

International Civil Aviation Organization

MIDANPIRG Traffic Forecasting Sub-Group (TF SG/4)

Fourth Meeting (Cairo, 15-17 November 2011)

Agenda Item 3: ICAO activities in the field of Traffic Forecasting and Economic Planning

SCOPE AND FUTURE OF THE ICAO STATISTICS ACTIVITIES

(Presented by the Secretariat)

SUMMARY

The purpose of this paper is to provide a description of ICAO statistical activities carried out by the Economic Analyses and Policy (EAP) Section as well as a summary of recommendations of the Tenth Session of the Statistics Division.

Action by the meeting is at paragraph 5.

REFERENCES

- Doc 7300, Convention on International Civil Aviation
- Report of the Tenth meeting of the Statistics Division (Doc 9932)
- Air Transport Reporting Forms

1. Introduction

- 1.1 The need for complete, comprehensive and reliable aviation statistics was recognized at the Chicago Convention in 1944 and Article 67¹ defines the ICAO mandate to collect data from each Contracting State. In parallel, Article 54 is asking the Council to request, collect examine and publish information relating to the operation of international air services, while Article 55 stipulates that the Council may conduct research into all aspects of air transport which are of international importance and communicate the results of its research to the Contracting States.
- 1.2 In addition to the framework established by the Chicago Convention, the ICAO Statistics Programme is addressed in Appendix B of the 37th Assembly Resolution A37-20, consolidated statement of continuing ICAO policies in the air transport field. More specifically, the Council is requested to, *inter alia*, examine on a regular basis the statistical data (referring to "statistics on airline operations") collected by ICAO in order to meet more effectively the needs of the Organization and its Contracting States and to establish the necessary metrics to monitor the

¹ Each Contracting State undertakes that its international airlines shall, in accordance with requirements laid down by the Council, file with the Council traffic reports, cost statistics and financial statements showing among other things all receipts and the sources thereof.

performance of the Organization in meeting its Strategic Objectives, notably Safety, Environmental protection and Sustainable development of air transport.

2. COLLECTION AND DISSEMINATION OF STATISTICS

- 2.1 Administration and management of the programme
- 2.1.1 The regular Statistics Programme of ICAO is established and administered by the Council whose authority is required for any modification in the structure and content of the programme. Normally, modifications to the programme whether additions, deletions or other adjustments, are on a regular basis considered by the Council on the recommendation of its subsidiary body, the Air Transport Committee (ATC). The Committee makes its recommendations by taking into account the proposals of its two advisory bodies on statistical matters, the Statistics Division and the Statistics Panel.
- 2.1.2 All Contracting States are invited to participate in the Statistics Division which is convened to review and make recommendations on the entire Statistics Programme. The Tenth Session of the Statistics Division (STA/10), was held at ICAO Headquarters in Montréal from 23 to 27 November 2009, and carried out a comprehensive review of the current Statistics Programme.
- 2.1.3 The Air Transport Bureau (ATB) is responsible for the management of the Statistics Programme, as well as for studying the needs of users and capabilities of providers to assist the Council in adjusting this programme as required by changing circumstances. This function involves the timely collection, processing, analysis, estimation, and dissemination of civil aviation data relating to commercial air carriers, airports and air navigation services, civil aircraft on register and aircraft accident rates.
- 2.2 Contents of the current Statistics Programme
- 2.2.1 Statistics of **commercial air carriers** (i.e., scheduled airlines and non-scheduled operators) are collected in a number of subject areas, the scope and frequency varying according to the size of the operator (in terms of traffic or fleet) and the types of services provided. The following data collected for commercial air carriers are available on-line:

Traffic: These statistics are collected in Form A on a monthly or annual basis, according to the size of the carrier, and they provide measures of aircraft activity, passenger, freight and mail traffic, for both scheduled and non-scheduled services of the airline.

Form A-S, similar in content to Form A, collects the total commercial air carrier traffic and capacity data produced by the air carriers of a State. The main purpose of Form A-S is to capture additional operational information for each State, in particular, those related to aircraft kilometres, departures and hours flown. Such data are important when assessing the needs for airspace, airport and air navigation systems and the rate of aircraft accidents.

