



第十届统计专业会议

2009年11月23日至27日，蒙特利尔

议程项目 1：民用航空统计——国际民航组织的分类和定义

第九届统计专业会议以来的发展情况

(由秘书处提交)

摘要

本文件介绍了第九届统计专业会议所通过的各项建议的实施程度，以及本组织内外的一些活动情况，这些活动主要推动了确定有必要召开第十届统计专业会议以审查本组织新的数据要求。

专业会议的行动在第4段。

1. 引言

1.1 根据统计专家组第三次会议（STAP/13）的建议，1997年9月22日至26日在蒙特利尔举行了第九届统计专业会议（STA/9）。此后，自从上次各国有机会正式审查国际民航组织的统计方案至今已有十一年过去了。但是，在此期间，理事会代表各国管理了此方案，并且每三年在编制本组织预算而对本组织的工作方案进行定期的三年期审查过程中，监测了统计方案的效力。

1.2 第九届统计专业会议通过了19项建议[参阅第九届统计专业会议的报告（Doc 9703号文件）]。前五项涉及到对报告的说明需要进行的修改，这是由于经济监管环境的变化相应地影响了一些报表所引起的。另外九项建议涉及到改变一些特定数据的收集，而最后五项涉及到与管理统计方案有关的问题。

1.3 本文件的目的是提供关于实施第九届统计专业会议各项建议的背景情况，以及本组织内外的一些活动的情况，这些活动主要推动了确定有必要召开第十届统计专业会议（STA/10）。这一会议的主要目的是，审查本组织在航空安全、效率及保安、以及环境保护等领域中发挥积极主动的作用方面而对新数据的要求。

2. 第九届统计专业会议各项建议的通过及实施

2.1 按照航空运输委员会（ATC）在第 153 届会议其第六次会议上的建议，除了拟议的将机场货运和邮件业务合并（航空运输报表 I）之外，它仍保留了其分开形式，理事会批准了第九届统计专业会议的所有建议。然而，理事会决定把一些建议推迟到其敲定了本组织 1999 年、2000 年和 2001 年期间的预算之后再实施。这些到 1999 年 3 月才最后批准。

2.2 以下各段简要归纳了理事会所采纳的各项建议的实施情况。本工作文件的附录概述了这 19 项建议及其各自实施的程度。

2.3 对统计方案的修改：2000 年，秘书处发布了航空运输报表的新版本，其中包括了两份新表（表 A-S 和 I-S），它们载有第九届统计专业会议通过的关于定义、报告的说明、及在必要时对报表结构所作的修改。还有，作为所建议的修改的一部分，停止了报表 G（航空器事故）¹。

2.4 统计方案的自动化：1999 年 3 月，理事会同意划拨资金以加强国际民航组织的统计方案。这些资金的大部分用于一个对基于 Oracle 软件的国际民航组织综合统计数据库进行分析和设计。此任务于 2000 年 10 月底完成。

2.5 在此工作基础上，2000 年 12 月，理事会批准了一些追加资金来进行该新数据库的开发、试验和实施。2001 年 6 月开始了该项目这一阶段的工作，国际民航组织新的综合统计数据库（ISDB）于 2002 年 9 月全部投入运行。在 STA/10-IP/1 号信息文件中载有关于综合统计数据库主要特点的描述及其目前和计划的最新情况。

2.6 2004 年 2 月，由于各缔约国已经可以通过国际民航组织的保密网站在线获取国际民航组织的统计资料，作为一项节省费用的措施，本组织停止了统计摘要的出版。（参阅 2004 年 2 月 27 日的 EC 7/1.4-04/4 号国家级信件）。

2.7 商业化：随着通过了关于统计数据商业化的建议 19，国际民航组织就本组织定期从各国收集的统计资料所生成的特殊数据报告向第三方收费。但是，在过去这些活动中的收入相对甚微，因为它只向顾客收取准备数据所用时间的费用。2004 年，采取了一项新的商业政策，与一些商业实体开始了合伙向第三方销售统计数据。

2.8 2008 年，通过这些商业活动销售的国际民航组织统计资料，为本组织产生了约 300 000 美元的额外收入。

3. 对国际民航组织数据需求有影响的其他活动

3.1 近年来，国际民航组织发挥了积极主动的作用，通过审计来监测各国对本组织所通过的国际民用航空公约各附件中的标准和建议措施（SARPs），特别是关于那些涉及安全和保安问题的附件的执行情况。

