

CONFERENCE ON THE ECONOMICS OF AIRPORTS AND AIR NAVIGATION SERVICES

(Montreal, 19 - 28 June 2000)

Agenda item 3: **Funding issues**

FUNDING ISSUES

(Presented by the Secretariat)

SUMMARY

This paper lists various sources of financing for airports air navigation services, reviews major new trends in infrastructure funding, and refers to ICAO guidance in this area. Suggested action by the Conference is at paragraph 5.1.

1. Background

1.1 Financing requirements of airports and air navigation services providers are expected to accelerate and reach higher levels in the next decade than ever before. On the basis of information collected from States and other sources it is estimated that airport and air navigation services investment requirements between now and the year 2010 will exceed US \$300 billion. This rough estimate gives an order of magnitude indicative of the challenges in the area of financing that airport and air navigation services managing bodies will be facing in the years to come.

2. Sources of Financing

2.1 A variety of sources are used to finance airport and air navigation services investment needs, as summarized globally in Tables 1 and 2 below and regionally in the Appendix. These data show the primary source(s) of funding for airports in 76 States and for air navigation services in 71 States (States were asked about their applied and planned practices in this regard in the pre-conference questionnaire circulated under State letter SR 167/1-99/80 of 6 August 1999). Both tables show that self-financing (e.g. from retained earnings) has replaced government financing as the most frequently quoted source when compared to a previous survey conducted prior to the 1991 Conference on Airport and Route Facility Management (CARFM), and this is expected to remain so in the future. This, however, does not mean that self-financing is or will be the largest source of financing. 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 1991 CARFM 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 manifest in Europe and North America. Also, financing by bonds, which in 1991 was almost exclusively only applied in the United States is finding wider and growing application elsewhere, 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 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) a 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 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.

3.5 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 (which is described in ANSCConf-WP/7 under Agenda item 2, Organizational issues) and an International Financial Facility for Aviation Safety (IFFAS). A study by the Secretariat of the IFFAS was distributed under cover of State letter EC 2/80-00/6 of 28 January 2000, along with a questionnaire, to be completed and returned by 14 April 2000, seeking the views of States on the concept and future work. As soon as responses are analysed they will be presented to the Council for determination of the next steps to be taken.

4. ICAO Guidance

4.1 Policy guidance related to self-financing of airport investment requirements is provided in the *Statements by the Council to Contracting States on Charges for Airports and Air Navigation Services* (Doc 9082/5)*, in paragraph 14 (vii) (airports) and paragraph 34 (iv) (air navigation services) which essentially state that:

Airports/air navigation services may produce sufficient revenues to exceed all direct and indirect operating costs (including general administration, etc.) and so provide for a reasonable return on assets (before tax and cost of capital) to contribute towards necessary capital improvements.

The term “capital improvements” should be understood in this context as meaning “investments in new or expanded facilities and services”. (The relevance of paragraphs 14 (vii) and 34 (iv) of the Council Statements in Doc 9082 in the context of pre-funding of projects through charges, along with their reconfirmation, is addressed in ANSCConf-WP/15).

4.2 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, it may be timely for the guidance on infrastructure financing in both manuals to be reviewed in order to reflect the most current trends in these areas and how airports and air navigation services providers can benefit from them.

5. Action by the Conference

5.1 The Conference is invited to note this paper and agree to recommend to the Council that the guidance on infrastructure financing in the *Airport Economics Manual* (Doc 9562) and the *Manual on Air Navigation Services Economics* (Doc 9161/3) be revised and updated as required.

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*Proposed by the Secretariat in ANSCConf-WP/4 to be retitled *ICAO Policies on Charges for Airports and Air Navigation Services*.