Fleet and Personnel: Annual data collected in Form D cover the number, capacity and utilization for each type of aircraft in the airline's fleet and expenditures for personnel, by category.

Financial Data: The revenues and expenses of airlines and their assets and liabilities are reported annually in Form EF.

- *Traffic flow*: Two series of traffic flow statistics are collected in respect of the international scheduled services of airlines, i.e., on-flight origin and destination (Form B) on a quarterly basis and traffic by flight stage (Form C) on an annual basis.
- 2.2.2 For **international airports**, selected by States in accordance with an established formula, monthly traffic statistics are collected in quarterly reports (Form I). Data collected through Form I is restricted to the main international airports of a State, and hence do not cover the over-all airport system of a State. Therefore, a summary traffic data for all the airports in a State are collected in Form I-S. In parallel, airport financial data (revenues, expenses and net capital investments) are reported in Form J.
- 2.2.3 The financial data relating to **air navigation services** (revenues, expenses and net capital investments) are collected annually in Form K. Corresponding traffic statistics (number of flights moving through a FIR/UIR) are collected in Form L.
- 2.2.4 Contracting States have been reporting the number of **civil aircraft on the national register** as of 31 December each year since 1961 in Form H.
- 2.2.5 It is noteworthy that since September 2002, ICAO implemented the Integrated Statistical Database (ISDB) system to collect process and disseminate all the aviation statistics submitted by Contracting States through the ICAO Statistics Programme. As the new database is web-enabled, ICAO Contracting States and regional organizations are able to access the data therein via the Internet, through a standard browser.

3. STA/10 RECOMMENDATIONS

- 3.1 The Tenth Session of the Statistics Division (2009) reviewed the Statistics Programme and acknowledged events both within the Organization and in the world at large, necessitating the review of the Organization's data requirements. The adjustments recommended by STA/10 include improvements in the existing collections, analysis and dissemination of data through active participation of Contracting States, cooperation and coordination with other organizations, the adoption of new ICAO classifications and definitions, as well as new data collections. The Council, at the Third Meeting of its 190th Session, in May 2010, approved, with no changes, all recommendations and conclusions of the Tenth Session of the Statistics Division (STA/10).
- 3.2 Recommendations which require immediate action by States
- 3.2.1 **Appendix A** to this working paper provides specific Recommendations [i.e. 1/2, 1/3, 2/1 a) and b), 2/2, 3/1 b) and 12/1] for which immediate action by States is required.
- 3.3 Aircraft accidents and serious incidents
- 3.3.1 The Division reviewed the current practice adopted by the Organization in the collection of accidents and serious incidents data and the benefits that will flow from introducing a new Air Transport Reporting Form GS to collect data and recommended collection of such data on an annual basis (Recommendation 11/2).
- 3.4 Civilian licensed personnel data
- 3.4.1 As air traffic is growing, the demand is increasing for licensed personnel (pilots, maintenance personnel, engineers and air traffic controllers). It is essential to estimate current and future requirements for licensed personnel on active duty and corresponding training capacity in Contracting States in order to lay the groundwork for human resources development and planning, institutional capacity building as well as related funding and policy measures. The new data will give

ICAO the ability to quantify the status as well as potential surplus or shortage of personnel and/or institutional capacities and to take adequate, timely measures to address these human resources and training issues on the one hand, and to anticipate adverse effects of these shortcomings on the safety of airline operations on the other hand. A new form for data collection on licensed personnel and training capacity on an annual basis was recommended (Recommendation 9/1).

3.5 New ICAO database on aircraft movements

3.5.1 An implementation of a global database on aircraft movements across Flight Information Regions (FIRs) and Upper Flight Information Regions (UIRs) was proposed. It was noted that the availability of such a database was critical to various analyses needed in support of civil aviation infrastructure planning and policy advisory and that the establishment of such a database would enhance the contribution of the Statistics Programme to the Organization's ability to measure the achievement of its Strategic Objectives with regard to safety, environmental protection and efficiency. It was also noted that the implementation of the proposed database would require active support from Contracting States, ANSPs and their affiliates (Recommendation 7/1).