¹ 根据理事会的决定，随后停止了每年关于民用航空活动和民用驾驶员执照的问卷。目前正在向第十届统计专业会议提议收集关于航空器事故和持有执照人员的新数据，供会议审议。

3.2 此外，在编制 2005 年—2007 年三年期预算期间，为了重新确定本组织的工作重点，使国际民航组织的作用更加有效和高效，理事会通过了一些本组织 2005 年—2010 年期间的战略目标。它们是：

- A — 安全——加强全球民用航空安全；
- B — 保安——加强全球民用航空保安；
- C — 环境保护——将全球民用航空对环境的不利影响减至最小；
- D — 效率——提高航空运行的效率；
- E — 连续性——保持航空运行的连续性；和
- F — 法治——加强规范国际民用航空的法律。

与这些目标一起，理事会还通过了一些高层指标（HLIs）来监测本组织在达到其目标方面取得的进展情况。所制定的这些指标，是以国际民航组织目前可用的统计数据为基础的，但不一定是最有效的。除了高层指标外，国际民航组织还需要有其他的统计资料来更详细地衡量其在空中航行规划和环境保护领域里所采取行动的有效性。

3.3 统计专家组第十四次会议的建议（STAP/14）——统计专家组第十四次会议注意到了第九届统计专业会议（STA/9）所通过的各项建议及其实施的程度。

4. 专业会议的行动

4.1 请专业会议注意到本文件所载的信息。

APPENDIX

LEVEL OF IMPLEMENTATION OF THE RECOMMENDATIONS ADOPTED BY THE NINTH SESSION OF THE STATISTICS DIVISION (STA/9)

(Montreal, 22-26 September 1997)

RECOMMENDATION 1

THE DIVISION RECOMMENDS THAT:

For the purpose of reporting statistics to ICAO a revenue passenger is defined as follows:

“Revenue passenger”: a passenger for whose transportation an air carrier receives commercial remuneration.

Notes:

- a) This definition **includes**, for example, (i) passengers travelling under publicly available promotional offers (for example “two-for-one”) or loyalty programmes (for example redemption of frequent flyer points); (ii) passengers travelling as compensation for denied boarding; (iii) passengers travelling at corporate discounts; (iv) passengers travelling on preferential fares (government, seamen, military, youth, student etc); and
- b) This definition **excludes**, for example, (i) persons travelling free; (ii) persons travelling at a fare or discount available only to employees of air carriers or their agents or only for travel on the business of the carriers; (iii) infants who do not occupy a seat.”.

Level of Implementation: Implemented in the 2000 edition of the relevant Air Transport Reporting Forms.

RECOMMENDATION 2

THE DIVISION RECOMMENDS THAT:

- a) for purposes of reporting air carrier statistics to ICAO, all operational and traffic items are to be reported by the operating carrier, including code-shared, franchised, pooled, blocked off charter, blocked space arrangements, joint services and leased aircraft services. In this context the term *operating carrier* refers to that carrier whose flight number is being used for air traffic control purposes; and
- b) definitions of all the terms specified in a) be included accordingly in the *Manual on the ICAO Statistics Programme*.

Level of Implementation:

- a) implemented in the 2000 edition of the relevant Air Transport Reporting Forms; and
- b) not implemented as currently there is no Manual. The intention was to create an on-line Manual which would be significantly different from the previous editions once the ISDB was fully implemented, but no funds have been available for this.

RECOMMENDATION 3

THE DIVISION RECOMMENDS THAT:

For the purposes of classifying flight stages when reporting air carrier statistical data to ICAO the following definitions apply:

“International” - A flight stage with one or both terminals in the territory of a State, other than the State in which the air carrier has its principal place of business, should be classified as international.

“Domestic” - A flight stage not classifiable as international. Domestic flight stages include all flight stages flown between points within the domestic boundaries of a State by an air carrier whose principal place of business is in that State. Flight stages between a State and territories belonging to it, as well as any flight stages between two such territories, should be classified as domestic. This applies even though a stage may cross international waters or over the territory of another State.

Note: In the case of multinational airlines owned by partner States, traffic within each partner State should be reported separately as domestic and all other traffic as international.”