APPENDIX

PRIMARY SOURCES FOR FINANCING AIRPORTS AND AIR NAVIGATION SERVICES

AIRPORTS – NUMBER BY REGION

	Self-financing	National govt.	Regional/municipal govt.	Foreign govts. loans or aid	Development banks or funds	Commercial loans		Bonds	Share capital	Other
						domestic	foreign			
Asia and Pacific (13 States)										
Applied	19	9	5	9	2	11	4	4	6	0
Planned	16	4	2	8	6	7	3	1	7	0
Middle East (8 States)										
Applied	2	8	0	0	1	0	1	0	0	0
Planned	2	2	0	0	0	2	1	1	2	3
Africa (19 States)										
Applied	57	51	0	26	21	4	23	0	2	2
Planned	33	20	0	14	20	13	22	8	10	1
Europe (27 States)										
Applied	120	29	13	1	50	73	45	6	13	2
Planned	81	17	7	6	41	50	45	5	10	0
North America (2 States)										
Applied	24	6	3	0	0	24	0	24	3	6
Planned	6	6	3	0	0	6	0	6	3	6
Caribbean/Central/South America (7 States)										
Applied	11	13	5	3	3	0	0	0	0	2
Planned	9	3	0	1	2	0	0	0	8	3
Total* (76 States)										
Applied	233	116	26	39	77	112	73	34	24	12
Planned	147	52	12	29	69	78	71	21	40	13

* Based on information received from the following States:

Asia/Pacific: Australia, Bangladesh, Brunei Darussalam, China (Hong-Kong), Japan, Maldives, New Zealand, Singapore, Sri Lanka, Tajikistan, Thailand, Turkmenistan, and Viet Nam;

Middle East: Bahrain, Iran (Islamic Republic of), Jordan, Kuwait, Lebanon, Oman, Qatar, and Saudi Arabia;

Africa: Algeria, Botswana, Burkina Faso, Cameroon, Egypt, Eritrea, Gambia, Ghana, Kenya, Mauritius, Namibia, Sao Tome and Principe, Senegal, South Africa, Swaziland, Tanzania, Tunisia, Uganda, and Zimbabwe;

Europe: Austria, Belgium, Bulgaria, Czech Republic, Finland, France, Germany, Greece, Iceland, Ireland, Lithuania, Malta, Monaco, Netherlands, Norway, Poland, Republic of Moldova, Romania, Russian Federation, Slovakia, Spain, Sweden, Switzerland, The former Yugoslav Republic of Macedonia, Turkey, Ukraine, and the United Kingdom;

North America: Canada, and United States;

Caribbean/Central and South America: Barbados, Bolivia, Brazil, Costa Rica, Jamaica, Mexico, and St. Vincent and the Grenadines.

AIR NAVIGATION SERVICES PROVIDERS – NUMBER BY REGION

	Self-financing	National govt.	Foreign govts. loans or aid	Development banks or funds	Commercial loans		Share capital	Other
					domestic	foreign		
Asia and Pacific (12 States)								
Applied	10	6	5	2	3	5	3	0
Planned	8	3	4	2	2	3	1	0
Middle East (7 States)								
Applied	3	6	0	1	1	0	0	0
Planned	2	2	0	0	1	0	1	0
Africa (18 States)								
Applied	10	10	10	8	2	4	1	1
Planned	5	0	3	3	0	3	2	0
Europe (26 States)								
Applied	24	5	1	8	8	10	1	1
Planned	11	2	0	3	7	5	2	0
North America (2 States)								
Applied	2	1	0	0	1	0	0	2
Planned	0	0	0	0	0	0	0	0
Caribbean/Central/South America (6 States)								
Applied	4	5	1	1	0	1	0	0
Planned	0	0	0	1	1	0	0	0
Total* (71 States)								
Applied	53	33	17	20	15	20	5	4
Planned	26	7	7	9	11	11	6	0

* Based on information received from the following States:

Asia/Pacific: Australia, Bangladesh, China (Hong Kong), Maldives, New Zealand, Singapore, Sri Lanka, Tajikistan, Thailand, Turkmenistan, Uzbekistan, and Viet Nam;

Middle East: Iran (Islamic Republic of), Jordan, Kuwait, Lebanon, Oman, Qatar, and Saudi Arabia;

Africa: Algeria, Botswana, Burkina Faso, Egypt, Eritrea, Gambia, Ghana, Kenya, Mauritius, Namibia, Sao Tome and Principe, Senegal, South Africa, Swaziland, Tanzania, Tunisia, Uganda, and Zimbabwe;

Europe: Belgium, Bulgaria, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Lithuania, Malta, Netherlands, Norway, Poland, Portugal, Republic of Moldova, Romania, Russian Federation, Slovakia, Spain, Sweden, Switzerland, The former Yugoslav Republic of Macedonia, Ukraine, and the United Kingdom;

North America: Canada, and the United States;

Caribbean/Central and South America: Barbados, Bolivia, Brazil, Costa Rica, Mexico, and St. Vincent and the Grenadines.