of the measures published in APATSI's "Manual on Mature Procedures". It was stated that ECAC States felt that implementation should follow the processing of these procedures through normal ICAO approval machinery rather than obliging States to file differences from the Annexes to the Chicago Convention or leading to the application of procedures which may, in some cases, differ from the current ICAO SARPs and guidance material. It was also stressed that the working bodies of two closely related organizations of States which were all signatories to the Chicago Convention (ICAO and ECAC) should progress closely in step and should undertake their work within the same procedural frameworks and in accordance with identical directives from the aeronautical authorities concerned. In this context, some Members expressed concern that certain "Mature Procedures" may not take all related safety aspects sufficiently into account which might hamper their early and full implementation in some cases.

2.5.42 The representative of IATA expressed regret that the APATSI airport database did not cover the important ground side capacity situation, being restricted to the approach and runway capacity elements only. This reduced the value of the data base for practical planning purposes in that it only reflected a part of the entire demand/capacity picture.

2.5.43 In this context the director of the ECAC Airports Bureau informed the EANPG that an ad-hoc group had been established by the APATSI Project Board to determine ways and means to accelerate the successful implementation of the "Mature Procedures" within the ICAO framework. To that extent, he said, a mechanism was required to convert the contents of the ECAC APATSI Manual into ICAO material. ICAO had been invited to participate in the deliberations of that ad-hoc group which was to meet shortly for the first time.

2.5.44 The EANPG agreed that participation by ICAO experts in that activity was important to ensure that the applicable procedures for the amendment of regional and world-wide ICAO material were applied whenever necessary and that the work programmes of the AOPG and the AWOG and the ECAC/APATSI activities were closely coordinated and harmonized. At the same time, it was important that the States concerned ensure full coordination within their respective Civil Aviation Administrations so that the work performed and the input made by their experts in these fora remained on a common and coherent track.

CONCLUSION 37/15 - EANPG-APATSI INTER-RELATIONSHIP

That:

a) **ICAO ensure participation by EUR/NAT Regional Office experts in the relevant APATSI activities so that applicable ICAO Council established procedures for the amendment of regional and world-wide ICAO material are followed whenever necessary and that the EANPG and APATSI work programmes in the aerodrome operations and all weather operations fields are harmonized and that duplication is avoided; and**

b) **States concerned ensure full coordination within their respective Civil Aviation Administrations so that the work performed and the input provided by their experts in these fora follow a common concept.**

2.5.46 It was recognized that the work programmes of the EANPG and of APATSI could not in all cases be entirely segregated due to the differences in the area of concern to APATSI and the area of responsibility of the EANPG and its inter-regional coordination tasks. It was essential,

therefore, that work undertaken in either forum was taken into account as fully as possible in the context of the others' work assignments.

2.6 Meteorology

Implementation of the SADIS cost allocation and recovery scheme

2.6.1 The Group noted that the SADIS cost allocation and recovery scheme (SCAR), developed pursuant to EANPG Decision 36/10, and subsequently endorsed by the Group, had been approved by the Council at its 145th Session on 6 July 1995 (paragraph i.7.1 refers). The essence of the scheme was that States, on a voluntary basis agree to share the cost of SADIS provision incurred by the provider State, the United Kingdom, currently estimated not to exceed £ 290,000 a year.

2.6.2 As the EANPG had initiated the scheme, the Group was now likewise expected to initiate its implementation. However, as SADIS services would be available not only to States in the EUR Region but also to States in the AFI and MID Regions and the Western part of the ASIA Region, invitations to participate in the SCAR should be extended to all States making use of the service and not only to those located in the EUR Region. This, the Group agreed, could best be achieved through the involvement of the respective regional planning groups, i.e. ASIA/PAC Air Navigation Planning and Implementation Regional Group (APANPIRG), AFI Planning and Implementation Regional Group (APIRG) and MID Air Navigation Planning and Implementation Regional Group (MIDANPIRG), in addition to the EANPG itself.

2.6.3 The Group also noted that the implementation of the SCAR would include the establishment of a SADIS Cost Recovery Administrative Group (SCRAG) which should:

a) audit the costs of the SADIS provision and any related financial activities, incurred by the provider State and subject to cost sharing; and

b) assess the annual contribution to be made by each State participating in the cost-sharing scheme, including any re-assessments arising from new States agreeing to participate in the scheme.

2.6.4 Originally it had been agreed that SCRAG should comprise three SADIS user States participating in the scheme, with the SADIS provider State as observer. However, with the subsequent extension of the SADIS coverage to include the Western part of the ASIA Region, the Group observed that the membership may eventually be extended to one State for each of the AFI, EUR and MID Regions and the Western part of the ASIA Region.

2.6.5 Since the SCAR scheme was developed essentially by EANPG States the Group found it reasonable that its implementation be initiated by its introduction in the EUR Region. However, as several States had wished to await Council action on the SCAR scheme before they would commit themselves to participate, the Group agreed that States should be consulted anew on their intentions. This survey and the establishment of an interim European SADIS Cost Recovery Administrative Group (ESCRAG) would be the two elements comprising the introduction of the SCAR in the EUR Region.

2.6.6 In the light of the above consideration the Group requested the ICAO Representative, European and North Atlantic Office, to approach each State in the EUR Region, other than those which have already categorically expressed they do not intend to participate in SADIS cost recovery, and enquire whether or not it is prepared to commit itself to participate on a voluntary basis in the SCAR scheme. The response would form the basis for the cost allocation at the initial stage. In

parallel, the ICAO Representative would also contact the ICAO Representatives in the other Regions concerned who, in turn, subject to the approval of the respective group, would address the same enquiry to States in their respective areas of accreditation. On the basis of the response to these enquiries, one State from each of the AFI and MID Regions and the Western part of the ASIA Region would be nominated, through the respective regional planning group, for membership in the final SCRAG.

2.6.7 It was expected that the final, multi-regional SADIS Cost Recovery Administrative Group (SCRAG) would be established by the Secretary General on the basis of the nominations by the regional planning groups concerned, and that its management would be undertaken by ICAO Headquarters, Montreal, in line with the management of the SADIS Operations Group.

2.6.8 In order to ensure a timely introduction of the SCAR, the Group however agreed to nominate one State to be the European representative in the final, multi-regional group and, pending the final composition of SCRAG on the basis of nominations from the other regional planning groups concerned, to nominate two additional EUR States to serve as members of the interim group ESCRAG.

2.6.9 Taking into account the position expressed by some States on the matter of participation in the SCRAG, the Group agreed that Sweden be nominated for membership of the new group as the European representative. As to the two additional States to serve on the interim group ESCRAG the Group also agreed that the Secretariat, on the basis of the afore-mentioned consultations and in close coordination with the EANPG Chairman, select these two States.

2.6.10 In the light of the above discussion the Group formulated the following Conclusions:

CONCLUSION 37/16 - IMPLEMENTATION OF THE SADIS COST ALLOCATION AND RECOVERY SCHEME (SCAR) IN THE EUR REGION

That the ICAO Representative, European and North Atlantic Office:

a) inform all EUR provider States of the introduction of the SADIS Cost Allocation and Recovery Scheme in the EUR Region; and

b) invite them to participate in the scheme on a voluntary basis.

CONCLUSION 37/17 - EXTENSION OF THE SADIS COST ALLOCATION AND RECOVERY SCHEME (SCAR) TO THE WHOLE SADIS AREA

That the ICAO Representative in the AFI, ASIA and MID Regions:

a) prepare appropriate inputs to their respective regional planning groups for the introduction of the SADIS Cost Allocation and Recovery Scheme in the AFI and MID Regions and the Western part of the ASIA Region; and

b) subsequently invite States concerned to participate in the scheme on a voluntary basis.

CONCLUSION 37/18 - ESTABLISHMENT OF A SADIS COST RECOVERY ADMINISTRATIVE GROUP (SCRAG)

That:

a) Sweden be invited to represent the EUR Region in the SADIS Cost Recovery Administrative Group;

b) the Secretariat, in close coordination with the EANPG Chairman invite two States participating in the scheme to form, together with Sweden, an interim SADIS Cost Recovery Administrative Group for the EUR Region (ESCRAG), until a multi-regional group with representation from all regions concerned is established; and

c) APANPIRG, APIRG and MIDANPIRG be requested to nominate, as soon as practicable, one SADIS user State in each of the three regions concerned, participating in the SADIS Cost Allocation and Recovery Scheme, to represent their respective regions in the ultimate, multi-regional SADIS Cost Recovery Administrative Group (SCRAG).

Establishment of a SADIS Operations Group

2.6.11 The Group was informed of Council action on its Conclusion 36/11, concerning the establishment of a SADIS Operations Group (paragraph i.7.1 refers). In its action, the Council had, *inter alia,* noted the establishment of the group with the composition proposed by the EANPG, on the understanding that Members of the group should be selected from the regions concerned. The Secretary General had been requested to proceed with the establishment of the group and commencement of its activities as soon as practicable.

2.6.12 The Group noted that, in line with the above action by the Council, the world area forecast centre (WAFC) and SADIS provider State (United Kingdom), the regional area forecast centre (RAFC) provider States directly concerned (Egypt, France, Germany, India, Kenya, Russian Federation, Senegal and Spain) would automatically be invited to provide members, together with observers invited from IATA and WMO. In addition, the Council had emphasized that representation of user States from all the ICAO regions concerned was required.

2.6.13 The Group was further informed that the Secretary General had subsequently requested all regional offices concerned to arrange, in coordination with the Chairmen of APANPIRG, APIRG, EANPG and MIDANPIRG, for one or two SADIS user States to be nominated by each of the four groups to designate members for the SADIS Operations Group. These members would then represent the interests of the user States in the regions concerned.