Level of Implementation: Implemented in the 2000 edition of the relevant Air Transport Reporting Forms.

RECOMMENDATION 4

THE DIVISION RECOMMENDS THAT:

For the purpose of reporting air carrier statistics to ICAO, scheduled air services are defined as:

“Services provided by flights scheduled and performed for remuneration according to a published timetable, or so regular or frequent as to constitute a recognizably systematic series, which are open to direct booking by members of the public; and extra section flights occasioned by overflow traffic from scheduled flights”.

Level of Implementation: Implemented in the 2000 edition of the relevant Air Transport Reporting Forms.

RECOMMENDATION 5

THE DIVISION RECOMMENDS THAT:

- a) Air Transport Reporting Forms A-1 and A-2, currently in use, be merged into a single Air Transport Reporting Form A;
- b) this new form is to be completed on a monthly basis (to be reported monthly or for three consecutive months of each quarter at the discretion of the reporting entity):
 - (i) for each of a State's carriers having combined traffic (international plus domestic, scheduled plus non-scheduled) of at least 90 per cent of the State total tonne-kilometres (scheduled and non-scheduled) performed; and
 - (ii) for each carrier with a total traffic of at least 100 million total tonne-kilometres performed per year (based on the previous year's data);
- c) on an annual basis for each of the State's remaining carriers whose fleet exceed 200 tonnes aggregate maximum take-off mass; and
- d) a similar form to be developed by the Secretariat to be completed on an annual basis summarizing all carriers of a State including, where possible, those with smaller fleets (i.e. carriers with fleets not exceeding 200 tonnes aggregate maximum take-off mass).

Level of Implementation: Subparagraphs a) to c) were Implemented in the 2000 edition of the relevant Air Transport Reporting Forms; d) New reporting Form A-S introduced in 2000.

RECOMMENDATION 6

THE DIVISION RECOMMENDS THAT:

The new Air Transport Reporting Form A should be simplified by eliminating under non-scheduled services the need to identify separately the items related to inclusive tours, namely sub-items 15 a) and 17 a) in the current Form A-1 and 4 a) and 6 a) in the current Form A-2 dealing with passenger numbers and passenger-kilometres performed respectively.

Level of Implementation: Fully implemented in the 2000 edition of Air Transport Reporting Form A.

RECOMMENDATION 7

THE DIVISION RECOMMENDS THAT:

- a) "foreign" cabotage traffic (i.e traffic carried between city-pairs in a country other than the one where the reporting carrier has its principal place of business) should be included in the data reported to ICAO on Form B; and
- b) these data be published in the form of country totals, indicating for each country which foreign air carriers are involved in the traffic.

Level of Implementation: b) is not implemented. Insufficient data reported. They would not meet the publication restriction rules (see Recommendation 8).

RECOMMENDATION 8

THE DIVISION RECOMMENDS THAT:

In order to enhance the usefulness of the programme of On-Flight Origin and Destination (OFOD) statistics and to reduce publication delays, ICAO should:

- a) authorize the publication of data collected EITHER (i) when the threshold reporting level of a specified percentage of the world's international scheduled traffic is reached OR (ii) one year after the end of the quarterly reporting period concerned, whichever is earlier;
- b) make every effort to encourage States to agree to a reduction in the current reporting threshold of 84 per cent;
- c) encourage States to report in column e) of Form B those carriers involved in code shared traffic on flights operated by the carrier whose data are being reported;
- d) consider the publication of OFOD data by country-pair and sub-regional pair, in addition to publication by city-pair and applying the existing confidentiality criteria on a country or sub-regional rather than city-pair basis;
- e) explore the practicability of providing advance access to OFOD data for States and/or original reporting entities for which data have already been submitted for the period concerned; and
- f) keep the issues of reporting threshold and confidentiality under review with a view to their further liberalization.

Level of Implementation: a) and b) continue to be the rules guiding the publication of OFOD; c) a new column (e) was never implemented. Unlikely air carriers would be able to report these data which come directly from the air carriers own statistical systems; d) not implemented on-line due to shortage of funds, but available on request, e) not a practical option from a systems point of view, and f) this subject to be discussed in STAP/14.