3.6 Fuel consumption by commercial air carriers

3.6.1 In view of the growing importance of aviation environmental protection issues, it appears that ICAO, Contracting States and other civil aviation stakeholders need time-series data on aviation fuel consumption in order to support the broad range of analyses requested. As ICAO plays a leading role in aviation environmental protection, it is imperative that the Organization maintains a reliable database on fuel consumption. These data are required to evaluate the effectiveness of the various measures introduced to improve aircraft technology, the efficiency of the different Air Traffic Management (ATM) initiatives implemented, to monitor the environmental policies and to develop performance indicators to follow-up the progress towards the fuel efficiency goals settled (Recommendation 10/1).

3.7 Appointment of the focal points for aviation statistics

3.7.1 It was noted that there was a general consensus among the participants of the STA Division on the need to appoint a focal point (or more if necessary) according to subject matter, in the national civil aviation administration of each Member State. Consequently, the Division adopted the appropriate recommendation (Recommendation 12/1) also stressing that the list of focal contact points should be made available through the ICAO secure website.

3.8 Implementation of the Recommendations and Conclusions of the STA/10 Division

- 3.8.1 The recommendations and conclusions are contained in the report of the Tenth Session of the Statistics Division (2009) (Doc 9932) which is available on the ICAO-NET (www.icao.int/icaonet).
- 3.8.2 The recommendations that require immediate action by States (see para. 3.2 above) were dispatched to Member States under cover of States Letter SD 13/1-10/60 from 30 September 2010.
- 3.8.3 The STA/10 Recommendations [i.e. 1/1, 2/1 c), 2/3, 3/1 a), 4/1, 8/1, 9/1, 10/1, 11/2], as well as the Conclusions that pertain to new editions of the ICAO Air Transport Reporting Forms, will become effective 1 January 2012. It should be noted that the filing of data pertaining to Form M Fuel Consumption and Traffic Data is required for both 2010 and 2011 and the introduction of Form GS Accidents and Serious Incidents (rec. 11/2) is no longer necessary due to revisions to existing safety data collection processes. Revised reporting forms, reporting instructions (including the implementation process with respect to reporting) and Conclusions were disseminated under cover of

a State Letter SD 13/1-11/66 dated 19 August 2011. The list of the new and revised forms and associated STA/10 Recommendations appears in **Appendix B** to this working paper.

4. ASSISTANCE TO CONTRACTING STATES

- 4.1 Several Statistics Divisions considered that benefits might be derived from short visits to States by experts in aviation statistics, who would study the local circumstances, determine necessary statistical functions and provide initial guidance to airlines, airports and government personnel in carrying out these functions. It was notably recognized that many States need manpower training and short-term expert assistance for the organization and development of their aviation statistics.
- 4.2 Statistical Workshops are conducted by ICAO on the basis of State sponsorship, in different regions of the world and they constitute a continuous, systematic effort to improve the quality of aviation statistics. These informal workshops provide those responsible in administrations, airlines and airports for the preparation of statistics for ICAO, an opportunity to work out solutions to practical problems.
- 4.3 In the most recent development, the 37th Session of the ICAO Assembly in addressing the ICAO Statistics Programme in Appendix B of Resolution A37-20, Consolidated statement of continuing ICAO policies in the air transport field, requested the Council to make arrangements, on an appropriate basis, for assistance to be given upon request to Contracting States by personnel of the Secretariat for the improvement of their civil aviation statistics and their statistical reporting to the Organization.

5. ACTION BY THE MEETING

- 5.1 The meeting is invited to:
 - a) note the recommendations described in this working paper; and
 - b) bring to the attention of appropriate authorities in order to properly comply with ICAO data reporting requirements. The compliance with the data reporting on the new and updated Air Transport Reporting Forms starts from 1 January 2012.

APPENDIX A

FOURTH MEETING OF THE TRAFFIC FORECASTING SUB-GROUP

(TF SG/4)

IMMEDIATE ACTION ON SPECIFIC STA/10 RECOMMENDATIONS

RECOMMENDATION 1/2

The Division recommends that:

States should be reminded that under the current definitions, international traffic includes data for cabotage services and that these data should be reported whenever data for international traffic is requested for the relevant Air Transport Reporting Forms, in particular in Forms A — *Traffic, commercial air carriers*, B — *On-flight Origin and Destination* (OFOD) and C — *Traffic by Flight Stage* (TFS).