2.6.14 In view of the diverse nature of the EUR Region the EANPG considered it appropriate that two SADIS user States be nominated from this region. After careful consideration of various factors such as active participation in the SADIS planning, current commitments in the implementation process and geographical considerations the EANPG agreed that the nomination of Switzerland and Ukraine for the candidature for user State membership of the new group should be submitted to the Secretary General. The Group formulated the following Conclusion:

CONCLUSION 37/19 - NOMINATION OF MEMBERS OF THE SADIS OPERATIONS GROUP

That Switzerland and Ukraine be nominated to represent the SADIS user States in the EUR Region in the SADIS Operations Group.

Preparation of a SADIS user guide

2.6.15 The EANPG recognized that there was a need for keeping States and end-users informed of all aspects of the system. To achieve this, the METG had identified a requirement for documentation to be prepared at three levels:

a) a colourful brochure drawing the attention of Civil Aviation and Meteorological Authorities of the nature of the SADIS and the services to be provided;

b) a user guide, directed to senior managerial and decision-making staff in the State Administrations, spelling out in some detail the installation and operation of the system and the products to be available. The purpose would be to assist the States in their planning for reception of WAFS products in the final phase; and

c) a technical manual giving a full description of the technical and engineering aspects of the system, aimed at the engineers and other personnel directly involved in the installation, operation and maintenance of the equipment. This document would be the technical manual provided by the service provider Matra Marconi.

2.6.16 The Group noted that the SADIS brochure had already been produced by WAFC London and distributed to States concerned. A first draft of the SADIS User Guide had also been prepared by WAFC London and reviewed by the Sixth Meeting of the SADIS Implementation Sub-group (Paris, April 1995).

2.6.17 The Group was of the opinion that the user guide should be issued as ICAO guidance material in a self-contained document. As such, it should be distributed to all States in the area of SADIS coverage. Because of its wide distribution the guide would have to be produced in all the ICAO working languages in use in the SADIS service area, i.e. Arabic, English, French, Russian and Spanish. For this reason and in order to ensure compliance with ICAO standards in respect of format of the text, terminology, acronyms etc., the Group considered it appropriate that final production be handled by ICAO with WAFC London being responsible for the factual aspects, including all the technical information.

2.6.18 Bearing in mind the establishment of a SADIS Operations Group (paragraph i.7.1 refers) the EANPG agreed that, with the assistance of that group, WAFC London should provide the technical and operational material to be included in the guide and notify ICAO of amendments thereto, whereas ICAO should undertake the formatting, translation, printing and distribution of the guide, as well as subsequent amendments. To this effect the EANPG drafted the following Conclusion:

CONCLUSION 37/20 - PUBLICATION OF THE SADIS USER GUIDE

That, with the assistance of the SADIS Operations Group:

a) WAFC London provide the technical and operational material to be included in the guide and notify ICAO of amendments thereto; and

b) ICAO undertake the processing, including translation into Arabic, French, Russian and Spanish, of the guide, as well as any subsequent amendments required.

Closure of regional area forecast centres (RAFC) in the EUR Region

2.6.19 The EANPG recalled that the COM/MET DIV (1982) Meeting, when establishing the World Area Forecast System (WAFS) had recognized that techniques for the automated production of significant weather (SIGWX) forecasts in digital format and adequate telecommunications systems would not be available for a foreseeable future. The full implementation of the WAFS could therefore not be achieved in one single step. The Meeting had therefore agreed on a two-phased implementation process. In the initial phase there would be a three-tiered system with the two world area forecast centres (WAFC) London and Washington preparing global upper-air forecasts in digital grid point format, a number of regional area forecast centres (RAFC) receiving these data, converting them into chart form as well as producing SIGWX forecasts using conventional forecasting methods, and finally the users as the third tier. Three RAFCs were designated for service area 7, covering the western part of the EUR Region, namely, Frankfurt, London and Paris. The service area was later expanded to include the whole of the MID Region, thereby adding RAFC Cairo.

2.6.20 The Group also recalled that the EUR/7 RAN (1985) Meeting had expressed concern over the proliferation of RAFCs in service area 7 and in Recommendation 3/10 had called upon the EANPG to carry out a study of the evolutionary development of the WAFS in the EUR Region. The study should cover both the meteorological and telecommunications aspects of the system, with a view to achieving an early closure of RAFCs in the Region. A first report on the study had been submitted to the EANPG in its 30th meeting (Paris, June 1989). In its Conclusion 30/6 the Group had agreed that the transition towards a system comparable to the final phase of the WAFS should be planned and implemented by promotion of:

a) the early transition to the use of objective significant weather forecasts;

b) the use of the CIDIN; and

c) the introduction of a satellite broadcast system.

2.6.21 Furthermore, the Group recalled that the Satellite Distribution System for WAFS Products in Service area 7 and 1 (Western part) (SADIS) had subsequently been developed and that the United Kingdom, as the WAFC provider State, had been invited to implement the SADIS. In addition, considerable progress had been made by WAFC London in respect of automated production of SIGWX forecasts and that an interactive man-machine procedure was now operational.

2.6.22 The Group noted that, as a consequence of these developments, the two necessary conditions for the closure of RAFCs, i.e. automated production of SIGWX forecasts and a satellite broadcast system as part of the AFS for distribution of WAFS products had now been fulfilled.

France and Germany had submitted proposals to METG/4 (Paris, November-December 1994) for the closure of RAFCs Frankfurt and Toulouse.

2.6.23 The Group was informed that as regards the closure of RAFC Frankfurt, the automation of SIGWX forecasts had enabled the transfer of the responsibilities for the production of WAFS products to WAFC London at an early stage. The transfer of the communications responsibilities, enabling Germany to discontinue the costly LF radio facsimile broadcast of WAFS products, would take place as soon as practicable when the SADIS was fully established, some time in the second half of 1995.

2.6.24 The Group noted that in the case of RAFC Toulouse there was only the purely meteorological task of production of WAFS products that needed to be transferred to WAFC London, and that this could be achieved towards the end of 1996.

2.6.25 The EANPG was further informed that Egypt was planning to gradually cease operation of RAFC Cairo during 1995. As the closure of RAFC London, co-located with the WAFC, was only formality, all RAFCs in service area 7 could thus be closed by the end of 1996. Recalling Recommendation 3.2/1 of the MID/3 RAN Meeting, giving the mandate for the EANPG to carry out WAFS planning for the MID Region, the Group requested the Secretariat to inform all States in the MID Region, through the forthcoming LIM MID RAN Meeting, of the closure of all the RAFCs in service area 7.

2.6.26 The Group then formulated the following Conclusion:

CONCLUSION 37/21 - CLOSURE OF RAFCS

That, subject to the successful operation of the SADIS and the introduction of automated production of global significant weather forecasts by WAFC London, RAFCs in service area 7 be withdrawn progressively until the end of 1996.

2.6.27 Finally, the user organizations expressed their appreciation to all concerned for the successful follow-up of EUR/7 RAN (1985) Meeting Recommendation 3/10.

The EANPG task force on phraseology in voice communication of meteorological information

2.6.28 The EANPG reviewed a report on progress achieved by its Task Force on Phraseology in Voice Communication of Meteorological Information, established pursuant to Decision 36/16. It noted that the task force had commenced its work by establishing the general principles for the standardization to be achieved. These principles are given in **Appendix G** to the report on this Agenda Item.

2.6.29 The Group noted the variety of the meteorological information which could be conveyed by voice communication as well as the different communication systems used (VOLMET, automatic terminal information service (ATIS), radio telephony and automated telephone briefing) and consequently the complex nature of the task. In order to structure the work the task force had felt that the consideration of phraseology for the EUR VHF VOLMET Broadcast System would be an appropriate starting point.

2.6.30 In view of the possible impact of this matter on the development of specific world-wide provisions the Group considered that it would be appropriate, as a first step, to develop the provisions for standard phraseology as guidance material in the form of Methods of Application (MA), to be included in the EUR ANP (Doc 7754). It proposed that an MA be added to Part VIII -

MET, section 16 - Communication requirements, together with a new Attachment D to that part of the Plan spelling out the provisions developed by the Task Force. In order to retain coherence of the Plan the task force had proposed that an appropriate MA also be added to Part VI -ATS.

2.6.31 When discussing the proposed new Attachment D to Part VIII - MET, the observer from Ukraine indicated to the Group that some States in the Eastern part of the EUR Region used units of measurement for surface wind and altimeter setting which were different from those prescribed in Annex 3 and Annex 5 and stressed the necessity to include appropriate examples in the MA. France underlined that the lack of reference (whether geographic or magnetic) on wind direction had already raised problems of aerodromes with a marked magnetic variation and that the work of the task force might offer an opportunity to clarify the problems, to the benefit of flight crews. IFATCA noted that this matter had not brought any problem to the air traffic controllers of the EUR Region. The Task Force was requested to bear the proposals of Ukraine and France in mind in its future work.

2.6.32 The proposed Methods of Application and the proposed layout of Attachment D to Part VIII - MET of the EUR ANP as well as the significant weather for voice communication for meteorological information are given in **Appendices H, I** and **J**, respectively.

CONCLUSION 37/22 - STANDARD PHRASEOLOGY IN VOICE COMMUNICATION OF METEOROLOGICAL INFORMATION

That:

a) the principles given in Appendix G of the Report on Agenda Item 2 be followed in voice communication of meteorological information in the EUR Region; and

b) a proposal for amendment of the EUR ANP (Doc 7754), to include new Methods of Application shown in Appendices H, I and J of the Report on Agenda Item 2, be circulated among States and international organizations concerned.

2.6.33 In this context the Secretariat confirmed that new provisions in respect of aerodrome reports and forecasts, introduced by Amendment 70 to Annex 3, would be taken into consideration in the finalization of the Method of Application.

Assessment on Runway Visual Range (RVR)

2.6.34 The EANPG was informed that the METG in its fourth meeting (Paris, November-December 1995) had considered a proposal by France aiming at harmonizing RVR assessments and making them fully compatible with one another and with the values of operating minima. While paragraph 4.7.8 of Annex 3 states that the light intensity to be used in RVR computations should be either the one in use on the runway or the optimum light intensity in the prevailing conditions, France had chosen to compute RVR on the basis of lights being set to maximum intensity and now proposed that the afore-mentioned paragraph be amended to reflect this practice.