RECOMMENDATION 9

THE DIVISION RECOMMENDS THAT:

- a) ICAO review the proposed new Air Transport Reporting Form EF-1 in Appendix F to this Report with a view to its refinement and adoption;
- b) the new Form EF-1 include a section where States can include the relevant operational and traffic data required to calculate unit revenues and costs when:
 - (i) the fiscal and calendar year are not the same when the annual Form A is being submitted; and/or

- (ii) the figures reported in Form A are not in accordance with the revenue and cost data reported in Form EF-1. In this case the reason for the difference between the two sets of capacity and traffic figures should be clearly stated; and
- c) ICAO develop a new data reporting form for smaller air carriers (those reported on an annual basis for traffic data) equivalent to the existing Form EF-2 in content but consistent with the revised Form EF-1.

Level of Implementation: Fully implemented in the 2000 edition of Air Transport Reporting Form EF.

RECOMMENDATION 10

THE DIVISION RECOMMENDS THAT:

- a) the current Air Transport Reporting Forms D-1 and D-2 be merged into a single Form D;
- b) in Part 1 of the new Form D two additional columns be included, one under “size of aircraft” showing the average payload capacity (tonnes) and another under “utilization” showing the number of total aircraft kilometres flown; and
- c) for smaller air carriers (i.e. those for which only annual traffic data is being reported on the new Form A, including, where possible those with fleets not exceeding 200 tonnes aggregate maximum take-off mass), personnel need only be reported in three categories: (i) pilots and co-pilots, (ii) cabin attendants, and (iii) all other personnel.

Level of Implementation: Fully implemented in the 2000 edition of Air Transport Reporting Form D.

RECOMMENDATION 11

THE DIVISION RECOMMENDS THAT:

- a) to the extent that the needs of ICAO to publish statistics on accidents and safety rates can be met by the data collected under the ADREP programme, the collection of information on civil aircraft accidents through Form G should be discontinued;
- b) the present time series of published safety data be continued without interruption in all the ICAO publications concerned; and
- c) ICAO continues to accord safety statistics priority consistent with the fundamental role of safety in the mandate of the Organization.

Level of Implementation: a) Form G was discontinued; b) data has continued to be published in the relevant ICAO publications; and c) deserved priority is being given to safety statistics.

RECOMMENDATION 12

THE DIVISION RECOMMENDS THAT:

With regard to Air Transport Reporting Form I:

- a) States should report on a monthly basis (for three consecutive months each quarter) individual airport traffic for those principal airports having a combined traffic of at least 90 per cent of total international commercial traffic (scheduled and non-scheduled) of all airports of the State or all those airports having no less than 1 000 international traffic units a year, whichever is less restrictive, where a traffic unit is defined as being equivalent to 1 000 passengers or 100 tonnes of freight or mail;
- b) States should report on an annual basis the total sum of the commercial air transport traffic figures for all airports of that State; and
- c) the figures for freight and mail tonnes loaded, unloaded and total be shown under a single combined "freight and mail" heading.

Level of Implementation: Implemented in the 2000 edition of Air Transport Reporting Form I, and the introduction of Form I-S. The proposed change in subparagraph c) was rejected by Council.

RECOMMENDATION 13

THE DIVISION RECOMMENDS THAT:

In Air Transport Reporting Form K:

- a) the elements in Part I (revenues) should be retained; and
- b) of the elements in Part II (expenses) only total expenses by expense item should be retained along with the total by facility or service (i.e. ATS, COM, MET, SAR, and AIS). Moreover, the allocation to en-route, airport and non-aeronautical utilization of the total of all the expenses by item should be reported whenever possible.

— the elements in Part III (capital assets) should be retained.

Level of Implementation: Fully implemented in the 2000 edition of Air Transport Reporting Form K.

RECOMMENDATION 14

THE DIVISION RECOMMENDS THAT:

In the annual questionnaire on civil aviation activities and civilian pilot licences Section 2, dealing with commercial air transport operations not being reported on an ICAO Air Transport Reporting Form, be deleted.

Level of Implementation: Section 2 was deleted since these data were now to be captured through the new reporting Form AS. With regard to the annual questionnaire, this was subsequently deleted by the

Council when reviewing the results of the Ninth Meeting of the Statistics Division due to budgetary limitations (State Letter SD 13/1-99/48, dated 9 April 1999).

