

**INTERNATIONAL CIVIL AVIATION ORGANIZATION
NORTH AMERICAN, CENTRAL AMERICAN AND CARIBBEAN OFFICE**

**FIRST MEETING OF DIRECTORS OF CIVIL AVIATION
OF THE CARIBBEAN REGION (CAR/DCA/1)**

(Grand Cayman, Cayman Islands, 8 -11 October 2002)

Agenda Item 8: Air Transport

8.4 Funding of Civil Aviation Activities

FUNDING SOURCES, TRENDS AND GUIDANCE

(Presented by the Secretariat)

SUMMARY

This paper lists various sources of financing for civil aviation activities when considering the management of airports and air navigation services. It reviews major new trends in infrastructure funding and charges collection, and refers to ICAO guidance in this area. It also provides considerations for Civil Aviation Authorities.

Action by the meeting is in paragraph 7.1

1. BACKGROUND

1.1 Financing requirements of airports and air navigation services are expected in the next decade to accelerate and reach higher levels than ever before, presenting a major challenge. At the same time, investment in civil aviation is vital if air transport is to maintain, and preferably increase, its substantial contribution to economic development. In the global economy, every \$100 of output produced and every 100 jobs generated by air transport trigger additional demand of some \$325 and 610 jobs in other industries; more than four and a half per cent of world economic output may be attributed to the air transport component of civil aviation. In the Caribbean, predominantly comprising island States and a strong linkage between economies and tourism, air transport is fundamental.

2. SOURCES OF FINANCING

2.1 The results of a survey of States' practices for financing airports and air navigation services, based on a questionnaire before the Conference on the Economics of Airports and Air Navigation Services in June 2000 (ANSCConf 2000), indicated that self-financing has replaced government financing as the most frequently quoted source, when compared with a similar survey in 1991. The increased use of self-financing and borrowing from the private sector was clearly linked to the growing number of autonomous entities managing airports and air navigation services. One of the results of increasing autonomy was a need for greater accountability. A variety of sources are used to finance airports and air navigation services investment needs, as summarized globally in Tables 1 and 2 below. These data show the primary source(s) of funding for airports in 76 States and for air navigation services in 71 States. The reliance on government financing still remains significant in many States, but could decrease considerably in the years to come with the continuous increase in the number of autonomous bodies operating airports and/or air navigation services. Compared to the situation prior to the one in 1991, commercial loans have shown a remarkable increase, again reflecting the growth in autonomous bodies that are expected to secure their own financing. An interesting new trend is the growing importance of bonds and share capital, which again is clearly linked to the new organizational structures. Another development has been the growth in the number of sources of financing used for individual airports or air navigation services.

2.2 Certain differences between regions also emerge. For example, the growth in self-financing has been particularly manifested in Europe and North America. Also, financing by bonds, which in 1991 was almost exclusively applied only in the United States, is finding wider and growing application elsewhere, as in Europe in particular. As to planned financing, although States have not always indicated the sources of funding they plan to use in the future, it appears that the use of loans is expected to increasingly replace government funding.

Table 1
Primary Sources for Financing Major Airports in 76 States
1999

		Self-financing	National govt.	Regional/municipal govt.	Foreign govts. loans or aid	Development banks or funds	Commercial loans		Bonds	Share capital	Other
							domestic	foreign			
Applied	Number of airports	233	116	26	39	77	112	73	34	24	12
Planned		147	52	12	29	69	78	71	21	40	13

Table 2
Primary Sources for Financing Air Navigation Services (ANS) in 71 States
1999

		Self-financing	National government	Foreign governments loans or aid	Development banks or funds	Commercial loans		Share capital	Other
						domestic	foreign		
Applied	Number of ANS	53	33	17	20	15	20	5	4
Planned		26	7	7	9	11	11	6	0

3. DEVELOPMENTS IN INFRASTRUCTURE FUNDING

3.1 Recent developments have shown, and this trend is foreseen to become even more pronounced in the future, that the private sector is replacing the public sector in its traditional roles, not only as owner and manager of facilities, but also as financier of airport and air navigation services infrastructure. Indeed, governments have increasingly transferred the burden of financing airports and air navigation services to the private sector or to financially autonomous public or semi-public bodies. From a government perspective, autonomous and profitable separately-managed entities also have the advantage of increasing the flow of tax revenues that can finance other government activities. Moreover, transfer of ownership to private interests where it has taken place (almost exclusively limited to airports) has not only transferred the responsibility for financing from the government but also made it possible for the government to realize the cash value of its airport holdings.