2.6.35 In this context both IATA and IFALPA had stated that in their experience RVR assessments were always too conservative and that a review of the relevant procedures may be called for. The discussion also made it clear that the question of RVR was a matter of considerable complexity and that opinions were divided as to the application of various principles. Considering the flight safety implications the METG had felt that a review of the RVR provisions was required as a matter of urgency.

2.6.36 Noting that the matter has been included in the Technical Work Programme of ICAO under Task MET-7901: Assessing and reporting of RVR, and that an RVR study group had been established to assist the Secretariat in its work the EANPG requested its Secretary to bring the concerns of the METG to the attention of the ICAO Air Navigation Bureau.

Volcanic ash advisory information

2.6.37 The EANPG noted that the ICAO Council had approved its Conclusion 36/13, inviting France to designate Toulouse as the European centre for the provision of volcanic ash trajectory advisories (volcanic ash advisory centre (VAAC)). It was informed by the METG of difficulties that had arisen in the implementation of this service because of a perceived lack of procedures for the provision of the required advisory information. The Group recognized that the volcanic ash trajectory advisories were essential both for the issuance of SIGMET information and for pre-flight planning purposes and that a number of issues needed to be resolved for the dissemination of the advisories.

2.6.38 Noting that some work was being done by the COM/MET Sub-group of APANPIRG the METG had seen a need for a global standardization in respect of procedures for the provision of volcanic ash advisory information. Taking note of the Volcanic Ash Forecast and Dispersion (VAFTAD) concept developed by the United States for the pictorial presentation of volcanic ash cloud movements the METG had felt that this concept could be further developed and had suggested that WMO should be invited to develop model charts.

2.6.39 The Group noted that the ICAO Secretariat, in the context of its Task MET-8201: Volcanic ash warnings, carried out with the support of the Volcanic Ash Study Group, was taking note of various developments at the regional level. It therefore requested its Secretary to bring the above considerations of the METG to the attention of the Air Navigation Bureau.

Harmonization of MET/AIS pre-flight information services

2.6.40 The EANPG was informed that METG/4 had reviewed a report of its project team on the harmonization of the MET component of pre-flight information systems in the EUR Region summarizing the user requirements from the MET component of the combined systems. The next phase of the work of the project team would be the development of a system concept for the MET component. To achieve this it would be necessary to take into account the AIS aspects of the systems.

2.6.41 The Group recognized that in view of the advanced plans in many States, including financial commitments for the development of automated AIS systems the development of a system concept would require close coordination with an appropriate body of AIS experts. It noted that an AIS Task Force had been established by Eurocontrol in March 1995 and was considering matters related to the work of the METG. Work could now proceed in that task force in parallel with that of the METG project team, and as the Chairman of the Task Force is also the Rapporteur of the Project Team, effective coordination is assured.

2.7 Aeronautical Information Services

2.7.1 The Group recalled that, at its 36th Meeting, it had established an AIS Task Force to re-appraise AIS requirements in the EUR Region with a view to proposing a revision to the mandate which had been given to Eurocontrol by EANPG/34 (Conclusion 34/14 refers). The Task Force had met three times and completed its assignment within the allocated time frame. The report had been sent to EANPG Members and regular participants in July 1994.

2.7.2 In the ensuing discussion, it was pointed out that many developments had occurred since the Task Force had completed its report. Eurocontrol had been actively pursuing the establishment of a European AIS Database (EAD) and had accordingly integrated AIS into the EATCHIP programme. In addition, the role of AIS in the provision of air navigation services was changing as more CNS/ATM technology became available. Furthermore, it was recalled that the Regional AIS Centre (RASC)/National AIS Centre (NASC) configuration, which had been agreed prior to the political changes that had occurred in the EUR Region, had not and probably would never be implemented as stated in the EUR ANP. Another important trend was the increase in the number "privatized" air navigation service providers.

2.7.3 Before proceeding with a detailed discussion of the recommendations in the report, the Secretary informed the Group that it would not be reasonable to expect the AIS Technical Officer post in the EUR/NAT Office of ICAO to be filled in the near future because of the continuing budgetary constraints and that it would therefore be difficult to support regular on-going AIS activities.

2.7.4 With the above in mind, the Group then examined the recommendations put forward by the Task Force. Firstly, it agreed that it was necessary to amend the EUR ANP. However to carry out this task, it would be necessary to develop a high level AIS policy for the EUR Region which took into account the requirements and differences that exist within the region as well as the global nature of AIS. This policy would also need to take into account evolving technology as well as changes in the objectives of air navigation service providers. On the basis of this policy, it would then be possible to develop an amendment to the EUR ANP and provide Eurocontrol with a clear mandate. From the foregoing, the Group also agreed that Conclusion 34/14 was no longer valid and that it would be pre-mature to propose a new mandate for Eurocontrol until the high level policy has been agreed to by all concerned.

2.7.5 The Group then addressed the methodology to develop the high level policy. Recalling that it had established a Programme Co-ordinating Group (COG) (paragraph 4.2.1 refers), the Group agreed that the COG should be responsible for developing the policy document.

DECISION 37/23 - HIGH LEVEL POLICY FOR THE PROVISION OF AERONAUTICAL INFORMATION SERVICES (AIS) IN THE EUROPEAN (EUR) REGION

That:

a) the EANPG Programme Co-ordinating Group (COG) develop a high level policy for the provision of AIS in the EUR Region taking into account the requirements and differences that exist within the region as well as the global nature of AIS, evolving technology and changes in the objectives of air navigation service providers; and

b) Conclusion 34/14 is no longer valid.

2.7.6 In concluding its discussions on this matter, the Group agreed that the work of the Task Force was indeed complete and it thanked those that had participated in the work for having produced a very good report in a timely way.

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APPENDIX A - TERMS OF REFERENCE OF THE MEETING FOR THE PLANNING AND COORDINATION OF IMPLEMENTATION OF ATS ROUTES THROUGH THE AIRSPACE OF THE EASTERN PART OF THE ICAO EUR REGION, INCLUDING MIDDLE ASIA (TARTAR)

(paragraph 2.3.3 refers)

Terms of reference

a) to develop, on the basis of the forecast air traffic demand and other available data, proposals aiming at establishment of a network of international ATS routes through the airspace of the Eastern Part of the ICAO EUR Region, including Middle Asia, taking into account, inter alia:

   i) opportunities afforded by the ICAO CNS/ATM concept;
   ii) airspace management requirements that may be associated with ATS route planning and implementation;
   iii) short, medium and long term requirements for ATS routes;

b) to ensure necessary coordination with adjacent States and other relevant ATS route planning bodies;

c) to closely cooperate with GATE concerning, inter alia:

   i) opportunities afforded by the early implementation of elements of CNS/ATM;
   ii) the necessary improvements of the organizational structure and technical support required for implementation of the ATS route network;

d) to prepare proposals on necessary improvements of the organizational structure and technical support of the ATS systems of the States of the Eastern Part of the EUR Region and Middle Asia, as concerns the ATS route structure;

e) to consider possible ways and means of financing the above projects.

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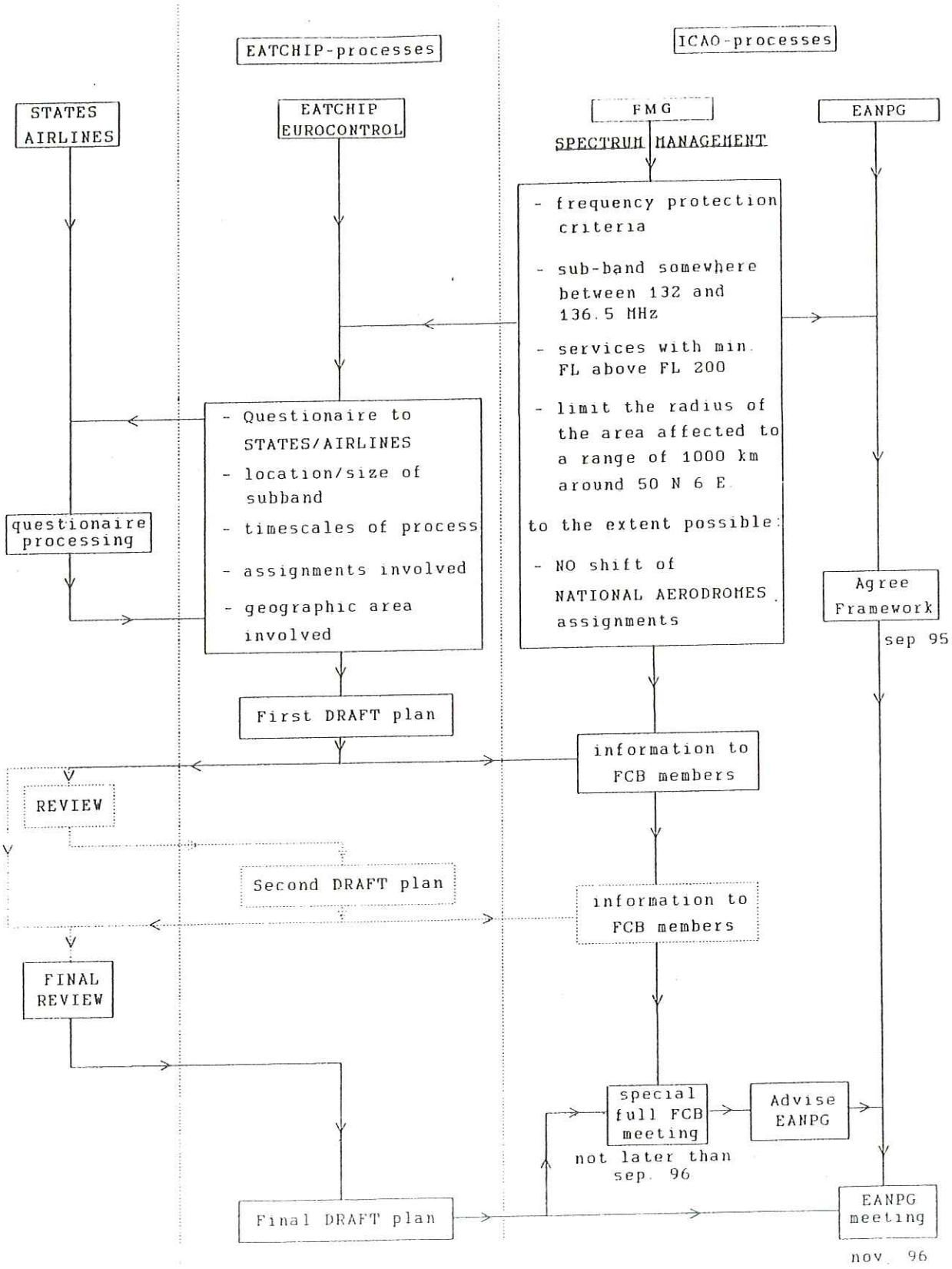
APPENDIX B - FRAMEWORK OF FIRST PHASE OF TRANSITION TO 8.33 KHZ CHANNEL SPACING