RECOMMENDATION 15

THE DIVISION RECOMMENDS THAT:

ICAO pursue as a matter of priority:

- a) the development of common airport, air carrier and other codes with IATA and other organizations concerned;
- b) in the short-term, or where common codes are not possible, the provision to States and other reporting entities of the correlations amongst the different codes existing; and
- c) more timely allocation of codes by the Organization to entities requesting them.

Level of Implementation: These codes are under the purview of the Air Navigation Bureau, who was duly informed of this Recommendation. Since January 2008, the *Location Indicators* (Doc 7910) published by ICAO contains both the ICAO codes as well as the corresponding IATA codes.

RECOMMENDATION 16

THE DIVISION RECOMMENDS THAT:

- a) ICAO should continue to pursue as a high priority the comprehensive programme for increased automation of the collection, analysis and transmission of aviation statistics amongst the Organization, aeronautical authorities, airports and other interested parties which was the subject of Recommendation 1 of the Eighth Session of the Statistics Division; and
- b) in particular, the Organization should:
 - (i) actively promote the submission of statistics in electronic form;
 - (ii) explore the practicability of providing electronic access to statistics prior to publication for States and/or original reporting entities for which statistics have already been submitted for the period concerned; and
 - (iii) give due attention to related training needs, both within the Organization and in many States.

Level of Implementation: a), b) (i) and b) (ii) were implemented when the new Integrated Statistics Database (ISDB) for the ICAO Statistics Programme became operational in September 2002; b) (iii) is covered through the regular informal Regional Statistics Workshops.

RECOMMENDATION 17

THE DIVISION RECOMMENDS THAT:

- a) ICAO remind States of the requirement to file statistical reports in accordance with Articles 54 (i), 55 (c) and 67 of the Convention on International Civil Aviation and Assembly Resolution A4-19;
- b) in so doing, ICAO draw attention to the fact that the transfer of operation of air carriers, airports and air navigation facilities from Governments to autonomous or privatized entities emphasizes the need for transparent and publicly disclosed traffic and financial statistics, notably to assure consumer protection and equitable charging consistent with Article 15 of the Convention; and
- c) ICAO to explore ways and means to give early access to statistical data to those reporting entities for which statistical data have been submitted in a timely manner.

Level of Implementation: The Secretary General drew to the attention of Contracting States a) and b) when reporting the results of the Ninth Session of the Statistics Division (State letter SD 13/1-98/19, dated 17 April 1998); c) Since data from the ISDB, are now available on-line, 80 per cent of the statistical data received by ICAO are loaded into the system within 10 working days of having been received.

RECOMMENDATION 18

THE DIVISION RECOMMENDS THAT:

For classification into ICAO statistical regions:

- a) Armenia, Azerbaijan, Belarus, Estonia, Georgia, Latvia, Lithuania, Republic of Moldova, Russian Federation, and Ukraine be assigned to Europe; and
- b) Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan be assigned to Asia.

Level of Implementation: Implemented since 2000.

RECOMMENDATION 19

THE DIVISION RECOMMENDS THAT:

While maintaining the free entitlement of Contracting States to ICAO publications and the agreed free exchange of information with other international organizations, ICAO adopt a charging policy for the sale of statistics and responses to enquiries for statistics as follows:

- a) published statistics be provided, on request, to original reporting entities (such as air carriers and airports) for which data have been submitted for the period(s) concerned at solely an administrative handling fee;

- b) published statistics be provided to other entities and to the general public at the average cost of publication (including overhead costs) rather than at the marginal cost of printing or computer processing as at present;
- c) responses to *ad hoc* enquiries for statistics be provided at the average or opportunity cost of provision (including overhead costs) rather than as a free public service or at the marginal cost of printing or processing as at present; and
- d) revenues generated by the Statistics Programme be set against the cost of the Programme.

Level of Implementation: Commercialization of the statistical data was started immediately following the approval of these Recommendations by Council. In 2004, ICAO ceased to publish the Digests of Statistics in favour of an on-line product. At the same time, a new commercial policy was adopted when joint venture were initiated with commercial entities effectively discarding the recommendations contained in a), b) and c). With reference to d) above, since January 2008, all monies earned by ICAO through its commercial activities are deposited in the Ancillary Revenue Generation Fund (ARGF), and as such this recommendation is no more implemented.

— END —