3.2 One result of these developments is that autonomous entities operating airports and air navigation services will be subject to a greater degree of accountability with regard to their commercial and financial performance considering their impact on the credit rating of these bodies. (One prerequisite for success in that area is that, airports, for example, will need to have full control of the use of their buildings and land in order to ensure commercial optimization.) Smaller airports which face difficulty in funding capital expansion, may, in such situations, find advantage in being operated by large entities operating one or more major airports which will be capable of obtaining funds at a lower cost (through joint negotiation).

3.3 Multinational facilities and services, including CNS/ATM systems components, will require investments which are clearly beyond the financial capabilities of most single States and may require new financing mechanisms.

3.4 Entities managing airports and air navigation services will increasingly have to call on the private sector to obtain financing for improving their facilities and providing additional capacity. Regardless of the source, the following are all-important prerequisites for obtaining financing for and successful cost recovery of airports and air navigation services:

- a) recognition of international cost recovery policy for air navigation services;
- b) existence of an effective cost and revenue accounting system;
- c) sound methodology for determining the cost basis for charges; and
- d) an effective mechanism for the collection of charges.

Efficacy and transparency would be substantially enhanced if, in line with ICAO cost recovery policy, revenues from air navigation (and airport) services charges are applied solely towards defraying the costs of these facilities and services. Further, in order to facilitate the obtaining of financing for significant civil aviation projects, these should be the subject of cost-benefit studies and be developed into business cases. The provision of most air navigation services, and particularly those provided for under the ICAO Regional Air Navigation Plan(s), are generally cost-beneficial for aviation users and providers combined, and with sound management and cost recovery, should be economically viable in most instances where there is adequate traffic volume.

4. INTERNATIONAL COOPERATIVE VENTURES

4.1 Recognizing that there may, nevertheless, be insufficient funds available in many States for aviation needs, notably to assure safety and to implement the CNS/ATM systems concept, the Council and the Secretariat are actively exploring all available and potential funding sources, including new applications of the Joint Financing concept and an International Financial Facility for Aviation Safety (IFFAS). The basis for the joint financing concept is that certain air navigation facilities and services may be too costly for a State to provide and operate alone for the benefit of international civil aviation at large. This is recognized in the Chicago Convention where Chapter XV lays down the basic principles for "joint support" action. International cooperative ventures in the provision of air navigation services have normally proven to be highly cost-effective for the provider States and the users served alike, and in some instances have constituted the only means for implementing costly facilities and services which offer capacity that exceeds the requirements of individual States. By cooperating in such facility or service provision, the States concerned have been able to provide more efficient services and at lower costs than if they had to finance the facilities concerned themselves.

4.2 Another effective means for States to benefit from cooperation in their provision of air navigation services would be to participate in the operation of a multinational charges collection agency. The need for States to recover the costs of their air navigation services has increased the emphasis on the efficient and effective billing and collection of air navigation services charges and has led to growing cooperation or joint ventures in their billing and collection efforts. This is because States individually operating facilities and charging for the services rendered are involved in considerable accounting work, and may also encounter collection difficulties where there is a substantial volume of overflying traffic.

4.3 Such an agency would collect air navigation services charges on behalf of all of the participating States, including those which are overflown. The agency would then transfer to each participating State the revenue collected on its behalf. Added to each charge levied for each participating State would be a small fee or percentage to cover the State's share of the agency's costs. For the agency to be cost-effective several States would need to be involved. Separate agencies could be established in different regions. Considering that air navigation services charges are an essential source of revenues, it is important that the States themselves singly or collectively remain fully in control of the charges collection function.

5. ICAO GUIDANCE

5.1 Policy guidance related to self-financing of airport investment requirements is provided in ICAO's *Policies on Charges for Airports and Air Navigation Services* (Doc 9082/6) paragraph 22 vii), where it is recognized that airports may produce revenues in excess of operating costs to provide for a reasonable return on assets at a sufficient level to secure financing on favourable terms in capital markets for the purpose of investing in new or expanded airport infrastructure, and in paragraph 24, where the pre-funding of projects through charges is deemed to be acceptable in those specific circumstances where this is the most appropriate means of financing long-term and large-scale investment projects and provided that strict safeguards are in place to cover such matters as economic regulation of user charges, transparent accounting, consultation and time limits.

5.2 Guidance on practical aspects of infrastructure financing is provided in the ICAO *Airport Economics Manual* (Doc 9562) in Chapter 7 - Financing Airport Infrastructure, and in the ICAO *Manual on Air Navigation Services Economics* (Doc 9161/3) in Chapter 6 - Financing Air Navigation Services Infrastructure. In both Manuals the relevant chapters focus on such subjects as the need for airport and air navigation services managing entities to conduct financial and economic analyses, financing plans, and various sources of financing, etc. Considering the growth of commercialization in the operation of airports, in particular, and air navigation services in recent years and the developments that have and are taking place in infrastructure financing, the guidance on infrastructure financing in both manuals is being reviewed by two ICAO Panels of experts in order to reflect the most current trends in these areas and how airports and air navigation services providers can benefit from them. This will be part of an under revision process being carried out on the guidance material contained in the two Manuals.

