



**WORKING PAPER**

**REGIONAL WORKSHOP ON TRAFFIC FORECASTING AND ECONOMIC PLANNING**

**Cairo 2 to 4 November 2010**

**Agenda Item 1: ICAO Activities in the Field of Traffic Forecasting and Economic Planning**

(Presented by the Secretariat)

**Basis of ICAO's Forecasting Work**

1. The member States of ICAO have long recognized the need for objective evaluation of future trends in aviation and for stimulating development of forecasting and economic planning methods. In 1968, the ICAO Assembly adopted Resolution A16-22 which constituted the framework for ICAO's work in forecasting and economic planning until 1998. It was superseded by successive Assembly resolutions the latest of which is Resolution A36-15 adopted by the 36th Session, held in September 2007, which provides the current basis for ICAO activities in this field. Appendix C to Resolution A36-15 identifies in general terms the forecasting needs of ICAO and the Contracting States and activities to be undertaken. It calls on the Council to prepare and maintain, as necessary, forecasts of future trends and developments in civil aviation of both a general and a specific kind including, where possible, local and regional as well as global data and to make these available to Contracting States; to develop methodologies and procedures for the preparation of forecasts, the analysis of cost-benefit or cost effectiveness, and the development of business cases to meet the needs of the Organization, the regional air navigation planning groups and, as required, other systems or environmental planning bodies of ICAO; and to collect and develop material on forecasting methods for the development of the above-mentioned forecasts and for dissemination to Contracting States as guidance in their own forecasting and economic planning. The specifications of this resolution are being met in a number of ways.

**ICAO's Aviation Forecasts**

2. Resolution A36-15 recognizes the need for the Council to foresee future developments likely to require action by ICAO and to initiate such action in good time. The Contracting States require global and regional forecasts of future civil aviation developments for various purposes. To assist in meeting these needs, the ICAO Secretariat prepares long-term regional and global forecasts of passenger and freight traffic by region of airline registration. In addition, passenger traffic flow forecasts for a number of selected major route groups as well as global aircraft movement forecasts have been developed. These forecasts are incorporated into Circular 313, "*Outlook for Air Transport to the Year 2025*", published in 2007. It should be noted that the latest long-term forecasts are being prepared will be available by the end of 2010, a summary of which will be presented to A-37 in the form of a working paper.

3. In response to a request from the 26th and 27th Sessions of the Assembly, medium-term forecasts are being produced every year. These forecasts cover world airline scheduled passenger traffic, in total and by region of registration, and world airline finances for a three-year forecast period. The most recent set of forecasts is available on ICAO's public website.

4. Other activities within the ICAO's forecasting programme include the generation of forecasts required for the planning of regional air navigation facilities and the assessment of the future environmental impact of aviation. This has involved forecasting aircraft movements along route groups and at airports. These activities also include the analysis of peak-periods at certain airports and flight information regions.

### **Economic Planning Studies**

5. The ICAO Secretariat has prepared guidance material on cost/benefit analysis for the implementation of the satellite-based communications, navigation and surveillance/air traffic management system (CNS/ATM). This is published in "*Economics of Satellite-Based Air Navigation Services*" (Circular 257).

6. Pursuant to recommendations of the World-Wide CNS/ATM Implementation Conference held in Rio de Janeiro in 1998 and endorsement by the 32nd Session of the Assembly, a computer application has been developed to assist States in the development of business cases for the implementation of CNS/ATM systems. The CNS/ATM Database and Financial Analysis Computer System (DFACS) model is an interactive, analytical tool that enables air navigation service providers (ANSPs) and airspace users to build, evaluate and compare the economics of alternative options or scenarios for the implementation of CNS/ATM systems. A CD-ROM containing the computer application along with a User's Manual and an illustrative example, has been made available. States may download the application and the documents from the ICAO-NET website (Electronic Publications/ICAO Documents). Other users may purchase the CD-ROM.

### **Economic Analysis Studies**

7. Pursuant to ICAO Assembly Resolution A36-15, Appendix G, the ICAO Secretariat undertakes annual analyses of regional differences in the levels of international airline revenues and costs. These studies continue to provide a unique and fundamental source of data which are used by international organizations as well as individual States for such essential tasks as evaluation of fare levels, analyses of operating economics and, more generally, the impact of regulatory policy. Since 1989, data from these studies are also being used by the Prorate Agency to prorate passenger revenues from interline journeys. A new ICAO circular containing the results of those studies covering the 2004 and 2005 period has been published and made available on the ICAO-NET website.

### **Databases, Forecasts and Economic Analyses in Support of ICAO's Committee on Aviation Environmental Protection (CAEP)**

8. In fulfilling its role of fostering the planning and development of international air transport, ICAO gives attention to the impact of civil aviation on environment with the aim of ensuring maximum compatibility between safe and orderly growth of civil aviation and the preservation and enhancement of the environment. Most of ICAO activities in the environmental field are being carried out by the Council through its Committee on Aviation Environmental Protection (CAEP). The Committee consists of members from 22 States and 12 Observers from States as well as governmental and industry

organizations. In fulfilling the tasks assigned to it, CAEP is supported by the ICAO Secretariat. In the economic aspects of those tasks, the Secretariat's involvement includes in particular:

- economic and traffic databases development and maintenance;
- economic analysis of policy measures to reduce the impact of aircraft noise and aircraft engine emissions; and
- development of relevant forecasts, as required, including long-term forecast scenarios on air traffic and aircraft engine emissions.

### **Forecasting and Planning Methods and Dissemination of Information**

9. Forecasts of traffic are required as an input to the aviation decision-making or planning process. The translation of traffic forecasts into airport planning parameters is discussed in Chapter 3 of the *Airport Planning Manual - Part 1: Master Planning* (Doc 9184, Part 1).

10. The ICAO Secretariat has recently revised the *Manual on Air Traffic Forecasting* (Doc 8991) and maintains a library containing specific aviation forecasts (e.g. airport forecasts, forecasts prepared by major aircraft manufacturers) and material on forecasting methods. Liaison is maintained with air transport forecasters in governments, manufacturers, airlines and other services. The series of workshops of which the present workshop is one represent a further response to the Assembly Resolution.

— END —