

## **CONFERENCE ON THE ECONOMICS OF AIRPORTS AND AIR NAVIGATION SERVICES**

(Montreal, 19 - 28 June 2000)

**Agenda Item 4: Determinants of the economic regulation of airports and air navigation services**

**Agenda Item 5.2.2: Air navigation services charging principles**

### **ECONOMICS OF AIR NAVIGATION SERVICES FOR GENERAL AVIATION AND AERIAL WORK ACTIVITIES**

(Presented by International Council of Aircraft Owner and Pilot Associations)

#### **SUMMARY**

General aviation and aerial work activities operate at the margins of air navigation service systems and use only a small portion of available infrastructure. Charges and fees for air navigation services should reflect these facts. Also, all use-based government-imposed levies should be used to finance and operate air navigation systems.

#### **1. Background**

1.1 General aviation and aerial work activities operate at the margins of air navigation service systems and use only a small portion of available infrastructure. Airline pilots are created through its training, critical care is provided to the populace through emergency medical service aircraft and business aviation supports national and international commerce; GA/AW forms an essential and significant force in the world of air transportation. The more than 600,000 pilots and 300,000 aircraft engaged in general aviation and aerial work operations throughout the world comprise a majority of aviation operations; they contribute significantly to national and international economies. Their needs must be accommodated when planning and operating the aviation infrastructure.

1.2 The great majority of worldwide aviation facilities and systems are designed and operated for the benefit of the airlines. GA/AW generally operate at the margins of this system, taking advantage of capacity unused by air carriers. Therefore, any discussion of funding the aviation infrastructure must realize

that GA/AW operations command only a small fraction of all services provided in the total system. Further, the majority of GA/AW operations are able to operate safely without using many air navigation or traffic services.

## 2. Discussion

2.1 **Organization** Governments have an obligation to their citizens and foreign visitors to provide basic services that bring order and safety to the polity in pursuit of legitimate goals. Among these are provision for air navigation services (ANS) that provide for the safe, orderly and efficient flow of air traffic.

Whether the government or a private enterprise provides these services is irrelevant; however, the provision for and oversight of these services is the responsibility of the government. (ANS associated services include: Navigation and communications infrastructure, air traffic services, meteorological services, search and rescue and aeronautical information services.)

2.2 **Capacity Management** Again, artificial metering mechanisms, like slot allocation, peak-hour charges and high minimum charges, are viewed as last-resort actions when considering management of air traffic capacity. Innovations such as direct routing through area navigation (RNAV) processes, reduced vertical separation minimums (RVSM and intelligent structuring of airspace to accommodate both VFR and IFR users are examples of creative capacity management. Only when the absolute capacity of a route segment or terminal sector is reached should queuing methods be used. But, the method used to determine system and segment absolute capacity should be subject to review by both government regulators and users.

2.2.1 Principles of fairness and equity should govern ATM within a State. Efforts must be made to accommodate all types of operators.

2.3 **Financing** All government charges, fees, and taxes imposed on general aviation and aerial work activities are based on actual or anticipated usage. In essence, these levies are really *user fees*, although revenues from these sources seldom are used to finance the activities from which they were derived. Therefore, when both usage-based levies and fee-for-service charges are imposed on ANS users, the user really pays for the service more than once. Further, users must also pay hidden access charges in the form of aircraft equipment required to operate in controlled airspace environments, e.g., a light single-engine aircraft operating under instrument flight rules (IFR) in European airspace has been required to spend Euros 30,000 just to upgrade installed avionics to minimum acceptable levels within recent years.

2.3.1 Financing the basic ANS infrastructure should be accomplished by the State, using excise taxes derived from either fuel tax revenues or passenger ticket taxes. Where privatized ANS providers are involved, conventional private or subsidized capitalization schemes may be employed. And, since basic civil safety and order functions are involved in providing ANS, a portion of the State's general revenues should also be used to create a safe and efficient infrastructure.

2.4 **Charges** Once the capital, research and development and future improvement costs of operating ANS services have been accommodated, operational costs may be recovered through similar methods or a system of graduated user charges. The use of excise taxes and other levies to fund system operations and maintenance are preferable due to the ease of collection of revenues and the lack of need for a complicated accounting system. Yet, operators who do not use certain services should not be charged for those services.

2.4.1 If direct user charges are employed, a graduated system of fees should be used that recognizes both value for services received. Since the ANS infrastructure is designed primarily for airline and military

interests, general aviation and aerial work activities should be viewed as marginal users of the system and charged accordingly.

2.4.2 Additionally, the obligation for a state to provide basic ANS safety services to the traveling public must be realized. For instance, requiring a private pilot to pay a significant fee for meteorological and notam briefings and for filing a VFR flight plan may actually contribute to unsafe operations. This is because pilots may choose to omit these essential safety services in an effort to avoid the associated charges. Therefore, consideration must be given to providing essential services using general government funds in support of safe operating practices.

2.4.3 The existing guidance provided for Air navigation services charging systems contained in ICAO Document 9082/5 provides succinct and appropriate counsel:

*The charges levied on international general aviation should be assessed in a reasonable manner, having regard to the cost of the facilities needed and used and the goal of promoting the sound development of international civil aviation as a whole.*

2.5 **Regulatory Aspects** All taxes, fees and charges associated with airport and ANS must be established as a cooperative effort between government regulator, service provider and service user. Only a joint effort of this nature will yield a workable, safe and effective aviation infrastructure. Dictated funding systems or those biased for or against any user segment may cause users to subvert the system in an effort to avoid unwanted charges. Finally, once planning and use mechanisms are put into place an ongoing dialog is necessary to preserve the system.

### 3. **Conclusion**

3.1 General aviation and aerial work activities are marginal users of ANS systems designed for and dominated by airline and state aircraft users. Therefore, general aviation/aerial work fees should be based on marginal costs for needed services.

3.2 Users paying a variety of use-based levies (charges, fees, taxes) should receive credit for those levies before ANS fee-for-service user charges are imposed.

3.3 States have an obligation to provide fundamental safety-related ANS services to users. These include meteorology, aeronautical information and search and rescue services.

### 4. **Action**

The Conference is invited to note the above conclusions and consider replacing paragraph 37.viii) in ICAO Document 9082/5 with the following:

*Charges levied on international general aviation should be based on the marginal value of the facilities and services actually used. These charges should be calculated with the supplementary goal of promoting the sound development of international general aviation.*