CONFERENCE ON THE ECONOMICS OF AIRPORTS AND AIR NAVIGATION SERVICES

(Montreal, 19 - 28 June 2000)

Agenda Item 6: Guidance and assistance by ICAO

ICAO ACTIVITIES IN THE FIELD OF ECONOMICS OF AIRPORTS AND AIR NAVIGATION SERVICES

(Presented by the Secretariat)

SUMMARY

This paper provides summary descriptions of the guidance material, workshops, seminars and other activities presently carried out by ICAO. Proposed action by the Conference is at paragraph 6.1.

1. **Introduction**

- 1.1 This paper describes the various activities being undertaken by ICAO on the economics and management of airports and air navigation services, under the headings of Documentary guidance (para 2), Workshops and seminars (para 3), Technical support (para 4) and Future work (para 5).
- 2. **Documentary guidance**
- 2.1 Statements by the Council to Contracting States on Charges for Airports and Air Navigation Services (Doc 9082)
- 2.1.1 As indicated in ANSConf-WP/4 (where the Secretariat is proposing to restructure and retitle this document), Doc 9082 is a basic policy document flowing *inter alia* from Article 15 of the Chicago Convention. Much of the other documentary guidance and activities flow in turn from Doc 9082.
- 2.2 **Airport Economics Manual (Doc 9562)**
- 2.2.1 This Manual was developed by the Secretariat with the assistance of the Airport Economics Panel and published in 1991. The Manual addresses ICAO policy on airport charges, organizational structures of airports, accounting and financial control, determining the cost basis for airport charges and costs attributable to concessions and other non-aeronautical activities, charges on air traffic and their

collection, development and management of non-aeronautical activities, and financing airport infrastructure. Review and further development of the Manual to reflect relevant conclusions of the present Conference is planned.

2.3 Manual on Air Navigation Services Economics (Doc 9161/3)

2.3.1 The Third Edition of this Manual, originally issued in 1976, was developed by the Secretariat with the assistance of the Air Navigation Services Economics Panel (ANSEP) and published in 1997. The Manual addresses ICAO policy on air navigation services charges, organizational structures of air navigation services, accounting and financial control, determining the cost basis for air navigation services charges, air navigation services charges and their collection, and financing of air navigation services infrastructure. Aspects which are of special relevance to CNS/ATM systems provision are identified and addressed throughout the Manual. Review and further development of the Manual to reflect recent conclusions of the present Conference is planned.

2.4 Report of the Air Navigation Services Economics Panel on Financial and Related Organizational and Managerial Aspects of Global Navigation Satellite System (GNSS) Provision and Operation (Doc 9660)

2.4.1 This Report, published in 1996, focusses on such organizational and managerial aspects of GNSS provision as the multinational nature of GNSS facilities or services, ownership and control considerations, and competition; and financial aspects, including funding sources, cost recovery policy, determination and allocation of GNSS costs, compensation or assistance to States to cover costs of redundancies and/or relocation/retraining, cost recovery methodology, and liability aspects. The report contains five recommendations, all of which have been approved by the Council, addressing guarantees by States in the context of servicing and repayment of loans, co-operation among States in cost recovery, financial imperatives for accelerating the amendment procedures for regional air navigation plans, the methodology for allocating GNSS costs attributable to civil aviation among user States, and the role of ICAO in financial and administrative aspects of GNSS implementation.

2.5 Guidelines for Cost-Benefit Analysis of Communications, Navigation and Surveillance/Air Traffic Management (CNS/ATM) Systems (Circular 257)

2.5.1 Comprehensive guidance material to assist States to carry out cost-benefit studies of CNS/ATM implementation systems is available in this Circular, which also includes the assumptions and results of the global economic evaluation of CNS/ATM conducted by the ICAO's Special Committee on Future Air Navigation Systems (FANS) in 1988. Further development of the Circular is being considered, notably to include further user friendly software methodology and to assist States, individually or in groups, to prepare sound business cases.

2.6 **Airport Planning Manual (Doc 9184)**

2.6.1 The Airport Planning Manual, originating from 1967, is designed to assist States in planning the expansion of existing international airports and the construction of new ones. The Second

Edition, issued in 1987, contains a number of economic inputs, including chapters on forecasting for planning purposes and on financial arrangements and controls¹ in Part 1 - Master Planning.

2.7 Manual on Air Traffic Forecasting (Doc 8991)

2.7.1 The Second Edition of this Manual, issued in 1985, describes various methods of traffic forecasting which can be used in airport planning and includes material on the economic value of airport investment.

