

**INTERNATIONAL CIVIL AVIATION ORGANIZATION**  
**CAR/SAM REGIONAL AIR NAVIGATION PLANNING AND IMPLEMENTATION GROUP**  
**(GREPECAS)**  
**FOURTH MEETING OF THE AERONAUTICAL METEOROLOGY SUBGROUP**  
**(AERMETSG/4)**

(Mexico City, 22 to 26 May 2000)

Agenda Item 9: **Commercial use of aeronautical meteorological information**

(Presented by the Secretariat)

**SUMMARY**

This paper intends, under the current trend, towards the privatization and commercialization of meteorological services to discuss the allocation and recovery of the costs of aeronautical meteorological facilities and services.

**REFERENCES:**

- 38th, 39th and 40th European Air Navigation Planning Group (EANPG) Meeting Reports;
- Annex 3 - Meteorological Services for International Air Navigation;
- Manual on Air Navigation Services Economics, ( Doc 9161);
- Statements by the Council to Contracting states on Charges for Airports and Navigation Services, (Doc 9082);
- CAR/SAM/3 RAN Meeting Report ( Yellow Cover).

**1. Background**

1.1 The discussion of the commercial use of aeronautical meteorological information at an ICAO forum was initiated and has been raised a couple of times at the MET Group (METG) of the European Air Navigation Planning Group (EANPG) as a result of the information provided by a Member of the EANPG that aeronautical meteorological information, originated in his State and disseminated internationally, found its way back and was offered to aeronautical users for a fee. The Group expressed deep concern that outside agencies, not being aeronautical users of the services, could benefit financially from the information obtained free of charge, while the State concerned would not be able to recover any of the cost for the provision of the service. It was agreed that, in view of the negative financial impact on States and possible flight safety aspects of the uncontrolled use of aeronautical meteorological information, a study of the commercial use of aeronautical information was included in the METG working programme ( EANPG/38, Decision 38/31).

1.2 As a result of the METG's study undertaken pursuant to EANPG Decision 38/31, the METG/EANPG have concluded that the question of the commercial use of aeronautical meteorological information it was a global matter and should be addressed by the ICAO Headquarters rather than by regional groups ( EANPG/39, Conclusion 39/16).

1.3 The EANPG/40 recalled Conclusion 39/16 proposing that ICAO should study the implications of the commercial use of all aeronautical information in co-ordination with World Meteorological Organization (WMO) and to be sure that the study would be conducted as soon as possible, the Group want ICAO to consider to raise the priority of the ANC Task MET-9205 (EANPG/40, Conclusion 40/12). In **Attachment A** is shown copy of the ANC Task MET-9205 of the Technical Work Programme (TWP) of the ICAO in the Air Navigation Field.

## **2 Discussion**

### ***Allocation and Recovery of Meteorological Costs***

2.1 The subgroup is aware of the current trend towards the privatization and commercialization of meteorological services. In the present environment, the allocation and recovery of the costs of aeronautical meteorological facilities and services are becoming increasingly important. In assist States in assessing these costs, ICAO in co-ordination with WMO, developed and published in 1997 the third edition of the *Manual on Air Navigation Services Economics* (Doc 9161). A separated appendix to this manual (Appendix 6) gives detailed guidance for determining the costs of aeronautical meteorological services. See **Attachment B** to this paper.

2.2 Although the manual has been distributed to all ICAO Contracting States and WMO Members by ICAO and WMO, respectively, a number of instances States have sought additional assistance from ICAO and WMO in the implementation of this guidance related to the assessment of aeronautical meteorological costs and how to arrange the recovery of the costs through air navigation services charges mechanism employed in the State concerned. Therefore, regional seminars on the meteorological cost allocation and recovery were being organized by WMO, in close coordination with ICAO, for WMO Members and ICAO Contracting States, in the AFI and ASI/PAC Regions. It should be noted that both financial and technical aspects of the issue were covered through the involvement of the Air Transport and Air Navigation Bureaux of ICAO. The Subgroup will recall that during the CAR/SAM/3 Ran Meeting, information was provided that WMO plans organize, in coordination with ICAO, similar seminars in the CAR/SAM Regions. Although the urgency and importance of such seminars were highlighted by the RAN meeting the Subgroup nevertheless may wish to emphasize the need of this type of seminar in the CAR/SAM Regions through the following draft conclusion:

#### **DRAFT CONCLUSION 4/.. SEMINARS ON THE ALLOCATION AND RECOVERY OF AERONAUTICAL METEOROLOGICAL COSTS**

That WMO be invited to organize in coordination with ICAO, seminars in the CAR/SAM Regions on the allocation and recovery of aeronautical meteorological costs, covering both the financial and technical aspects of the issue.