(paragraph 2.4.23 refers)



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APPENDIX C - TERMS OF REFERENCE AND COMPOSITION OF THE EANPG FREQUENCY MANAGEMENT GROUP (FMG)

(paragraph 2.4.33 refers)

Terms of Reference:

The FMG works on behalf of the EANPG:

a) to establish co-ordinated frequency assignment plans for the EUR aeronautical mobile services and the EUR radionavigation aids service and to make recommendations, as necessary, concerning frequency aspects of their implementation;

b) to co-ordinate the frequency aspects of new requirements, as necessary;

c) to give advice to States on questions of frequency assignment, rated coverage, etc., as necessary;

d) to undertake tasks assigned by the EANPG as follows:

i) the planning of operation of aeronautical communication and navigation facilities, especially with regard to issues of integrity, protection against harmful interference, etc.;

ii) the frequency-related aspects of the introduction of VHF data link services;

iii) monitor civil/military interoperability issues; and

iv) the introduction of 8.33 kHz channel spacing.

e) to advise EANPG on frequency spectrum issues covering all aeronautical radio services, including satellite based facilities; and

f) work in liaison with international organizations, Eurocontrol (COMT, ARB), etc..

Note 1: In the conduct of the work listed in (a), (b), (c) above, the FMG shall retain the same measure of autonomy afforded to the Frequency Coordination Body (FCB) which it replaced in 1995. In this context members of the FMG shall act as independent frequency assignment experts on behalf of the aviation community at large, and not as representatives of their State.

Note 2: For items (d), (e) and (f) above the FMG shall be subject to the procedures laid down for working groups of the EANPG.

Composition:

a) For items a, b, c, d, e and f of the terms of reference, members nominated by:

Albania, Armenia, Austria, Belgium, Belarus, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of Moldova, Romania, Russian Federation, Slovakia, Slovenia, Spain, Sweden, Switzerland, The former Yugoslav Republic of Macedonia, Turkey, Ukraine, United Kingdom, Yugoslavia (Serbia and Montenegro), IATA, IAOPA and Eurocontrol.

b) For items a, b and c of the terms of reference, members nominated by :

Albania, Algeria, Armenia, Austria, Belgium, Belarus, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Egypt, Estonia, Finland, France, Georgia, Germany, Greece, Hungary, Ireland, Israel, Italy, Jordan, Lebanon, Latvia, Libyan Arab Jamahiriya, Lithuania, Luxembourg, Malta, Morocco, Netherlands, Norway, Poland, Portugal, Republic of Moldova, Romania, Russian Federation, Slovakia, Slovenia, Spain, Syrian Arab Republic, Sweden, Switzerland, The former Yugoslav Republic of Macedonia, Tunisia, Turkey, Ukraine, United Kingdom, Yugoslavia (Serbia and Montenegro), IATA, IAOPA and Eurocontrol.

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APPENDIX D - TERMS OF REFERENCE AND COMPOSITION OF THE METEOROLOGICAL COMMUNICATIONS GROUP (MOTNEG)

(paragraph 2.4.43. refers)

Terms of reference

a) to monitor the operation of communication systems used for the collection of OPMET data required in the EUR Region and dissemination to all Regions of OPMET data collected in the EUR Region;

b) to promote appropriate action among States for the timely collection and dissemination of OPMET data required; and

c) to recommend changes to the Air Navigation Plan, including relevant Regional Supplementary Procedures (SUPPs) arising from its work.

Composition

The Members nominated by:

Algeria, Austria, Belgium, Bulgaria, Czech Republic, Denmark, Egypt, France, Germany, Greece, Ireland, Italy, Lebanon, Morocco, Netherlands, Poland, Portugal, Romania, Russian Federation, Spain, Sweden, Switzerland, United Kingdom, United States, IATA and WMO.

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APPENDIX E - PRELIMINARY TERMS OF REFERENCE OF THE ALL WEATHER OPERATIONS GROUP (AWOG)

(paragraph 2.5.26 and 2.5.30 refer)

1. Terms of Reference

1.1 The All Weather Operations Group of the EANPG (AWOG) shall be responsible to the EANPG for:

a) the implementation of the ICAO Global Strategy, as the focal point for the management and progress of all tasks on All Weather Operations;

b) continuous and coherent planning of All Weather Operations at international aerodromes in the EUR Region as a whole; and

c) identification of specific problems in the field of All Weather Operations in the EUR Region and development of appropriate proposals for solutions.

1.2 In order to assist in the work, the AWOG may create project teams, if and when required, charge them with specific tasks and define target dates for their completion. These project teams should report the progress and outcome of their tasks directly to the AWOG. After completion of the task(s), the project teams(s) will be dissolved.

2. Composition of the AWOG

2.1 The AWOG should be composed of experts on All Weather Operations from Belgium, Czech Republic, Finland, France, Germany, Italy, Netherlands, Portugal, Russian Federation, Spain, Sweden, Switzerland, United Kingdom, United States of America, ACI, EC, EUROCAE, Eurocontrol, IACA, IAOPA, IATA, IBAC, IFALPA, IFATCA and JAA.

Note: The above composition of AWOG was derived from that of the AOPG Project Team I (IMTEG) but will be enlarged, as necessary, by consultation with EUR provider and selected user States.

3. Meetings of the AWOG

3.1 To fulfil its role, the AWOG should meet, at least, two (2) months before each EANPG meeting, thus permitting the elaboration and advance distribution to EANPG of any recommendations proposed by the AWOG on either the EANPG work programme on All Weather Operations, or on issues requiring policy decision by the EANPG.

EANPG WORK PROGRAMME ON ALL WEATHER OPERATIONS

a) Implementation of the Global Strategy;

b) Coordinate and manage activities relevant to All Weather Operations in Europe, through the development of a "Road Map";

c) Maintain the current safety of All Weather Operations;

d) Maintain the existing level, or planned improved level, of service;

e) Maintain global interoperability;

f) Coordinate with other regional planning;

g) Ensure the continuation of ILS based operations into the next century and of the effort to maintain CAT III ILS operations as long as operationally acceptable;

h) Continue the development of MLS Category III operations;

i) Ensure development of GNSS as a non-precision and precision approach aid;

j) Develop operational ATS procedures for simultaneous availability and use of different technologies for navigation during approach and landing;

k) Ensure implementation of ICAO provisions on AWO;

l) Ensure continuous development of Aerodrome Flight Information Service (AFIS); and

m) Ensure detailed planning coordination and implementation of navaids/technologies at international aerodromes.

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APPENDIX F - PRELIMINARY NEW TERMS OF REFERENCE OF THE AERODROME OPERATIONS GROUP

(paragraph 2.5.39 refers)

1. Terms of Reference

1.1 The Aerodrome Operations Group of the EANPG (AOPG) shall be responsible to the EANPG for:

a) monitoring of the evolution of operational requirements with the objective of maintaining the safe and increasing efficient conduct of aerodrome operations;

b) continuous and coherent planning for international aerodrome operations in the EUR Region as a whole with specific emphasis on all capacity related subjects and paying particular attention to the development of other operational disciplines, to secure a harmonized progress; this includes development of proposals for policy and definition of priorities and operational requirements for provision of relevant Air Navigation Services, and monitoring of their provisions; and

c) identification of specific problems in the field of Aerodrome Operations in the EUR Region and development of appropriate proposals for solutions.

1.2 In doing so, the AOPG shall:

a) in consultation with all EUR States and in co-ordination with the ICAO Representative, European Office, identify new Task(s) and propose change to the work programme of the EANPG on aerodrome operations, necessary for the harmonized planning and implementation of aerodrome operations within the entire EUR Region of ICAO;

b) harmonize the progress of work on all Tasks of the work programme of the EANPG on aerodrome operations between the various project teams allocated with those Tasks;

c) pay particular attention to interfaces and cooperation with other responsible bodies in the EANPG and groups addressing Aerodrome Operations in other international fora and ensure coordination and compatibility with adjacent ICAO Regions;

d) on behalf of the EANPG, prepare input to ICAO world-wide activities, as required, for consideration and action by the EANPG;

e) assist the European Office of ICAO in its tasks related to international aerodrome operations, and in particular monitor the implementation of ICAO world-wide provisions and, when of specific concern to the EUR Region, monitor their development;

f) monitor development in the field of Aerodrome Operations in the EUR Region, including the implementation of regional provisions as contained in the Part III-AOP of the EUR ANP, and make proposals to meet the operational requirements of the EUR Region related to these developments, with particular attention being given to the safety and efficiency of aerodrome operations;

g) identify current and anticipated capacity and implementation short-falls at international aerodromes in the EUR Region and their causes through the continuous review of Table AOP-1 and Table AOP-2 of Part III - AOP of the EUR ANP, including associated requirements (e.g. Tables ARN-2, ATS-2), and the list of shortcomings;

h) when required, review the outcome of APATSI for which regional ICAO provisions are necessary, in order to expedite their approval along established procedure and their harmonized implementation throughout the EUR region of ICAO;

i) propose to the EANPG appropriate and timely remedial actions, including new Task(s), taking full account of related airspace aspects;

j) submit to the EANPG, as necessary, proposals for amendment of the EUR ANP (Doc 7754) and/or EUR SUPPS (Doc 7030);

k) identify and refer to the EANPG items of a policy nature related to Aerodrome Operations, with particular emphasis being put on the safety and efficiency aspects; and

l) coordinate with States and international organizations concerned, through the ICAO Representative, European Office, on technical matters.

