



WORKING PAPER

TENTH SESSION OF THE STATISTICS DIVISION

Montréal, 23 to 27 November 2009

Agenda Item 12: Collection, analysis and dissemination

REVIEW OF THE CURRENT REPORTING STATUS: COMMERCIAL AIR CARRIERS

(Presented by the Secretariat)

SUMMARY

This paper covers statistics collected by ICAO through its Air Transport Reporting Forms for Commercial Air Carriers. In addition to a description of the individual programme, its major uses and its reporting coverage, the paper also looks at the potential benefits of implementing new reporting processes with the objective of further improving the coverage and utility of these data.

Action by the division is in paragraph 7.

1. INTRODUCTION

1.1 Detailed description of each air carrier reporting form, its major uses and its reporting coverage is highlighted in this paper.

2. SCHEDULED AIRLINE TRAFFIC - FORM A

2.1 *Description of collection:* Statistics for (scheduled and non-scheduled) traffic for airlines are collected on Form A filed monthly. Over the last three years ending in 2007 data filed on this Form represented, on average, some 96 per cent of total tonne-kilometres performed (TKPs) world-wide. Some 21 per cent of total traffic reported was for air carriers which are not members of IATA.

2.2 *Known uses of collection:* these data are some of the most widely used ones in ICAO and by the aviation community at large. Calls for these data are received on a regular basis from Contracting States, governmental agencies, regional and international air carrier associations, training institutes, researchers/consultants, aircraft and aero-engine manufacturers, and the media. These data are also one of the most popular data series in ICAOdata.com, the commercial website of ICAO. However, more importantly these data are extensively used inside ICAO mainly for: industry traffic and capacity analyses, forecasting and planning; calculating the contributions of Contracting States to the ICAO budget; trend analysis of aircraft fatal accident rates; correlation between the Safety Oversight Audit

results and the aircraft accident rates; environment indicators; efficiency indicators; briefings for the President and the Secretary General; and major ICAO press releases on the state of the industry.

3. TRAFFIC FLOW STATISTICS

3.1 On-flight Origin and Destination (OFOD) Traffic - Form B

3.1.1 *Description of collection:* OFOD statistics are collected on a quarterly basis on Form B for each airline providing international scheduled air services. Over the last three years ending in 2007 data filed on this Form represented, on average, some 89 per cent of total international passenger-kilometres performed (PKP) world-wide

3.2 Traffic By Flight Stage (TFS) - Form C

3.2.1 *Description of collection:* traffic statistics by (international scheduled) flight stage for each airline providing international scheduled air services are collected annually on Form C. Over the last three years ending in 2007 data filed on this Form represented, on average, some 86 per cent of international PKP world-wide.

3.2.2 *Known uses of collection:* aviation community at large; Contracting States, for economic analysis, particularly in connection with bilateral agreement negotiations; and airframe and engine manufacturers for market analysis.

3.2.3 *ICAO analysis:* TFS data are extensively used for the analysis of air carrier operations in conjunction with the revenues and costs by route. Also, traffic flow data from Forms B and C will be the cornerstone of the new forecasting methodology adopted by ICAO with effect from 2010. In addition, these data are crucial to obtain the relationship between passenger and cargo loads by aircraft type for each route group and generating route group load factors used in the ICAO carbon calculator tool to determine the carbon emissions by aircraft which may be attributed to passengers and cargo on individual air trips.

4. AIR CARRIER FLEET AND PERSONNEL - FORMS D

4.1 *Description of collection:* information on the fleets and personnel for scheduled airlines and non-scheduled operators is collected annually on Form D. Part 1 of these Forms covers data items on fleet of the airline/operator by type of aircraft showing make, model and manufacturer of aircraft, changes in the numbers of aircraft during the year, size of aircraft in terms of seating capacity and maximum take-off mass (MTOM) (tonnes), and utilization data of each type of aircraft in terms of departures, hours, kilometres flown and days available. Part 2 of the Forms contains data items on personnel of the carriers by category of staff and their annual expenditure for scheduled airlines. Over the last three years ending in 2007 data filed on this Form represented, on average, some 83 per cent of scheduled TKP worldwide.

4.2 *Known uses of collection:* significant use of these data set for analytical purposes. This is the only known data collection that captures worldwide aircraft and personnel utilization. Hence, these data are ideal for benchmarking and productivity analysis. In addition the utilization data derived from these data will facilitate planned ICAO fleet forecasts. These data sets have also been used by ICAO to arrive at estimates of requirements of qualified personnel i.e. pilots and maintenance staff relative to projected traffic growth and planned aircraft acquisitions. Data from this Form also can be used to cross-

check data collected for other purposes, such as the new data base on civil aircraft on register (see STA/10-WP/18), the Safety Activity Audit Questionnaire (SAAQ) and the planned collection of civil licensed personnel data (see STA/10-WP/20). In conjunction with the latter, data from Form D will also help ICAO to determine the constraints to potential traffic growth due to lack of qualified licensed personnel. Finally, data collected through Form D would be of considerable value for modelling work in the field of environmental protection when used in conjunction with the information to be collected on aircraft fuel consumption (see STA/10-WP/21).