***Guidance for determining the costs of aeronautical meteorological service***

2.3 As the Subgroup is aware, meteorological services are services that are shared by many users including aeronautical users. This generates cost savings and creates specific relationships. Aeronautical meteorology is dependent on the basic meteorological system and the meteorological provider is bound by the general policy concerning air navigation services charges. So it is necessary that the national authorities concerned work in consultation to implement this policy and determine the corresponding costs.

2.4 The Subgroup may wish to note that the basic policy established by ICAO in the area of airport and air navigation services charges is expressed in Article 15 of the Chicago Convention. In this regard see **Attachment C** to this paper. Furthermore, based in the outlining guidance for determining the costs of aeronautical meteorological services provided in Attachment B ( Appendix 6 , Doc 9161) the Subgroup may also wish to discuss the issue of institutional arrangement for meteorological services to benefit from revenue generated through air navigation charges.

2.5 As result of the discussion held on the foregoing as well as that some meteorological services in CAR and SAM Regions are receiving little or no revenue from air navigation services charges, the Subgroup may wish to formulate a conclusion similar to this one proposed as follows :

**DRAFT CONCLUSION 4/.. - COST RECOVERY FOR AERONAUTICAL METEOROLOGICAL SERVICES PROVIDED TO AVIATION**

That,

- a) States having difficulties in cost recovery of their meteorological services provided to aviation, make adequate institutional arrangements to ensure that MET services benefit from these charges; and
- b) the gathering funds be used to improve aeronautical meteorological service provided to international air navigation.

**3 Action to be taken by the AERMETS/4**

3.1 The Subgroup is invited to:

- a) consider the information provided in this working paper; and
- b) adopt pertinent action according paragraphs 2.2 and 2.5.

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## ATTACHMENT B

### Appendix 6

## GUIDANCE FOR DETERMINING THE COSTS OF AERONAUTICAL METEOROLOGICAL SERVICE

### Introduction

1. Meteorological services are services that are shared by many users including aeronautical users. This generates cost savings and creates specific relationships. Aeronautical meteorology is dependent on the basic meteorological system and the meteorological provider is bound by the general policy concerning air navigation services charges. So it is necessary that the national authorities concerned work in consultation to implement this policy and determine the corresponding costs (see Chapter 1).

2. As indicated in Chapter 4, Section A, the first step in determining the costs of aeronautical meteorological service is to prepare an inventory of all those meteorological facilities and services which serve to meet aeronautical requirements stated in ICAO Annexes (e.g. Annex 3 — *Meteorological Service for International Air Navigation*), Procedures for Air Navigation Services (PANS) (e.g. *Procedures for Air Navigation Services — Rules of the Air and Air Traffic Services* (PANS-RAC, Doc 4444) and air navigation plan publications (ANPPs). This inventory should be drawn up jointly by the national aviation authorities (such as a civil aviation administration) and the meteorological authority (designated in accordance with Annex 3, 2.1.4) in the State concerned. Meteorological services meeting aeronautical requirements are summarized in paragraphs 4.18 and 4.19 as follows:

