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Regional Differences in International Airline Operating Economics: 2008 and 2009

Approved by the Secretary General and published under his authority

International Civil Aviation Organization

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Chapter 1

INTRODUCTION

1.1 This circular has been prepared pursuant to ICAO Assembly Resolution A37-20, Appendix G, which requests the Council to instruct the Secretary General to issue periodically "a study on regional differences in the level of international air transport operating costs, analysing how differences in operations and input prices may affect their levels and the impact that changes in costs may have on air transport tariffs". This study on *Regional Differences in International Airline Operating Economics: 2008 and 2009* succeeds the study which covered the years 2006 and 2007 and was published in 2010 (Circular 327-AT/189) and five previous studies covering the years 1992 to 2005. Prior to that, similar studies were published annually under the title *Regional Differences in Fares, Rates and Costs for International Air Transport*, which covered the years 1976 to 1992. The studies are now published biennially, although data have continued to be collected and analysed on an annual basis. This circular focuses on the years 2008 and 2009 and makes some comparisons with 2007, the last year for which data are available in Circular 327-AT/189.

1.2 For 17 international route groups, comprising all international routes, passenger, freight and mail revenue yield data are presented in Chapter 2 for scheduled services. With reference to the same route groups, regional differences in the costs related to the scheduled service passenger yields are presented in Chapter 3. The major causes of regional differences in costs are identified in Chapter 4. In Chapters 2 and 3, the 2009 results are compared with those for 2007.

1.3 The sources of data used in the study are given in Appendix 1, together with information on the sample sizes on which revenue and cost data are based. The method of analysis used in the study is presented in Appendix 2, together with information on the margins of uncertainty, a factor which should be borne in mind when considering the results of studies of this nature. The questionnaires and information on responses appear in Appendix 3.

1.4 Unless indicated otherwise, all references to "cents" in this circular mean "U.S. cents" and all references to "dollars" mean "U.S. dollars".

SUMMARY OF MAJOR FINDINGS

Passenger yields (Chapter 2)

On a worldwide basis, the overall average yield (excluding incidental revenues) is estimated at 9.91 cents and 8.79 cents per passenger-kilometre performed for 2008 and 2009, respectively. However, the route group averages vary from a high of 15.0 cents in local Africa to a low of 7.5 cents on routes across the North/Mid-Pacific in 2008 and from a high of 13.5 cents to a low of 6.6 cents on the same route groups in 2009. Due to inadequate representation in reporting, three route groups: between and within Central America and the Caribbean, local South America and local Middle East are not included in this analysis, although their estimates are included in the worldwide totals for both years. The estimated average yield for scheduled services in 2009 showed a decrease of some 8 per cent from the level in 2007. Comparable data by route group between 2007 and 2009 are available for 14 individual route groups. Except for one (between North America and Central America/Caribbean) all of them showed decreases, ranging from a decline of some 13 per cent for routes across the North Atlantic to almost 2 per cent for routes between North America/Central America/Caribbean and South America.

Unit operating costs (Chapter 3)

The average (weighted) operating cost – attributable to the carriage of passengers on passenger and combination aircraft – per passenger-kilometre for all international routes is estimated at 10.55 cents and 9.37 cents in 2008 and 2009, respectively. The figures for individual route groups range from a high of 15.7 cents on routes within Europe to a low of 8.6 cents on routes across the Pacific and Mid-Atlantic in 2008 and from a high of 14.2 cents on routes within Europe to a low of 7.2 cents on routes across the North/Mid-Pacific in 2009. These estimated costs include such items as depreciation and sales commission paid (which are sometimes accounted for differently) but exclude costs attributable to the carriage of freight and mail.

An overall comparison between data for 2009 and corresponding data for 2007 shows a decrease of about 0.5 per cent in the estimated passenger cost per available seat-kilometre, from 7.11 cents to 7.07 cents. Since the worldwide average load factor at 75.4 per cent in 2009 showed a deterioration of about 1 percentage point, as compared to 2007, the cost per passenger-kilometre shows an increase of about 0.8 per cent, from 9.30 cents to 9.37 cents.

As far as the individual route groups are concerned, between 2007 and 2009, 8 out of 14 route groups for which comparable data were available showed increases in average costs per passenger-kilometre ranging from about 1 per cent on routes across the Mid-Atlantic to almost 8 per cent for those between North America/Central America/Caribbean and South America. Decreases ranging from some 5 per cent (on routes within Africa) to less than 1 per cent (on routes within Europe and across the South Pacific) were experienced on the remaining 6 route groups.

Revenue/cost ratio (Chapter 3)

The ratio of passenger revenues to passenger costs for international routes as a whole is estimated at 0.94 for both 2008 and 2009, with the ratios for individual route groups varying from 0.80 to 1.10 for 2008 and from 0.75 to 1.05 in 2009. Taking into account the relevant incidental revenues associated with international passenger traffic and the margins of uncertainty in estimated revenues and costs (discussed in Appendix 2), the revenue/cost ratio for all international passenger traffic is estimated to be between 0.91 and 0.97 in 2008 and between 0.90 and 0.98 in 2009.

Of the 14 route groups analysed in this study for which comparable data were available, 13 showed a decreases in their respective revenue/cost ratios between 2007 and 2009, while the remaining 1 showed only a marginal improvement. For 5 of the 13 route groups where there was a decrease in their respective revenue/cost ratios in 2009 compared to 2007, yields expressed in cents per passenger-kilometre showed decreases as did unit costs expressed in terms of cents per seat-kilometre; however, the decreases in unit costs were smaller than the decreases in yields on these route groups. Some improvements in load factors on 2 of these 5 route groups were insufficient to compensate for the difference between costs and yields. Some deterioration in load factors that occurred on the remaining 3 route groups added to the difference in costs and yields and worsened the ratios further. For 7 of the 13 route groups where there was a decrease in the revenue/cost ratios, yields decreased and unit costs per seat-kilometre increased. Even though on some of these route groups the load factors improved, these improvements were not sufficient enough to compensate for the difference between costs and yields. The remaining one route group of 13 where the revenue/cost ratios deteriorated witnessed an increase in yields but at the same time unit costs per seat-kilometre increased even more and the difference between costs and yields could not be compensated by an improvement in the load factor.

Summary of the causes of regional differences in costs (Chapter 4)

Comparison of the various factors contributing to differences from the world average cost per passenger-kilometre was carried out for 14 route groups for which adequate data were available for both 2008 and 2009. Stage length and average block speed were the most important factors for 11 route groups in both years. Other factors making significant contributions included load factor, which was the most important factor for 2 route groups both in 2008 and 2009 and aircraft mix, which was the most important single factor for 1 route group both in 2008 and 2009. In addition, an important proportion of the differences in route group costs from the world average cost was due to the other factors which do not lend themselves to precise analysis.