1.3 In order to assist in the work, the AOPG may create project teams, if and when required, charge them with specific tasks stemming from the EANPG Work Programme and define target dates for their completion. These project teams should report the progress and outcome of their tasks directly to the AOPG. After completion of the task(s), the project team(s) will be dissolved.

2. Composition of the AOPG

2.1 The AOPG should be composed of experts on aerodrome operations from Austria, Belgium, Bulgaria, Czech Republic, Denmark, France, Germany, Greece, Iceland, Ireland, Italy, Netherlands, Norway, Poland, Portugal, Russian Federation, Spain, Sweden, Switzerland, Turkey, United Kingdom, United States of America, ACI, Eurocontrol, ECAC/APATSI, IACA, IAOPA, IATA, IBAC, IFALPA and IFATCA.

Note: The above composition of AOPG was derived from its previous composition, but will be enlarged, as necessary, by consultation with EUR provider and selected user States.

3. Meetings of the AOPG

3.1 To fulfil its role, the AOPG should meet, at least, two (2) months before each EANPG meeting, thus permitting the elaboration and advance distribution to EANPG of any recommendations proposed by the AOPG on either the EANPG work programme on aerodrome operations or on issues requiring policy decision by the EANPG.

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APPENDIX G - GENERAL PRINCIPLES FOR THE STANDARDIZATION OF PHRASEOLOGY IN VOICE COMMUNICATION OF METEOROLOGICAL INFORMATION

(paragraph 2.6.28 refers)

The EANPG task force on phraseology in voice communication of meteorological information established the following general principles for the standardization to be achieved:

a) the current procedures promulgated in Annex 10 - *Aeronautical Telecommunications*, paragraphs 5.2.1.2 and 5.2.1.3 in respect of the spelling alphabet and reading of numbers should be followed;

b) as regards the name of aerodromes the English version should be used in line with Principle No. 15 for the EUR VHF VOLMET broadcast System, promulgated in the European Air Navigation Plan (EUR ANP), Part VI - Air Traffic Services, Attachment D;

c) time should always be given in Universal Co-ordinated Time (UTC), in hours and minutes without a break, e.g. 1350 UTC should be read as ONE THREE FIVE ZERO;

d) in order to keep the voicing of various elements as economical as possible, identifiers and units of the various elements should only be repeated to the extent that avoidance of ambiguity required; and

e) as a rule, numerical values below a certain limit should be preceded by the phrase "LESS THAN" except for vertical parameters such as cloud height and vertical visibility. In these cases "BELOW" is appropriate.

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APPENDIX H - PROPOSED METHODS OF APPLICATION FOR INCLUSION IN THE EUR ANP

(paragraph 2.6.32 refers)

1. **Part VI - Air Traffic Services**

"MA 6.2 Meteorological information included in an ATIS broadcast should be phrased in accordance with the standard phraseology described in Part VIII - MET, Attachment D."

"MA 7.3 The reports to be included in the EUR VHF VOLMET broadcasts should be phrased in accordance with the standard phraseology described in Part VIII - MET, Attachment D."

2. **Part VIII - Meteorology**

"MA 16.13 In voice communication of meteorological information the standard phraseology described in Attachment D should be applied."

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APPENDIX I - PROPOSED ATTACHMENT D TO PART VIII - METEOROLOGY OF THE EUR ANP

(paragraph 2.6.32 refers)

ATTACHMENT D to PART VIII - MET

METHOD OF APPLICATION

PROVISIONS REGARDING STANDARD PHRASEOLOGY FOR VOICE COMMUNICATION OF METEOROLOGICAL INFORMATION

1. Surface wind

1.1 Group dddff

Because of its place at the beginning of the MET report or METAR message the wind information was easily identifiable. Therefore, it need not be preceded by the name of the element. When there is no wind, "CALM" should be used.

Example 1: dddff**KT** = 01015KT

ZERO ONE ZERO DEGREES, ONE FIVE KNOTS

Example 2: dddff**KMH** = 00000KMH

CALM

1.2 Group dddff$G f_m f_m$

The significant information in the group dddff$G f_m f_m$ was considered to be the maximum speed of the gusts. Therefore, the speed should be preceded by "MAXIMUM".

Example: dddff$G f_m f_m$ = 26015G27KT

TWO SIX ZERO DEGREES, ONE FIVE KNOTS,
MAXIMUM TWO SEVEN KNOTS

1.3 Group $d_n d_n d_n V d_x d_x d_x$

The preferred term for the variation was "VARIABLE". There was no compelling reason for repeating the unit "DEGREES" between the extremes. Directional variations should therefore be given as "VARIABLE BETWEEN ... AND ... DEGREES".

Example: $d_n d_n d_n V d_x d_x d_x$ = 280V350

VARIABLE BETWEEN TWO EIGHT ZERO AND
THREE FIVE ZERO DEGREES

2. Visibility

2.1 Group VVVV

The identification of the visibility information was sufficiently obvious for an indicator to be superfluous. The reporting interval given in Annex 3 - *Meteorological Service for International Air Navigation*, paragraph 4.6.4, should be respected. The following examples illustrate the wording to be used in specific cases:

Example 1: VVVV = 0000

LESS THAN FIVE ZERO METRES

Example 2: VVVV = 0250

TWO FIVE ZERO METRES

Example 3: VVVV = 9999

ONE ZERO KILOMETRES OR MORE

2.1.1 The code word CAVOK should be read as "KAV-OH-KEY"

2.2 Group $VVVVD_vV_xV_xV_xV_xD_v$

For directional variations of the visibility the words "TO THE" should preceded the compass points.

Example: $VVVVD_vV_xV_xV_xV_xD_v$ = 1000E 6000SW

ONE THOUSAND METRES TO THE EAST, SIX KILOMETRES TO THE SOUTH-WEST

3. Runway visual range (RVR)

3.1 Group $RD_RD_R/V_RV_RV_RV_R$

The set of RVR information should be preceded by the word "RVR" which should not be repeated within the set.

Example 1: $RD_RD_R/V_RV_RV_RV_R$ = R26/0450

RVR RUNWAY TWO SIX, FOUR FIVE ZERO METRES

Example 2: $RD_RD_R/V_RV_RV_RV_R$ = R27L/MOO50

RVR RUNWAY TWO SEVEN LEFT, LESS THAN FIVE ZERO METRES

3.1.1 Noting that the WMO Manual on Codes makes provisions for RVR to be reported for up to five parallel runways the extreme right and left runways should be referred to as "RIGHT, RIGHT" and "LEFT, LEFT", respectively.

Example: **R**$D_RD_R/V_RV_RV_RV_R$ = **R**32LL/P1500

RVR RUNWAY THREE TWO LEFT LEFT, MORE THAN ONE THOUSAND FIVE HUNDRED METRES

3.2 Group $RD_RD_R/V_RV_RV_RV_RVV_RV_RV_RV_Ri$

The words "DECREASING" and "INCREASING" should be used to indicate the RVR tendency.

Example: **R**$D_RD_R/V_RV_RV_RV_RVV_RV_RV_RV_Ri$ = **R**O6/0500**V**1200U

RVR RUNWAY ZERO SIX VARIABLE BETWEEN FIVE HUNDRED METRES AND ONE THOUSAND TWO HUNDRED METRES, INCREASING

4. Present weather

4.1 Group w'w'

The variety of possible combinations of intensities, qualifiers and phenomena of present weather could occur. In the case of intensity it would be appropriate to only describe intensities when light or heavy. The qualifier moderate was therefore superfluous. In order to achieve optimum linguistic structure of the description of the parameter it should be based on the three components qualifier, weather phenomena and location, in that order, except that "PATCHES" and "SHOWERS" should follow the respective phenomenon. To this should be added "IN VICINITY" when appropriate. The various options for these components are given in the attached table (**Appendix J** to the report on this Agenda Item).

Example 1: BLSN

BLOWING SNOW

Example 2: +SHRA

HEAVY RAIN SHOWERS

Example 3: BCFG

FOG PATCHES

Example 4: VCPO

DUST OR SAND WHIRLS IN VICINITY

4.1.1 To connect different types of precipitation "AND" should be used. If separate groups of other reported phenomena are given, they should be preceded by "WITH".

Example: -DZRASN FG

LIGHT DRIZZLE AND RAIN AND SNOW, WITH FOG

5. Cloud

5.1 Group $N_sN_sN_sh_sh_sh_sCC$

As the description of the sky would start with cloud amount, obscuration of the sky or "SKY CLEAR" there was no need to precede the cloud information with an identifier. The structure would be amount, cloud type, cloud hight, without any additional words.

Example: $N_sN_sN_sh_sh_sh_sCC$ = SCT020CB

SCATTERED CUMULONIMBUS TWO THOUSAND FEET

5.2 Group $VVh_sh_sh_s$

The reporting of vertical visibility was considered sufficient to indicate that the sky is obscured. The phrase "SKY OBSCURED" was therefore required only when the vertical visibility is not reported.