“4.18 Meteorological services for air navigation comprise the services provided in accordance with ICAO provisions in Annexes, Procedures for Air Navigation Services (PANS) and Air Navigation Plan Publications (ANPPs). These include meteorological observations, reports and forecasts, briefing and flight documentation, SIGMET and AIRMET information, world area forecast system (WAFS) digital grid point data for computerized flight planning, meteorological information for inclusion in broadcasts (such as VOLMET and OFIS), aeronautical meteorological

telecommunications (if not included in COM) and any other meteorological data required from States for aeronautical use. The facilities required to provide such services include world area forecast centres (WAFCs), regional area forecast centres (RAFCs), volcanic ash advisory centres (VAACs), tropical cyclone advisory centres (TCACs), meteorological watch offices (MWOs), aerodrome meteorological equipment for aeronautical purposes (including observational instruments) and telecommunications equipment for aeronautical meteorological purposes. Additionally, it may be appropriate to include in the inventory various supporting facilities and services which also serve meteorological requirements in general, among these being surface and upper-air observation networks, meteorological telecommunication systems, data processing centres and supporting core research, training and administration. In the case of such general-purpose facilities and services an appropriate allocation of the costs involved between the aeronautical and non-aeronautical needs served will have to be determined.

4.19 Furthermore there are additional services specified and agreed by the national aviation authorities, in consultation with the meteorological authority and users. Any additional special facilities or services provided at the request of a single or limited number of users are deemed to be outside these arrangements and should be charged to the user(s) concerned. Further guidance on the identification of facilities and services serving aeronautical MET is contained in Appendix 6 — *Guidance for determining the costs of aeronautical meteorological service.*”

3. As indicated in 4.51 of Chapter 4, it is important to note that national meteorological organizations, while they serve aeronautical requirements, operate to serve the non-aeronautical community as a whole by providing meteorological and climatological information for maritime and other surface transport, civil protection, agriculture, fishing, hydrology, air pollution control,

retailing, sports and recreation, tourism, building and construction, the press and other media, and the general public. Usually, meteorological organizations engage in general meteorological, i.e. core activities in fulfilment of a primary system requirement for meteorological information which is jointly used by all service recipients. Examples of core activities include general analysis and forecasting, automated data processing, weather radar and satellite observations, surface and upper air observations, telecommunications to collect and exchange basic data, training, research and development. Since no single user requirement determines the level and cost of the core activities, the further allocation of core activity costs among aeronautical and non-aeronautical users should be approached with considerable caution. The proportion of core activities used for the benefit of air navigation that it is appropriate to attribute to the requirements of aviation will vary from State to State. Furthermore, there are States which do not allocate core costs to any specific user. It should also be recognized that aviation contributes data to the core system by providing upper air observations of winds and temperatures and that there are core activities which in terms of the level of sophistication exceed the aeronautical requirements. It is therefore not possible to indicate any specific percentage allocations that would have general validity for this purpose. However, the broad description of the meteorological facilities and services required for aeronautical purposes in 2 above gives general guidance in this field, with more specific advice being provided below.

4. The proper approach for allocating aeronautical meteorological costs involves analysis of each element of the meteorological service concerned to determine the extent to which its functions are attributable to aeronautical requirements.

5. For this purpose it is necessary:

- a) to establish an inventory of the facilities and services to be provided by the meteorological service provider concerned to meet the aeronautical requirements stated in ICAO Annexes, PANS, regional ANPPs and as specified and agreed by national aviation authorities;
- b) to identify for each facility or service the costs (including costs of maintenance and supporting services) to be taken into account, as indicated in Chapter 4, Section B — *Determining costs*; and

- c) to establish an appropriate basis for allocation (see also Chapter 4, Section C — *Allocation of costs*).

6. By the same kind of analysis, the total costs so attributed to aeronautical requirements can similarly be allocated as between airport (approach and aerodrome control) and en-route requirements.

7. The method of calculation of costs for the meteorological facilities and services provided and charged to aeronautical users should be available. Furthermore, the allocation of costs for the meteorological facilities and services should be done after consultation with the users. Such consultations between the meteorological authority, the service provider (if different from the meteorological authority) and the users should be held regularly and at least before the cost basis for charges are established or revised.

#### Inventory of facilities and services

8. The facilities and services comprising the inventory may be classified under the following categories:

- a) facilities and services needed to serve exclusively aeronautical requirements; and
- b) facilities and services which may be needed to serve both aeronautical and non-aeronautical requirements.

The above facilities and services are listed under 17 a) and 17 b) below.

#### Categories of costs

9. For guidance in establishing the costs of meteorological facilities and services and a description of the various cost categories involved reference should be made to Chapter 4, Section B.