2.8 Manual of Airport and Air Navigation Facility Tariffs (Doc 7100)

2.8.1 This document lists the various airport and air navigation services charges levied in Contracting States as well as a few non-Contacting States. It also contains information on States' general charging policies and their implementation. Based on information received from States, the Manual is updated and re-issued annually; it is now available in CD-ROM as well as hard copy format.

2.9 Digests of Statistics (Series AT, AF, Doc 9180)

- 2.9.1 Airport traffic data have been collected since 1960 and are published annually in the Airport Traffic Digest of Statistics (Series AT), with summary data reported in the Statistical Yearbook (Doc 9180).
- 2.9.2 Airport financial data have been collected since 1976 and are published annually in the Airport Financial and Air Navigation Services Digest of Statistics (Series AF).
- 2.9.3 Air navigation services financial data and en route traffic data have been collected since 1976 and are published annually in the same Digest of Statistics (series AF).
- 2.9.4 The statistical reporting concerned was reviewed by the Statistics Division most recently in 1997 and, following approval by the Council, new reporting forms and publications are in effect from coverage of the year 2000. Possible further development of the databases is discussed in ANSConf-WP/36. Both reporting and publication are increasingly carried out by electronic as well as hard copy means.

3. Workshops and seminars

- 3.1 Pursuant to a recommendation of the 1967 Conference on Charges for Airport and Route Air Navigation Facilities (CARF), the Organization has conducted a programme of regional Workshops on Airport and Route Facility Management (WARFM) since 1968. These meetings are intended to provide an informal forum for government and other officials or executives engaged in airport and route facility management to receive advice and freely exchange views and information on the economic aspects and financial management of airports and air navigation services, and to encourage consistency and standardization in implementing ICAO guidelines and recommendations.
- 3.2 The agenda for these workshops has been amended over the years to reflect changes in the type of advice and assistance being sought from ICAO in the subject areas covered. The agenda presently covers

¹This information of financial arrangements and controls has been overtaken by the guidance in the *Airport Economics Manual* (Doc 9562).

ICAO policy on airport charges, organizational structures of airports, airport financial management, airport charges on air traffic and their collection, development and management of non-aeronautical activities, infrastructure financing, ICAO policy on air navigation services charges, organizational structures of air navigation services, including multinational facilities and services, financial management of air navigation services and air navigation services charges and their collection. Particular emphasis is placed on the autonomy and commercialization of airports and air navigation services, and on regional co-operative ventures in the provision of air navigation services. These workshops also pay special attention to financial and related organizational and managerial aspects of implementing the ICAO communications, navigation and surveillance/air traffic management (CNS/ATM) systems. In addition to States, the Airports Council International (ACI), the International Air Transport Association (IATA) and certain international regional organizations are also invited to participate as observers.

- 3.3 Since 1991, when the Conference on Airport and Route Facility Management (CARFM) was held, these workshops (each of five-day duration) have been held at the following locations: 1992: Cairo and Aruba; 1993: Vienna and Nairobi; 1994: Bali and Buenos Aires; 1995: Dakar; 1996: Copenhagen; 1997: Cairo and Trinidad & Tobago; 1998: Nairobi and Lima; 1999: Fiji.
- 3.4 Two other series of informal regional workshops in the air transport field are also relevant, namely those on Statistics and on Forecasting and Economic Planning. The approach is similar, that is an informal exchange of views and information, with elaboration of the documentary guidance in the fields concerned.
- 3.5 In recent years a greater degree of flexibility has been introduced in the workshop programme. The frequency of "core" workshops such as the three types mentioned above has been reduced in order to respond to differing needs and priorities in different regions and sub-regions through development of seminars of shorter duration on specific issues.
- 3.6 For example, two seminars on the Economics of CNS/ATM Systems Implementation have been held, in Montreal in December 1996 for States in the Americas and Caribbean, and in Casablanca, Morocco, in October 1997 for States in Africa and the Middle East. The seminars addressed such subjects as the regional planning and implementation process; organizational issues, including structure, ownership and control, implementation options, and regional co-operation; traffic forecasts; cost/benefit methodology, and financial comparisons of implementation options; cost recovery policy and mechanisms, including cost determination and cost allocation; and financing.
- 3.7 Under the auspices of ICAO's Technical Co-operation Programme, a round of workshops addressing cost/benefit analysis of CNS/ATM systems has been held for different groups of States in the Asia-Pacific region. Under the ICAO Special Implementation Project programme, a series of workshops on CNS/ATM national planning in various other regions also touch on cost/benefit analysis as well as the development of business cases.
- 3.8 The impression gained from the workshop and seminar programme (including questionnaires on their value completed by participants) is that they have been of significant assistance to States. The intention is to continue the "core workshops" at a minimum rate of one per year per type of workshop and to place further emphasis on specialized seminars responding to regional requests. The WARFM programme will be intensified in the short term after ANSConf 2000 to provide States in different regions with information on new policies and trends stemming from the Conference. More workshops and seminars could be organized if funds were available (through the Technical Cooperation Programme or otherwise).