Action by States — Review of definitions of domestic and cabotage air services

States are reminded that cabotage services data should be reported whenever data for international traffic is requested. In this regard, Recommendation 1/3 related to the adoption of a classification for statistical purposes should be noted.

RECOMMENDATION 1/3

The Division recommends that:

The proposed classification (as shown in the Appendix to the report on Agenda Item 1) of civil aviation activities be adopted for statistical purposes.

Action by States — Review of the Classification and Definitions Used for Civil Aviation activities

It is noteworthy that the proposed classification is applicable with immediate effect.

RECOMMENDATION 2/1 A) AND B)

The Division recommends that:

With regard to the On-flight Origin and Destination (OFOD) data collection, Air Transport Reporting Form B, ICAO should:

- a) remove all publication restrictions in the selection of the city-pairs for this data collection; and
- b) publish all data submitted six months after the end of the quarterly reporting period concerned.

Action by States — Review of on-flight origin and destination (OFOD) publication rules and data

It is noteworthy that the release of publication restrictions is applicable with immediate effect.

RECOMMENDATION 2/2

The Division recommends that:

- a) for statistical purposes ICAO should use the definition of low-cost carriers (LCCs) as shown in the *Manual on the Regulation of International Air Transport* (Doc 9626);
- b) ICAO should annually update the list of LCCs based on the feedback from Member States; and
- c) ICAO should show both the IATA and the ICAO codes associated with each LCC.

Action by States — Definition and identification of low-cost carriers (LCCs)

Low-cost carriers (LCCs) list (preliminary compilation established by the Secretariat) is posted on the STA/10 website at http://www.icao.int/STA10/Documentation.htm. States are requested to report on the appropriateness of the categorization of those carriers and provide other categorizations that are not listed to facilitate the updating of the list before it is posted on the ICAO Secure site.

RECOMMENDATION 3/1 B)

The Division recommends that:

b) ICAO should implement a new quarterly survey to obtain basic financial parameters of major air carriers in their regions to be collected through the ICAO Regional offices.

Action by States — Quick monitoring system (QMS) of commercial air carrier financial data

ICAO Regional Offices will dispatch a new quarterly survey pertaining to basic financial parameters to be collected from major air carriers in their region (Attachment B refers).

RECOMMENDATION 12/1

The Division recommends that:

- a) Member States should name one or more focal contact points for aviation statistics within their national civil aviation administration; and
- b) the list of focal contact points should be made available through the ICAO secure website.

Action by States — Review of the Current Reporting Status Commercial Air Carriers and Review of the Current Reporting Status: Airports and Air Navigation Service Providers

States are requested to name one or more focal contact points for aviation statistics within national civil aviation administrations. The list of focal contact points will be made available through the ICAO secure website.

APPENDIX B

FOURTH MEETING OF THE TRAFFIC FORECASTING SUB-GROUP $(TF\;SG/4)$

LIST OF NEW AND REVISED FORMS AND ASSOCIATED STA/10 RECOMMENDATIONS

REVISED AND NEW FORMS	STA/10 RECOMMENDATIONS
Form A — Traffic — Commercial Air Carriers	R-1/1, R-1/3 and R-2/3
Form B — On-Flight Origin and Destination	R-2/1 c)
Form D — Fleet and Personnel — Commercial Air Carriers	R-1/3
Form EF — Financial Data — Commercial Air Carriers	R-3/1 a) and R-3/2
Form H — Civil Aircraft on Register	R-8/1 a) 1) and 2)
Forms I and I-S — Airport Traffic	R-4/1
Forms J — Airport Financial Data	Conclusions-5&6/1
Form K — Air Navigation Services Financial Data	Conclusions-5&6/1
Form M (New) — Fuel Consumption Data	R-10/1 and R-1/3
Form N (New) — Aviation Personnel Licensing and Training	R-9/1