#### Allocation of costs between aeronautical and non-aeronautical users

10. For the facilities and services needed to serve exclusively aeronautical requirements (8 a)), the costs are allocated 100 per cent to aeronautical use. (It is understood that the related services would not be provided to non-aeronautical users).

11. For any facilities or services needed to serve exclusively non-aeronautical requirements (e.g. agrometeorology, maritime meteorology, hydrology, etc., see also 3 above), the costs are allocated 100 per cent to non-aeronautical use and should not be allocated to the cost base of aeronautical charges.

12. The costs of facilities and services needed to serve both aeronautical and non-aeronautical requirements (core activities), listed in paragraph 8 b), if allocated at all (4.51 in Chapter 4 refers), may be allocated between aeronautical and non-aeronautical users using such methods as the following:

- a) in proportion to the estimated aeronautical and non-aeronautical use made of the products supplied (applicable, e.g., to general analysis and forecasting offices);
- b) in proportion to the estimated time of use of the computers for aeronautical and non-aeronautical purposes (applicable, e.g., to electronic data processing facilities);
- c) in proportion to the estimated volume of information transmitted for aeronautical and non-aeronautical purposes (applicable, e.g., to telecommunications facilities);
- d) in proportion to the personnel working on aeronautical and non-aeronautical data (applicable, e.g., to climatological services); and
- e) on the basis of results from an analytical accounting system which ensures an equitable allocation of the costs concerned.

13. The aim should always be for the allocation of meteorological costs between aeronautical and non-aeronautical use to be based on one or more of the methods described above. However, in circumstances where the use made of meteorological facilities and services cannot be allocated on the basis of one of these methods, the necessary cost allocation should be approximated on the basis of the best data available. One possible approach would be to establish a ratio between the costs of those facilities and services needed to serve exclusively aeronautical requirements and the costs of those needed to serve exclusively non-aeronautical requirements; this ratio would then be applied to the costs of those core facilities which serve both aeronautical and non-aeronautical requirements (8 b)) in order to estimate the aeronautical portion of these costs.

#### Allocation of aeronautical meteorological costs

14. In the context of dual airport and en-route utilization of facilities or services, it is noted in Chapter 4, 4.57 that the costs of aeronautical meteorological services require particular attention. The Council Statements specifically recommend that the "costs of all meteorological services provided to civil aviation should, where appropriate, be allocated between air traffic services provided for airports and air traffic services provided en route. In States where more than one international airport is involved, consideration could be given, where possible, to allocating the costs attributable to airport utilization between the airports concerned" (Doc 9082/4, Appendix 2).

15. When developing criteria for the allocation of costs to airport and en-route, the following considerations should be taken into account:

- a) the allocation of aeronautical costs among users should be carried out in a manner equitable to all users;
- b) the allocation should be made in such a way that costs are recovered from the appropriate users; and
- c) the allocation should be based on the phase of flight operation, in which the facilities or services are used.

Where allocation of aeronautical meteorological costs between airport and en-route utilization is required, the allocation criteria described in 10 to 13 above may be equally applied, with the terms "airport/en-route" being used instead of "aeronautical/non-aeronautical" as indicated below. As to facilities and services referred to above under Inventory of facilities and services, 8 a) and 8 b), those listed below indicate whether the requirement and utilization of the facilities or services concerned are en-route (E), mainly en-route (mE), airport (A), mainly airport (mA) or mixed en-route/airport (A/E).

16. The allocation of aeronautical meteorological costs should be determined in such a way as to ensure that no users are burdened with costs not properly allocable to them. Where deemed necessary for reasons of equity and where the necessary basic data, including all required traffic statistics, are available, consideration should be given to allocating the aeronautical meteorological costs between IFR and VFR traffic.

**Inventory of facilities and services and their allocation between airport and en-route use**

17. The inventory of the facilities and services and their allocation between airport and en-route use are presented below.

a) Facilities and services intended exclusively to serve aeronautical requirements.

Legend indicating utilization:

- A airport;
- E en-route;
- mA mainly airport;
- A/E airport and en-route;
- mE mainly en-route.