Example 1: $VVh_sh_sh_s$ = VV002

VERTICAL VISIBILITY TWO HUNDRED FEET

Example 2: $VVh_sh_sh_s$ = VV000

VERTICAL VISIBILITY BELOW ONE HUNDRED FEET

Example 3: $VVh_sh_sh_s$ = VV///

SKY OBSCURED

6. Temperature and Dewpoint

6.1 Croup $T'T'/T'_dT'_d$

The temperature and dewpoint values should be preceded by the identifiers "TEMPERATURE" and "DEWPOINT", respectively. Values below 0.0 degrees Celsius should be indicated with the word "MINUS".

Example 1: $T'T'/T'_dT'_d$ = 15/08

TEMPERATURE ONE FIVE, DEWPOINT EIGHT

Example 2: $T'T'/T'_dT'_d$ = 03/M06

TEMPERATURE THREE, DEWPOINT MINUS SIX

Example 3: $T'T'/T'_dT'_d$ = M00/M11

TEMPERATURE MINUS ZERO, DEWPOINT MINUS ONE ONE

7. QNH

7.1 Group $QP_HP_HP_HP_H$

The identifier "QNH" should be used, followed by the value without the unit hectoPascal.

Example 1: $QP_HP_HP_HP_H$ = Q1026

QNH ONE ZERO TWO SIX

Example 2: $QP_HP_HP_HP_H$ = Q0987

QNH NINE EIGHT SEVEN

8. TREND Forecast

8.1 The TREND forecast part should be preceded by the identifier "TREND". The time indicator groups BECMG, AT, FM, TEMPO and TL should be read as "BECOMING", "AT", "FROM", "TEMPO" and "UNTIL". No significant changes should be read as "NOSIG".

Example 1: BECMG AT0330

BECOMING AT ZERO THREE THREE ZERO

Example 2: FM1100 TL1300

FROM ONE ONE ZERO ZERO UNTIL ONE THREE ZERO ZERO

9. Missing or incomplete reports

9.1 If the report from an aerodrome is not available or contains obvious errors, the words "NO REPORT" should replace the report.

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APPENDIX J - SIGNIFICANT WEATHER FOR VOICE COMMUNICATION FOR METEOROLOGICAL INFORMATION

(paragraph 2.6.32 refers)

Qualifier 1	Weather Phenomena 2	Location 3
Blowing	Diamond dust	In vicinity
Heavy	Drizzle	
Light	Dust storm	
Low drifting	Fog	
Patches	Funnel cloud	
Shallow	Hail	
Showers	Small hail	
Freezing	Haze	
	Ice pellets	
	Mist	
	Rain	
	Sand	
	Sandstorm	
	Smoke	
	Snow	
	Snow grains	
	Squalls	
	Thunderstorm	
	Volcanic ash	
	Dust or sand whirls	
	Widespread dust	

AGENDA ITEM 3: CNS/ATM POLICY DEVELOPMENTS IN THE EUR REGION

3.1 Introduction

3.1.1 Under this Agenda Item, the Group considered the following items:

a) overview of CNS/ATM planning and implementation related activities;

b) development of the EUR regional Air Navigation Plan;

c) implementation of Reduced Vertical Separation Minimum (RVSM) above FL 290; and

d) Eurocontrol activities related to satellite navigation.

3.1.2 When discussing this Agenda Item, the Group was also provided with information papers which addressed the following issues:

a) general review of CNS/ATM implementation activities in the Russian Federation;

b) update on the trial of the North Atlantic Facilities and Services Implementation Document (FASID);

c) the availability of the FANS starter kit and the results of the Global NAVCOM 1995 meeting;

d) update on global CNS/ATM developments; and

e) the Inmarsat-3 navigation transponders.

3.2 Overview of the CNS/ATM planning and implementation related activities

3.2.1 The Group was presented with an overview of CNS/ATM planning and implementation related activities. The objective was to inform States about the global situation of planning and implementation of the ICAO CNS/ATM systems world-wide, to provide assistance to States in their efforts to implement new systems and to identify the action to take in response to Recommendation 3/1 of the Special EUR RAN (1994) Meeting, concerning development of EUR Regional Plan Material on CNS/ATM.

3.2.2 In this context, the Group noted that since the last Assembly in 1992, significant progress had been achieved at all levels concerning the planning and implementation of the CNS/ATM systems around the world. The Special Committee of the Council for the Monitoring and Coordination of Development and Transition Planning for the Future Air Navigation Systems (FANS II) had completed its task in 1993 and had been dissolved. The Council had approved the Global Coordinated Plan for Transition to the CNS/ATM systems which includes the appropriate guidelines, along with the necessary recommendations, to ensure the progressive and orderly implementation of the ICAO global future air navigation systems in a timely and cost-effective manner. This plan covered every aspect of the world-wide air navigation systems, including the extensive use of new technologies, especially those related to satellites and automation and calls for new functions and

procedures for air traffic management. The plan was to be used as a framework and benchmark in the preparation of regional plans and will be updated on a regular basis to reflect the evolving process.

3.2.3 To further assist in the planning and implementation of the CNS/ATM systems, the Council developed and adopted during its 141st Session (9 March 1994), a statement of policy to assist in the definition of the project and associated provision of services and to guide implementation and operation of the new system. This document, entitled "Statement of ICAO policy on CNS/ATM systems implementation and operation", was the foundation upon which the new system was to be constructed.

3.2.4 In line with the above, a high-level task force (Communications, Navigation and Surveillance/Air Traffic Management (CNS/ATM) Systems Implementation Task Force (CASITAF)) had been established early in 1994 to advise the ICAO Council on how best to provide specific assistance to States in the CNS/ATM implementation process. The task force had been requested to develop recommendations on the type and role of the ultimate ICAO mechanism for coordinated global implementation of CNS/ATM, give advice on priorities, funding, cost-recovery aspects, and ways of promoting the integrated systems among governments and financial institutions. CASITAF was composed of senior executives from 15 States and international organizations. It examined requirements for assistance in implementation in different regions in the world, studied priorities in implementation of different components of the air traffic management system and considered the costs and benefits of the implementation. While the bulk of the activities associated with the planning and implementation of the CNS/ATM systems rested with States and aircraft operators, there was a decisive need for such a mechanism to ensure global and inter-regional coordination, maintain global vision of the systems and facilitate integration and rationalization of resources.

3.2.5 The results of this work have been documented and presented to the ICAO Council. The Council agreed with the view of CASITAF that ICAO was the ultimate mechanism to perform the monitoring and coordination functions related to the planning and implementation of the CNS/ATM systems and provide, as required, the necessary advice and assistance. To this effect, it established during its 144th Session the CNS/ATM Implementation Committee (CAI). The terms of reference of the CAI include, inter alia:

a) review of progress on the implementation of the CNS/ATM global plan and development of recommendations on amendments to the global plan;

b) review of progress on the implementation of the CNS/ATM plans of States;

c) review of progress on the implementation of the CNS/ATM plans of international organizations, airlines and industry; and

d) examination of regional problems and requirements, including budgetary, economic and assistance aspects.

3.2.6 The Group was also informed that to further facilitate planning, and in response to Assembly Resolution A29-9, an ICAO Circular (25 7-AT/106) on cost-benefit analysis of CNS/ATM had been produced. This would assist States to assess the economic and financial implications of transition to the new systems, and to evaluate different technical solutions and institutional arrangements. The analysis could be used in the selection of the most cost-effective implementation strategy.

3.2.7 The EANPG also noted that the Air Navigation Services Economic Panel (ANSEP), which had commenced its work in 1994, had been assigned two tasks both of which have a strong bearing on CNS/ATM systems implementation. The first was to assist the Secretariat in the revision and expansion of guidance, with specific reference to guidance on financial, organizational and cooperative aspects of CNS/ATM systems, for inclusion in the Manual on Air Navigation Services Economics. The second, and separate task, was the development of financial as well as related organizational and managerial aspects of the options identified by the FANS (II) Committee of providing and operating the GNSS. Concerning the former task, insofar as CNS/ATM systems were concerned, the Panel had agreed on the inclusion in the Manual of draft guidance on specific organizational aspects pertaining to the CNS/ATM systems, special costing consideration pertaining to CNS/ATM systems when the cost basis for charges are determined, and charges/cost recovery aspects of CNS/ATM systems provision.

3.2.8 As concerns the Global Navigation Satellite System (GNSS), the Group was informed that the Panel had already developed a number of findings and conclusions, and had identified various additional factors relevant to GNSS implementation which it would examine further. These included competition aspects, ownership and control, the role of ICAO, and compensation or assistance to States to cover costs of redundancies. It had also recommended that guidelines on the establishment and provision of multinational air navigation facilities and services such as those already contained in the Introduction to the AFI and EUR Regional Air Navigation Plans be developed and included in all ICAO regional air navigation plans. The Panel was scheduled to complete its work in 1996.

3.2.9 With respect to Regional activities, the Group was aware of its responsibility, namely that the activities associated with the planning and implementation of the CNS/ATM systems rested with States and aircraft operators working together within the framework of the regional planning process through the overall ICAO machinery in order to ensure that these activities were kept coherent with ICAO plans, at both the regional and world-wide levels. To this effect, regional planning groups had been established in all ICAO Regions. It was recalled that within the seven ICAO regional offices, six regional planning groups had been created as follows:

a) the AFI Planning and Implementation Regional Group (APIRG), which covers the African States and Indian Ocean areas;

b) the ASIA/PAC Air Navigation Planning and Implementation Regional Group (APANPIRG), which covers Asia and Pacific Ocean areas;

c) the CAR/SAM Regional Planning and Implementation Group (GREPECAS), which covers all of the Americas;

d) the European Air Navigation Planning Group (EANPG), which covers Europe;

e) the Middle East Air Navigation Planning and Implementation Regional Group (MIDANPIRG) covering the Middle East; and

f) the North Atlantic Systems Planning Group (NAT SPG) for the North Atlantic.