4. **Technical Support**

4.1 **Regional planning process**

- 4.1.1 The Air Transport Bureau provides ongoing support to the regional planning process, including financial, managerial and organizational aspects of multinational facilities or services, forecasting, cost/benefit analysis and the development of business cases. Traffic Forecasting Groups, supported by the Bureau, are now in full operation in all regions, and play an important role in the planning the implementation of CNS/ATM system components, including the selection of options and associated financing.
- 4.1.2 The implementation and operation of major CNS/ATM systems components require, with rare exceptions, international co-operation because of the magnitude of investments involved and the capacity that will be provided. Assistance is, however, required in some regions to establish such co-operative ventures as well as other co-operative or joint ventures which can greatly benefit States.

4.2 Other air navigation matters

4.2.1 The Air Transport Bureau is frequently called upon to provide economic evaluation of air navigation facilities and services. The development by ICAO of a draft comprehensive action plan on shortcomings in the air navigation field, part of the Global Aviation Safety Plan (GASP), categorizes activities to remedy shortcomings and deficiencies into four basic areas. Three are technical in nature but the fourth focuses on financial and organizational corrective actions by States and ICAO, including improving financial control and cost recovery procedures as well as organizational structures at the national level, and the application of co-operative approaches by States in air navigation services provision. The Universal Safety Oversight Audit programme also has identified a need for support in the fields of finance and organization as well as technical and human resources.

4.3 **Technical cooperation**

4.3.1 The Air Transport Bureau also provides advice and technical support to the Technical Cooperation Programme of the Organization frequently as and when required. The Technical Cooperation Programme is of course available to Contracting States for any aspect of civil aviation.

4.4 SADIS Cost Association and Recovery (SCAR) Scheme

4.4.1 ICAO has developed the Satellite Distribution System Cost Allocation and Recovery (SCAR) scheme and, upon request of the governments concerned, provides administrative services for the group which oversees the scheme. This arrangement is described more fully in ANSConf-WP/5 on cooperative or joint ventures (in this regard ANSConf-WP/7 on the ICAO Joint Financing arrangements is also relevant).

4.5 Cooperation with Other Organizations

4.5.1 ICAO is presently cooperating with the World Meteorological Organization (WMO) in providing assistance to States on cost recovery of aeronautical meteorological services, applying guidance that was developed by ICAO in consultation with WMO. This subject is becoming of significant importance to States whose governments have decided to give financial and organizational autonomy to bodies operating

airports and air navigation services, and as greater emphasis is being placed on organizational autonomy and cost recovery for meteorological services.

4.6 Cooperation with ACI and IATA as well as with different international and regional governmental and non-governmental organizations involved in airport and air navigation services economics and management has been intensified over the past few years. ICAO will continue to liaise closely with other governmental and non-governmental organizations involved in similar activities.

5. General approach

- 5.1 The nature of the provision of airports and air navigation services is undergoing fundamental change. Growing emphasis is being placed by States on the financial self-sufficiency, *inter alia* to reduce the burden on government budgets. In the case of air navigation services, costly high capacity technology is available for implementation capable of serving the requirements of several States much more efficiently and at a lower cost than is possible for each of them alone using current technology.
- 5.2 Strategic Objective G of ICAO's Strategic Action Plan is to "Assist in the mobilization of human, technical and financial resources for civil aviation facilities and services". In respect of financial and organizational aspects of the provision of air navigation services the 32nd Session of the Assembly supported an action plan by the Council including: to make better known the services ICAO can provide with regard to the administration of international co-operative schemes; to assist States, upon request, in establishing joint charges collection agencies and in the preparation and negotiation of loans; and to provide routine assessments of economic aspects of air navigation planning and operations, notably through the development of cost-benefit and business cases.
- An important aspect of this approach which the Council intends to explore fully is that, consistent with Doc 9082 and illustrated through the administration of the Joint Financing Agreements (see ANSConf-WP/7), the cost of ICAO assistance in cost recovery, financing and other aspects of financial management of air navigation services, including the preparation for and negotiation of loans to finance air navigation services infrastructure, may be recovered *inter alia* through air navigation services charges.

6. **Action by the Conference**

6.1 The conference is invited to note this paper and comment on the activities concerned to assist the Council in planning ongoing ICAO activities on the economics of airports and air navigation services.