- World area forecasts centres (WAFCs) . . . . . E
- Regional area forecast centres (RAFCs) . . . . . E
- Volcanic ash advisory centres (VAACs) . . . . . E
- Tropical cyclone advisory centres (TCACs) . . . . . E
- Meteorological watch offices (MWOs) . . . . . E
- Aerodrome meteorological offices . . . . . A/E
- Aeronautical meteorological stations . . . . . A/E
- Operation of a regional OPMET data bank . . . . . E
- Telecommunications for aeronautical meteorological purposes, including VSAT stations to receive WAFS products and OPMET data (if not included in COM) . . . . . A/E
- Facilities to provide meteorological data-processing of WAFS products . . . . . mE
- Provision of VOLMET broadcasts . . . . . E
- Observing instruments provided for aeronautical purposes (e.g. transmissometers, ceilometers) . . . mA
- Specific aeronautical meteorological research . . . A/E
- Specific aeronautical meteorological training . . . A/E
- Specific aeronautical technical support (including administration) . . . . . A/E

The above facilities and services provide the following products and functions. Their utilization is indicated in brackets:

- Meteorological observations and reports for local ATS units . . . . . (A)
- Meteorological observations and reports disseminated beyond the aerodrome (METAR, SPECI) . . . . . (mE)
- Aerodrome forecasts (TAF, including amendments thereto) . . . . . (mE)
- Landing forecasts (including TREND) and forecasts for take-off . . . . . (A/E)

Area and route forecasts, other than those issued within WAFS (including ARFOR, GAMET, ROFOR, WINTEM) . . . . . (E)

Aerodrome and wind shear warnings . . . . . (A)

SIGMET, AIRMET, volcanic ash advisories, tropical cyclone advisories . . . . . (E)

Aerodrome climatological information . . . . . (A)

Flight documentation (WAFS products, SIGWX charts/forecasts for low-level flights and required OPMET data) . . . . . (mE)

Meteorological watch by MWOs over FIR/UIR for the issuance of SIGMETs and AIRMETs . . . . . (E)

Aerodrome weather watch by the meteorological office concerned for the issuance of amendments to TAFs, aerodrome and wind shear warnings . . . . . (A/E)

Volcanic ash and tropical cyclone watch by VAACs and TCACs for the issuance of VA and TC advisories . . . . . (E)

Meteorological watch by WAFCs and RAFCs for the issuance of amendments to WAFS products . . . . . (E)

Briefing and consultation (including display of OPMET and other meteorological information) . . . . . (A)

Provision of information to meteorological information systems and local operators (including the use of remote briefing/consultation systems) . . . . . (A/E)

Provision of information for ATS and AIS units (including NOTAM) . . . . . (A/E)

Provision of information for SAR units . . . . . (E)

Provision of WAFS and OPMET data to operators . . . . . (mE)

*Note.— An ultimate goal would be the identification of the costs attributable to the individual products and functions where this is feasible.*



Appendix 6

b) Core facilities and services which may serve both aeronautical and non-aeronautical requirements.

Legend indicating utilization:

- A airport
- E en-route
- mA mainly airport
- A/E airport and en-route
- mE mainly en-route

General analysis and forecast offices . . . . . A/E  
 Meteorological data processing (including maintenance of climatological data base) . . . . . A/E

Commonly used meteorological telecommunications facilities and services . . . . . A/E  
 Surface observation stations (making synoptic and climatological observations) . . . . . mE  
 Upper-air observation stations . . . . . E  
 Weather radar . . . . . A/E  
 Meteorological satellite reception . . . . . mE  
 Core training . . . . . A/E  
 Core research . . . . . A/E  
 Core technical support (including administration) . . . . . A/E

## ATTACHMENT C

# Chapter 1 ICAO POLICY ON AIR NAVIGATION SERVICES CHARGES

### INTRODUCTION

1.1 This chapter focuses on ICAO policy on air navigation services charges with particular attention given to certain fundamental aspects of that policy. The chapter is divided into two sections. The first addresses the basic policy principles expressed in Article 15 — Airport and similar charges — of the *Convention on International Civil Aviation*, usually referred to as the Chicago Convention, which is the charter of ICAO. (The "similar charges" referred to in the title of Article 15 include air navigation services charges). The section refers to the three fundamental principles set forth in Article 15 and discusses certain other aspects raised in that Article as well. It also explains the status of this Article and the Convention.