3.2.10 It was in this overall framework that the EANPG had seen its role reinforced at the Special EUR RAN (1994) Meeting as the Group responsible, under the direction of the Council, for ensuring that planning and implementation of CNS/ATM-related activities of States of the EUR Region, individually or collectively, remained coherent within the Region, its neighbouring areas and in the framework of the global provisions and plans. It was recognized that the EANPG was the only

body covering the entire geographical area of the ICAO European Air Navigation (EUR) Region, including its Asian part and taking into account the interfaces with the NAT, AFI, MID, ASIA and PAC Regions.

3.2.11 The Group was aware that at present, essential aspects of CNS/ATM were covered under the activities of Eurocontrol to the benefit of States located within the ECAC area (33 States of the EUR Region) further to the initiative of Ministers of Transport of ECAC States in 1990 to mandate that Agency as the managing agent of EATCHIP. This programme foresaw a transition beyond 1998 into a full-scale European Air Traffic Management System (EATMS). The task of Eurocontrol was to translate into appropriate objectives the ECAC Strategy for the 90s through a Convergence and Implementation Programme (CIP) in order to reach the EATCHIP goal and create an infrastructure for transition to EATMS.

3.2.12 For States of the EUR Region which are not located within the ECAC area, CNS/ATM matters are being addressed within GATE. So far, the Group has held three meetings (GATE/3 having taken place in Kiev from 16 to 19 May 1995) and established a number of project teams in order to carry out its work. Of specific interest in this context is the ATM project team which agreed to develop concept document where emphasis is placed on the ICAO CNS/ATM systems aspects.

3.2.13 In the context of its discussions related to implementation of new CNS/ATM systems, the Group was informed that Denmark, Germany and Sweden, with the assistance of the United Kingdom CAA safety authority for the certification process would establish a North European Automatic Dependent Surveillance Broadcast (ADS-B) Network. It would consist of 12 aircraft installations of the Scandinavian Airlines and Lufthansa. In Sweden, six ground-installations, five in Germany and three in Denmark would be part of the Network. It would cover the major part of the N.E. above FL 100. It would be based on the Self-organizing Time Division Multiple Access (STDMA) technique and the experience achieved in Sweden during several years of research and development work.

3.2.14 It was considered as a contribution to the work encouraged by ICAO in the CNS/ATM field and is a low cost gate-to-gate solution which will bring added value to the users.

3.2.15 Discussions with the EU-Commission indicated that great interest in the matter had been expressed.

3.2.16 Work had started on the implementation of CNS/ATM in the Russian Federation.

3.3 Development of the EUR Regional Air Navigation Plan

3.3.1 The Group recalled Special EUR RAN (1994) Meeting Conclusion 3/1 concerning the need for the EANPG to develop relevant EUR regional plan material on CNS/ATM. In follow up to this, the EANPG Task Force, at its meeting in April 1995, had reaffirmed the need for documentation which would provide the foundation for harmonized planning throughout the EUR Region and at interfaces with adjacent regions. This would ensure that air navigation system development plans and actions within the Region remained coherent and compatible with those of adjacent ICAO regions and with the global plan and world-wide provisions.

3.3.2 The Group agreed that the regional documentation should reflect common requirements emanating from EATCHIP as well as those from GATE. It should also contain a minimum of details, however it should provide a comprehensive framework within which EUR provider and user States could base their CNS/ATM implementation strategies. In this regard, it was

felt that the Eurocontrol Convergence and Implementation Programme (CIP) would constitute a significant basis to develop the document. In addition, it was suggested that progress reports concerning on-going developments within Eurocontrol should be routinely made available to the EUR/NAT Office of ICAO in order to facilitate the development of planning documentation. In this context, the Group was informed that ICAO and Eurocontrol had met in Paris on 9 and 10 March 1995 in order to explore possible arrangements concerning the development of EUR Regional Plan material.

3.3.3 Taking into account the decision by the EANPG to establish the COG (paragraph 4.2.2 refers), it was considered that all the elements needed to proceed were assembled and that it was only necessary to agree on an appropriate mechanism to carry out the task.

3.3.4 With the above in mind, the Group agreed that it would be necessary to develop a first draft of the documentation taking into account all relevant Recommendations and Conclusions from the Special EUR RAN (1994) Meeting, the current EUR ANP, the CIP and the work of GATE. The Group also felt that its Secretary should be responsible for carrying out this initial task. Subsequently, the COG would assist the Secretariat to further develop the documentation. In this context, it was stressed that all States and international organizations concerned would have to contribute to the task in order to ensure its success. It was also stressed that States would be responsible for the contents of the documentation that had a direct bearing on their national air navigation planning.

CONCLUSION 37/24 - DEVELOPMENT OF EUROPEAN REGION COMMUNICATIONS NAVIGATION SURVEILLANCE/AIR TRAFFIC MANAGEMENT (CNS/ATM) PLANNING DOCUMENTATION

That:

a) the European and North Atlantic (EUR/NAT) Office of ICAO, in close coordination with Eurocontrol, develop an initial draft of a EUR Region CNS/ATM planning document on the basis of relevant Recommendations and Conclusions of the Special EUR RAN (1994) Meeting, the current EUR Air Navigation Plan, Eurocontrol's Convergence and Implementation Programme, the work of the Group for Air Traffic Management in the Eastern part of the Region;

b) States provide the EUR/NAT Office of ICAO with relevant national CNS/ATM material for inclusion in the document; and

c) the EANPG Programme Co-ordinating Group (COG) finalize documentation for approval by the EANPG at the earliest opportunity.

3.4 Implementation of Reduced Vertical Separation Minimum (RVSM) above FL 290

3.4.1 The Group recalled Conclusion 3/3 of the Special EUR RAN (1994) Meeting, in particular the need for the EANPG to coordinate, with States and international organisations concerned, the planning and studies urgently needed, aimed at the implementation of the reduced vertical separation minimum above FL 290 for the entire geographical area of future application.

3.4.2 In this context, the Group was informed of Eurocontrol's RVSM implementation programme for application in the airspace of the ECAC states. The programme had been elaborated within EATCHIP and was based closely upon the RVSM implementation plan developed for the NAT

Region and ICAO's *Manual on Implementation of a 300 M (1 000 ft) Vertical Separation Minimum between FL 290 and FL 410 Inclusive* (Doc 9574). The objective of the programme was to establish a date for the implementation of RVSM throughout the ECAC area.

3.4.3 The programme had been structured in two phases with the preparatory phase, or phase 1, providing the data needed to support a critical review of the programme prior to its final endorsement by the EATCHIP Project Board. Accordingly, phase 1 concentrated on the following three main areas of activity:

a) an assessment of requirements which included a study on capacity benefits, a cost assessment and an evaluation on the impact on ATS;

b) an assessment of system safety which addressed the ability to meet the target level of safety, the effects of altitude deviations, atmospheric disturbances, the effects of future aircraft systems and a hazard analysis; and

c) planning and preparation which included areas of application, development of ATM procedures, production of guidance material, amendments to various documentation and obtaining a regional air navigation agreement.

3.4.4 Start-up of phase 2 of the programme, which addressed implementation issues such as verification and operational trials, was dependent on the results obtained from phase 1.

3.4.5 The Group noted that the initial target date for implementation of RVSM in the ECAC area was November 2001, with the understanding that this was subject to a critical review of the feasibility of this date in 1997. It also noted that Eurocontrol would, within the context of EATCHIP, prepare guidance material on the implementation of RVSM.

3.4.6 The Group was then given a brief overview of RVSM implementation activities concerning the NAT Region. Implementation was still planned for 2 January 1997, and the Minimum Aircraft System Performance Specification (MASPS) was complete and awaiting publication by States concerned; in addition, the NAT RVSM guidance material had been published. It was stressed that all the cost benefit studies that had been carried out in support of the implementation of RVSM in the NAT Region had been positive. In fact, it had been shown that the implementation of RVSM in the NAT Region provided a greater cost benefit than any capacity increases that required the implementation of CNS/ATM technologies.

3.4.7 The Group was also informed that RVSM implementation planning was going on in other parts of the EUR Region, mainly in the Russian Federation. From the preceding, the importance of maintaining close coordination between all concerned was stressed. With this in mind, the Group agreed that the necessary regional air navigation agreement should be obtained through the EANPG in order to guarantee that the required coordination was carried out. To do this, the Group also agreed that Eurocontrol should take a leading role in developing amendments to the appropriate ICAO documentation and in particular, the enabling text that would need to be incorporated in the EUR Regional Supplementary Procedures (Doc 7030).

CONCLUSION 37/25 - DEVELOPMENT OF AMENDMENTS TO RELEVANT ICAO DOCUMENTATION IN CONNECTION WITH THE IMPLEMENTATION OF REDUCED VERTICAL SEPARATION MINIMUM (RVSM) IN THE EUROPEAN (EUR) REGION

That Eurocontrol develop proposals for amendment to appropriate ICAO documentation with the objective of obtaining a regional air navigation agreement for the implementation of RVSM in the EUR Region.

3.4.8 Finally, the Group was provided with an overview of on-going activities by the United States Federal Aviation Administration (FAA) to implement RVSM in continental United States airspace. It was anticipated that an advance notice of proposed rulemaking would be issued in 1996 with the intention of issuing the final rule in the 2000 so as to implement RVSM in 2001. In the meantime, several studies and simulations would be carried out to ensure that implementation remained feasible and to develop ATS and operator procedures.

3.5 Eurocontrol activities related to satellite navigation

3.5.1 The representative from Eurocontrol informed the Meeting about activities concerning satellite navigation developments as well as relevant institutional issues. In this connection, it was recalled that, further to the Special EUR RAN (1994) Meeting, due account should be taken of the Eurocontrol satellite CNS strategy when developing relevant material for the ICAO Regional Air Navigation Plan.

3.5.2 It was recognized that the introduction of satellite positioning and navigation should provide users with the potential for safer, more efficient and less costly means of navigation. Ultimately, the objective was to have a Global Navigation Satellite System (GNSS) which would meet the requirements of all users on land, at sea or in the air. Such a system would be institutionally acceptable to all users and would be approved as a sole means of navigation for all phases of flight. The Group was also informed that Eurocontrol was actively engaged in a multi-modal programme which was expected to evolve towards a sole means of navigation in the ECAC area.