5.3 The issue of funding of security services, and notably the extent to which the provision of such services is a national rather than an aviation obligation, has been highlighted with the increase in security in the aftermath of the events of 11 September 2001. The current ICAO policy specific to cost recovery of security services is set out in paragraph 29 of ICAO's Policies in Doc 9082/6. Paragraph 29 notes that States may determine in which circumstances and the extent to which the costs involved in providing security facilities and services should be borne by the State, the airport authorities or other responsible agencies. Paragraph 29 *inter alia* calls for separate identification of security costs and Appendix 1 of ICAO's Policies indicates that the security functions at an airport which may be taken into account in determining security costs are: inspection/screening of passengers and cabin baggage; security in departure/arrival lounges, including transfer/transit lounges and other terminal areas; security of airside areas; and security of landside areas. Pursuant to a Recommendation of a High-Level, Ministerial Conference on Aviation Security held in February this year, ICAO is in the process of elaborating on its policy and guidance material on cost recovery of security services, notably to encompass security services for air navigation.

6. ORGANIZATIONAL CONSIDERATIONS FOR CIVIL AVIATION AUTHORITIES

6.1 The organizational format of the entity or entities for regulating civil aviation activities and for managing airports and air navigation services in a State has an important impact on all the activities and operations concerned. Depending on the importance of its air traffic and on national or local circumstances a civil aviation authority may be established to operate both airports and air navigation services and also performing other functions previously vested in a directorate of civil aviation. Establishment of separate bodies completely independent from each other with one operating airports and another the air navigation services plus a body to carry out the remaining functions of the directorate of civil aviation does not appear attractive in a small traffic State. The total costs will increase substantially because of the duplication of functions, including administrative overheads. Not less important and costly would be the inefficient use of scarce technical expertise that would evolve.

6.2 An efficient air transport system is crucial to a healthy national economy, and ICAO believes that the concept of an autonomous civil aviation authority can be a mechanism for reducing or resolving funding problems. By autonomous, ICAO means that the organization should have greater freedom from the government in conducting its financial affairs, infrastructure funding, civil service staffing requirements, etc, and it should be self-financing to the extent possible. Such an autonomous authority should have financial and managerial autonomy from the government. This means that it should finance its operations through user charges, and any other revenues it may generate from operations, be free to access national and international money markets in order to fund major infrastructure investment, and have the authority and flexibility to respond to market forces when it comes to manpower and general management policies.

6.3 At present, the majority of air navigation service providers are government departments, usually civil aviation administrations that operate on an annual budget allocated by the government, with all revenues they generate through, for example, charges channelled back into the civil aviation administration or central Treasury coffers. In some instances, this means that aeronautical charges are being used to fund non-aviation infrastructure development. ICAO would like to see a much greater use of aviation revenues for aviation purposes only, the Organization's stated policy being that air navigation charges should not be used for other purposes than paying for the costs of providing the air navigation services system.

6.4 In addition, civil aviation administrations are usually constrained by government restrictions relating to the amount of money that public sector bodies are free to borrow. Often this pits civil aviation activities against a myriad of other competitive causes, many of which may have a much higher and more visible political or social profile, in the battle for government funds or loans. As a result, air traffic services often lose out, and investment plans are determined according to government-determined borrowing limitations rather than system requirements.

6.5 Concerns that any outstanding financial liabilities may revert to the government and add to the level of government borrowing mean that these civil aviation administrations or other government departments are often not permitted to raise funds in the commercial marketplace, further curtailing their ability to make essential infrastructure improvements. Autonomous bodies, provided they are so authorized, would be at much greater liberty to raise money in the open markets, thereby relieving the burden on the government, while still making it possible for the government to fulfil its obligations.

6.6 A further drawback of remaining a government department is that management policies must comply with those of other civil service sectors, which means that staff pay levels and conditions reflect civil service guidelines, rather than market forces.

6.7 It should however not be expected that an autonomous civil aviation authority *per se* in a State with minimal traffic and hence minimal revenue generating capacity would be completely self-financed. Its establishment may, nevertheless, be beneficial in that it can improve efficiency, thereby lowering the deficit and the consequential government subsidy required. In such cases a more viable solution has often been the establishment of an autonomous civil aviation authority to take over the functions provided by a civil aviation administration also including the provision of air navigation services and airports (the latter subject is addressed in WP CAR/DCA/1-20 under Agenda Item 8.3, Privatization of Airports and Air Navigation Services).

7. ACTION

7.1 The meeting is invited to note the information in this paper and apply the concepts presented therein, as appropriate, in an effort to enhance efficiency in all civil aviation activities through the resolution of funding difficulties.