1.2 The chapter's second section focuses on the additional policy guidance provided in the Statement by the Council on Charges for Air Navigation Services, which is reproduced in Appendix 3. This is the second of two Statements contained in Doc 9082/4 — *Statements by the Council to Contracting States on Charges for Airports and Air Navigation Services*. The section describes how the Statement was developed and its status vis-à-vis the Chicago Convention, and then discusses principles which States have found of particular interest as well as the application of the Statement with regard to the ICAO communications, navigation and surveillance/air traffic management (CNS/ATM) systems. It should be noted that Chapter 5 — *Air Navigation Services Charges and their Collection* — is also based on this Council Statement, but focuses on the practical aspects of implementing the policy and practices concerning charges and charging systems. References to ICAO policy as it applies to guidance material provided in this manual can be found throughout the text.

1.3 It should also be noted that States may define general policies concerning air navigation services charges which take account of the respective interests of

the users and providers of air navigation services. These general policies should be in conformity with the principles set out in Doc 9082.

### A. ARTICLE 15 OF THE CONVENTION ON INTERNATIONAL CIVIL AVIATION

1.4 The basic policy established by ICAO in the area of airport and air navigation services charges is expressed in Article 15 of the Chicago Convention as follows:

#### *"Airport and similar charges*

Every airport in a contracting State which is open to public use by its national aircraft shall likewise, subject to the provisions of Article 68, be open under uniform conditions to the aircraft of all the other contracting States. The like uniform conditions shall apply to the use, by aircraft of every contracting State, of all air navigation facilities, including radio and meteorological services, which may be provided for public use for the safety and expedition of air navigation.

Any charges that may be imposed or permitted to be imposed by a contracting State for the use of such airports and air navigation facilities by the aircraft of any other contracting State shall not be higher,

- (a) As to aircraft not engaged in scheduled international air services, than those that would be paid by its national aircraft of the same class engaged in similar operations, and
- (b) As to aircraft engaged in scheduled international air services, than those that would be paid by its national aircraft engaged in similar international air services.

All such charges shall be published and communicated to the International Civil Aviation Organization: provided that, upon representation by an interested contracting State, the charges imposed for the use of airports and other facilities shall be subject to review by the Council, which shall report and make recommendations thereon for the consideration of the State or States concerned. No fees, dues or other charges shall be imposed by any contracting State in respect solely of the right of transit over or entry into or exit from its territory of any aircraft of a contracting State or persons or property thereon."

1.5 In summary, Article 15 sets out the following three basic principles:

- a) uniform conditions shall apply to the use of airport and air navigation facilities in a Contracting State by aircraft of all other Contracting States;
- b) the charges imposed by a Contracting State for the use of such airports or air navigation facilities shall not be higher for aircraft of other Contracting States than those paid by its national aircraft engaged in similar international operations; and
- c) no charge shall be imposed by any Contracting State solely for the right of transit over or entry into or exit from its territory of any aircraft of a Contracting State or persons or property thereon.

While the first two of these principles do not appear to have given rise to misunderstandings, the third has in some instances been interpreted to mean that no charges are to be levied when an aircraft flies into, out of or over a State. That, however, is not the intent of this principle since all States are fully within their rights to recover the costs of the services they provide to aircraft operators through charges. The substance of this principle is in fact that a State should not charge solely for granting an authorization for a flight into, out of or over its territory.

1.6 Two other aspects are also addressed in Article 15. The first is that States shall publish all their airport and air navigation services charges, and also communicate them to ICAO. This information is collected and published by ICAO in the *Manual of Airport and Air Navigation Facility Tariffs* (Doc 7100). The only other publication known to provide similar information is the *IATA Airport and En Route Aviation*

*Charges Manual*. The publication or communication of charges by States to aircraft operators and other interested parties is discussed in Chapter 5.

1.7 Article 15 also provides for ICAO, upon representation by an interested Contracting State, to review charges imposed and make recommendations thereon to the State or States concerned. It should be observed that the Article specifically refers to representation by an interested Contracting State, not by an aircraft operator.