5. AIR CARRIER FINANCIAL DATA - FORM EF

5.1 *Description of collection:* financial statistics (revenues and expenses of air carriers, their assets and liabilities) are collected annually for air carriers on Form EF. Over the last three years ending in 2007 data filed on this Form represented, on average, some 87 per cent of TKPs world-wide

5.2 *Known potential uses of collection:* this is a fairly detailed Form which includes information on individual revenue and cost items which are generally only covered in a very aggregated manner in the annual reports of air carriers or other sources. This makes the data collected through this Form very important for financial analysis and efficiency trends of air carriers.

5.3 *Aviation community at large:* Contracting States, governmental agencies, regional and international air carrier associations, training institutes, researchers/consultants, aircraft and aero-engine manufacturers for benchmarking, and for economic and financial analysis. *For ICAO analysis:* Analysis of the financial situation of airlines, financial estimates and, forecasting and planning. These data are also used extensively to provide high level efficiency indicators, ICAO Annual Report of the Council, major press releases and in providing briefing reports for the President and Secretary General. Data from Forms A and EF are also used to calculate the annual minimum conveyance rate for the Universal Postal Union (UPU).

6. COVERAGE AND REPORTING PROCESS

6.1 The coverage of the air carrier reporting Forms and their uses are somewhat related to the complexity of each Form, the amount of data to be reported and the frequency of reporting. At the last Divisional meeting, several steps were taken to decrease the number of Forms through mergers, such as in the case of Forms A, D and EF, to reduce the workload of the reporting entities. In addition, the Secretariat has been very proactive in trying to get data in electronic form from the reporting entities and to load them into the Integrated Statistical Database (ISDB) with little or minimal manual effort. An analysis of the data received indicates that since the last Division meeting in 1997, the Secretariat staff now process 32 per cent more air carrier reporting Forms than ten years ago. This can, in part be attributed to the increase in the number of carriers and, in part, attributed to the proactive approach adopted by ICAO to track Forms that have not been submitted on the due date and send reminders to get these forms into the ISDB. The significant increase in the number of Forms processed with reduced staff numbers also point towards the higher productivity achieved by staff mostly due to the better software tools at their disposal.

6.2 Reporting frequency of Air Carrier Forms

6.2.1 Given the reporting frequency and the coverage of air carrier Forms, it is generally felt that there is no need to make any changes in this respect. The exception to this are Forms A and EF. The

revenue and cost data from Form EF are generally aligned with traffic data reported on the same Form to have more accurate yield and unit cost figures. However the differences between fiscal and calendar year are an inherent complexity that readers of the data or analysts should keep in mind. Trying to convert financial data from fiscal to calendar years, would add significant administrative costs to the air carriers.

6.2.2 A proposal to amend the reporting frequency schedule for Contracting States for Forms A and EF so as to hasten the reporting process is detailed in the WPs 10 and 11 presented to the Division.

6.3 **Reminder Process Update**

6.3.1 The reminder process is currently being generated outside the purview of the ISDB, and reminders to non reporting entities must be generated manually, resulting in an inefficient process. Steps have been taken to integrate the entire reminder process in the ISDB. This should enable the ISDB to generate auto reminders immediately when the due dates are breached. The system will generate an e-mail in the appropriate official languages of ICAO. Therefore, the appointment of a focal point in each Contracting State responsible for the submission of all air transport reporting forms pertaining to commercial air carriers will make the reminder process more efficient and may further improve the coverage of reported data. In addition, through these reminders Contracting States will have an audit trail of the non-reporting Forms which will add to their accountability.

6.4 **Recommendations of the Fourteenth Meeting of the Statistics Panel (STAP/14-13).** The Panel endorsed the creation of a focal contact point in the national civil aviation authority of each Contracting State concerning air carriers' statistics. The list of focal points will be made available through the ICAO secure website. It was agreed that it will be up to the States to nominate one focal point for all Civil Aviation Statistics or, depending on their administrative structure, to have one focal point for air carrier statistics and another for all non air carrier statistics.

7. **ACTION BY THE CONFERENCE**

7.1 The division is invited to:

- a) review the air carrier statistics programmes and offer views on possible means of enhancing their usefulness;
- b) endorse the creation of a focal contact point for air carrier statistics in the national civil aviation authority of each Contracting State, and
- c) agree that the list of focal points be made available through the ICAO secure website.

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