3.5.3 The Group noted the augmentation programmes relating to Global Positioning System (GPS) developments in the United States and to Global Orbiting Navigation Satellite System (GLONASS) developments in the Russian Federation. In this respect, it was also noted that a tripartite group composed of Eurocontrol, the European Commission and the European Space Agency (ESA) had embarked on a work programme, known as the European Geostationary Navigation Overlay Service (EGNOS), that was expected to satisfy the aviation needs of ECAC States and should provide service to all other modes of transport. Other programmes were also mentioned, such as the Wide Area Augmentation System (WAAS) and the Multi Function Transport Satellite (MT-SAT) developed by the United States and Japan respectively.

AGENDA ITEM 4: MANAGEMENT OF THE WORK OF THE EANPG

4.1 Introduction

4.1.1 Under this Agenda Item, the Group considered the following items:

a) creation of an EANPG Programme Coordinating Group (COG);

b) language support for EANPG working groups; and

c) Financial sources and means for development of air navigation systems in the Eastern part of the ICAO EUR Region.

4.2 Creation of an EANPG Programme Coordinating Group (COG)

4.2.1 As a result of the discussions held by the EANPG Task Force (18-19 April 1995 and 11 September 1995) and the subsequent debate concerning future working arrangements of the EANPG, it was agreed to create a supporting body which, in the new context of planning, geopolitical developments and the high number of provider States in the EUR Region would assist the Chairman and the Secretariat to facilitate and coordinate the work of the EANPG between its meetings, avoid duplication of work in any form and maintain a dialogue with other ICAO Regions. This coordinating group should have a reasonable composition covering the EUR Region as widely as possible, taking into account the concept of homogeneous areas but limited in size so as to allow its efficient functioning. Its membership should include selected international organizations involved in the decision making process in air navigation planning matters. It was suggested that a group of some 10 to 12 members would fit the purpose. States in the interfaces with adjacent regions, particularly the Asia/Pacific and North Atlantic Regions, should be adequately represented. In following these criteria, the programme coordinating group should be composed of the EANPG Chairman, the two Vice-Chairmen, representatives from several selected States (i.e. the Czech Republic, France, Germany, the United Kingdom, Portugal, Spain, the Russian Federation, USA and representatives from State groupings (e.g. the Nordic States, the Benelux States, the Baltic States, etc.) and from IATA, IACA, Eurocontrol and the European Commission. The programme coordinating group should invite representatives from additional States in those cases where it may be discussing matters of particular concern to them. This coordinating group would replace the current EANPG Task Force.

4.2.2 In taking this decision, the EANPG made it clear that the programme coordinating group should not be regarded as a "steering committee" which would assume any specific functions pertaining to the EANPG itself or the ICAO Secretariat, as established by the Special EUR RAN (1994) Meeting, Recommendation 1/1, as approved by the Council. Furthermore, emphasis was laid on the informality and flexibility with which the programme coordinating group would conduct its work and the need to take advantage of modern and rapid communications means amongst the programme coordinating group members (e.g. facsimile, SITATEX, Internet, etc). In this context, Doc 9639 SP EUR, Appendix A to the Report on Agenda Item 1, paragraph 4.8.2 is of particular relevance.

DECISION 37/26 - CREATION OF AN EANPG PROGRAMME COORDINATING GROUP (COG)

That:

a) an EANPG Programme Coordinating Group (COG) be established to facilitate the on-going work undertaken within the EANPG framework, and to assist the Chairman and the Secretariat and to expedite follow-up work of the EANPG and its working groups between plenary meetings, taking into account the work undertaken by other bodies active in the air navigation field in the EUR Region as well as in adjacent Regions and to ensure that duplication of work does not occur;

b) the COG be composed of the Chairman and Vice-Chairmen of the EANPG, Representatives from the Czech Republic, France, Germany, Portugal, Spain, the United Kingdom, the Russian Federation, the USA, as well as from relevant State groupings (e.g. the Nordic States, the Benelux States, the Baltic States, etc.) and International Organizations (IATA, IACA, Eurocontrol, the European Commission);

c) the COG invite additional State representatives in those cases when it may discuss matters of particular concern to them;

d) preview draft Conclusions and Decisions emerging from the work of EANPG working groups and other input for the attention of the EANPG;

e) prepare and refine EANPG material to assist and guide the ICAO Secretariat in its work in support of the EANPG; and

f) carry out specific tasks given to it by the EANPG to advance its work at the required speed.

4.3 Language support for EANPG working groups

The use of the Russian language at GATE, TARTAR and FLOE meetings

4.3.1 Under this Agenda Item the Russian Federation recalled that a successful outcome to the work of all ICAO fora in the Eastern part of the Region depended highly on the possibility of conducting these meetings in both the English and Russian languages and on the availability of supporting documentation in these languages. It was explained that this had not been the practice in the past and suggested that appropriate measures be initiated to overcome this problem. The Secretariat explained that, because of the substantial efforts of the States concerned and the ICAO Secretariat, assistance in English and Russian languages had been provided to some recent ICAO meetings. It was noted however, that translation of supporting documentation for those meetings was not possible. While sympathizing with the Russian Federation the Secretariat explained that, due to the well known budgetary constraints of ICAO, resources required for interpretation and translation for the subject meetings could not be ensured, and that these services could be provided occasionally and on ad hoc basis only.

4.4 Financial sources and means for development of air navigation systems in the Eastern part of the ICAO EUR Region

4.4.1 The Russian Federation briefed the Group on several projects and work undertaken in respect of improvements of the ATS route network and supporting Area Control Centres (ACCs) in their airspace, including ATS routes and ACCs, the operation of which would be based upon CNS/ATM technologies. The Russian Federation stated that implementation of associated projects would depend heavily on the availability of adequate financial resources. Using national resources only, these projects could not be implemented before 1998-1999, while international assistance in financing could substantially reduce the time required.

4.4.2 In view of the above the Russian Federation proposed the convening of an ad hoc ICAO meeting devoted to finding sources and means of financing air navigation systems and facilities in the Eastern part of the ICAO EUR Region. The Secretariat informed the Group that ICAO had already organized three Senior-level Coordination Meetings on Technical Cooperation in the EUR Region, and that the last of these took place in May 1995 in the European and North Atlantic Office of ICAO in Paris. It was further explained that these meetings had established a Strategic Plan for the Advisory and Assistance Functions for Civil Aviation in the ICAO EUR Region, and that plan, once approved, would be distributed to banking institutions, various international organizations and potential donor States, so that relevant financing projects could be developed in a coordinated and harmonious way.

4.4.3 In this context, the meeting also noted the importance financing institutions attached to the application by a State for a loan to finance an investment in air navigation facilities being accompanied by information relevant to how that State would service the loan. Such information should include total cost of the air navigation services currently provided by the State, how these costs would be influenced by servicing the loan, the level of the charges it would be levying, and the portion of the charges that could and would be set aside to service the loan. Such information was not only relevant in the context of servicing the loan being applied for, but its value also lay in proving to the financing institution that financial management of air navigation services was at a satisfactory level in the State concerned. This in turn could affect whether or not the loan would be granted, and if granted, the terms offered. The Group agreed that where such financial managerial capability did not exist, it would be important to assist the State(s) involved to develop it. This in fact should be considered an integral part of any assistance provided to a State requiring and seeking external financing.

AGENDA ITEM 5: ANY OTHER BUSINESS

5.1 Introduction

5.1.1 Under this Agenda Item, the Group considered:

a) the timely availability of supporting documentation for EANPG meetings;

b) the need for adequate time for discussion of the various subjects under review by the EANPG;

c) the timing of the next 38th meeting of the EANPG;

d) the timing of the first meeting of the EANPG Programme Coordinating Group (COG).

5.2 Availability of supporting documentation

5.2.1 In order to achieve full coordination within State administrations of the various, often complex and inter-related subjects to be considered by the EANPG, the availability of supporting documentation with ample lead time before any meeting of the Group was essential. Some Members felt that a cut-off date of three months before a meeting should be aimed at. While ideal, it was recognized that this goal would not be achievable in all cases. Nevertheless, it was felt that the Programme Coordination Group should look into this matter when establishing the meeting schedules and programmes for the various working groups of the EANPG in the interval between full EANPG meetings.

5.2.2 In this connection it was emphasized that the EANPG should concentrate on the important planning issues of the EUR Region and should be less concerned with technical detail. It was expected that the COG would keep this in mind when preparing for each forthcoming EANPG meeting.

5.3 Adequate time for discussion during EANPG Meetings

5.3.1 Considering the comparatively high cost of full EANPG Meetings, which are conducted in English, French and Russian, the tendency was to shorten these meetings to an absolute minimum. Furthermore, there was a trend to try to schedule meetings of the Group to remain entirely within the space of one week, allowing delegations to return to their home bases before the weekend. This situation, coupled with the need for the meeting to establish an agreed final report during the meeting, shortened the time for discussion considerably and required the Group to make time available for the Secretariat to produce the draft report material. Complexity of that material and the need for high quality required more than the normally available night times for that purpose. It was therefore agreed to schedule future EANPG meetings in such a way that they would start on a Tuesday and close in the evening of the following Monday.

5.4 Dates of the 38th Meeting of the EANPG

5.4.1 The Group felt that its next meeting should be held towards the end of 1996 at the latest. It felt it advisable, however, to leave the determination of a firm date to the COG which would analyze and establish work programme priorities and schedules and would propose a suitable date after its first meeting.

5.5 First meeting of the Programme Coordinating Group

5.5.1 It was agreed that the newly established Programme Coordinating Group (COG) should hold its first meeting as soon as possible but in any case before the end of 1995. The precise date and venue would be coordinated between the Chairman of the COG and the ICAO Secretariat.

- END -