1.8 As to the status of the principles in Article 15 and, for that matter, all the articles of the Chicago Convention, an ICAO Contracting State cannot exempt itself from applying any of the principles expressed therein since by signing the Chicago Convention the signatory State binds itself to adhere to all its Articles without exception.

## **B. STATEMENT BY THE COUNCIL ON CHARGES FOR AIR NAVIGATION SERVICES**

### **Basic aspects**

1.9 Additional and more detailed policy guidance in the area of air navigation services charges is provided in the Statement by the Council on Charges for Air Navigation Services found in Doc 9082/4 and reproduced in Appendix 3. The contents of the Statement have been revised periodically by the Council following major international conferences on airport and air navigation services economics and management, with amendments published when required. The basic philosophy and principles expressed in the Statement, however, that is, fairness and equity in the determination and sharing of air navigation services costs, have remained unchanged over the years.

1.10 The Council Statement differs in status from the Chicago Convention in that an ICAO Contracting State is not bound to adhere to the Statement's provisions and recommendations, unlike the articles of the Chicago Convention. Since the recommendations in the Council Statement have been developed by major international conferences, however, there is a strong moral obligation for States to ensure that their air navigation services cost recovery practices conform to the policies

and philosophy set out in the Council Statement. This appears to be the general practice amongst ICAO Contracting States.

1.11 The principles contained in the Council Statement address such subjects as the cost basis for air navigation services charges, allocation of air navigation services costs among aeronautical users, air navigation services charging systems, approach and aerodrome control charges, route air navigation services charges, charges for air navigation services used by aircraft when not over the provider State, and consultation with users regarding charges and air navigation services planning. It is not the intention to discuss here the substance of each of these principles since they are available for further examination in Appendix 3, and some will also be referred to in the following chapters when they have a direct bearing on the subject matter being addressed. However, a few of the principles and policies advocated in the Council Statement which have attracted particular attention are discussed below.

#### **Balance of interests of providers of air navigation services and users**

1.12 An important recommendation in the Council Statement is that States exercise caution in their general policy on charges for air navigation services and take into consideration the effect on users, in particular air carriers which may need to adjust their tariffs to deal with or absorb increased costs arising from new or higher charges. Also, the Statement observes that there should be a balance between the respective interests of providers of air navigation services and airlines and therefore States should encourage a greater level of co-operation between them (Doc 9082/4, paragraph 29).

#### **Consultation with users regarding charges and air navigation services planning**

1.13 The Statement attaches much importance to providers of air navigation services giving advance notice to and consulting with principal users directly or through their representative bodies when any significant review of existing charges or the imposition of new charges is contemplated. Consultation, the Statement further advises, implies discussions between users and providers in an attempt to reach general agreement on any proposed charges, and that failing such agreement governments would continue to be free to impose the charges concerned. The Statement also observes that

when major new air navigation services are being planned, it is desirable that the regular users or their representative organizations be consulted as early as practicable and that users, particularly airlines, should either directly or through their representative bodies provide advance planning data relating to their aircraft and to the special facilities they desire, on a 5- to 10-year forecast basis (Doc 9082/4, paragraphs 44 to 46).

#### **Proliferation of charges on air traffic**

1.14 Concern is expressed in the Council Statement (paragraph 30) over the proliferation of charges on air traffic, and the retaliatory effects this could lead to, it being recommended that States should (i) impose charges only for services and functions which are required for international civil aviation; and (ii) refrain from imposing charges which discriminate against international civil aviation in relation to other modes of international transport (paragraph 30). Subparagraph ii) addresses situations where charges would be levied on international civil aviation for certain services provided, while other modes of international transport would not be charged for the same type of services. It should be noted that subparagraph ii) does not refer to the granting of subsidies.

#### **The cost basis for air navigation services charges, charging systems and collection of charges**

1.15 A general principle expressed in the Statement is that where air navigation services are provided for international use, the providers may require the users to pay their share of the related costs, but international civil aviation should not be asked to meet costs which are not properly allocable to it (paragraph 32); also that the cost to be shared is the full cost of providing the air navigation services, including interest on capital investment and depreciation (paragraph 34 (i)).

1.16 Other principles and recommendations of particular relevance in the context of the cost basis for air navigation services charges, charging systems and the collection of charges are:

- a) that States are encouraged to maintain accounts for the air navigation services they provide in a manner which ensures that air navigation services charges levied on international civil aviation are properly cost-based (paragraph 32); also, that for

- the purpose of consultation users should be provided with adequate financial information (paragraph 45 (ii));
- b) that air navigation services may produce sufficient revenues to exceed all direct and indirect operating costs and so provide for a reasonable return on assets to contribute towards necessary capital improvements (paragraph 34 (iv));
- c) that the allocation of air navigation services costs among aeronautical users should be carried out in a manner equitable to all users, and the proportions of cost attributable to international civil aviation and other utilization of the facilities and services (including domestic civil aviation, State or other exempted aircraft, non-aeronautical users) should be determined in such a way as to ensure that no users are burdened with costs not properly allocable to them according to sound accounting principles (paragraph 36);
- d) any charging systems should, so far as possible, be simple, equitable and, with regard to route air navigation services charges, suitable for general application at least on a regional basis. The administrative cost of collecting charges should not exceed a reasonable proportion of the charges collected (paragraph 37 (i));
- e) that the charges should not be imposed in such a way as to discourage the use of facilities and services necessary for safety or the introduction of new aids and techniques (paragraph 37 (ii));
- f) any charging system should take into account the cost of providing air navigation services and the effectiveness of the services rendered. The charging system should be introduced in such a fashion as to take account of the economic and financial situation of the users directly affected on the one hand, and that of the provider State or States on the other (paragraph 37 (v));
- g) the charges levied on international general aviation should be assessed in a reasonable manner having regard to the costs of the facilities needed and used and the goal of promoting the sound development of international civil aviation as a whole (paragraph 37(vii));
- h) that approach and aerodrome control charges, whether a part of the landing charges or levied separately, should as far as possible be a single element of the landing charge or a single charge per flight and could take aircraft weight into account but less than in direct proportion (paragraph 39);
- i) that route air navigation services charges should essentially be based on distance flown and aircraft weight but that weight should be taken into account less than proportionately (paragraph 40); and
- j) that all users may be required to pay their share of the costs of providing air navigation services regardless of whether or not the utilization takes place over the territory of the provider State (paragraph 42).

#### **Currency aspects**

1.17 On this important issue the Council Statement recommends that under normal circumstances, user charges should be expressed and payable in the local currency of the State concerned, but that under special circumstances, for example where economic conditions are not stable, when user charges are denominated in other than local currency, airlines could apply the currency of denomination using the same exchange rate for their local ticket sales; the Council also recommends that remittance problems be resolved. It is also recognized that when route air navigation services charges are billed on a regional basis (i.e. on behalf of several States or by a jointly operated agency), it may be advantageous to both users and providers to denominate and pay charges in a single convertible currency (paragraph 38).

#### **Search and rescue services — cost recovery**

1.18 Attention is also invited to the observation made with regard to search and rescue services in the Council Statements (Doc 9082/4), Appendix 2 — *Guide to the facilities and services to be taken into account by providing authorities in determining the total costs of air navigation services*. The Appendix (under Other ancillary aviation services) refers to the search and rescue services concerned in this context as being any permanent civil establishment of equipment and personnel maintained for the purpose of providing search and rescue. The thrust of this guidance is that costs attributable to the provision of search and rescue services provided by a permanent *civil* establishment can be included in the cost basis for air navigation services charges but that such services

provided by parties or entities that do not fall within that category (for example military forces) should not.

**The ICAO communications, navigation  
and surveillance/air traffic management  
(CNS/ATM) systems — charges policy aspects**

1.19 The Council Statement refers to the CNS/ATM systems in the context of facilities and

services for which additional resources will be needed (paragraph 28). No specific reference, however, is made to particular cost recovery principles that apply exclusively to these systems which represent a major technological evolution. They will of course require special considerations in so far as organizational, managerial and co-operative aspects are concerned, as well as with regard to financing, and costing and cost recovery mechanisms. These issues will be addressed in subsequent chapters of the manual.