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Chapter 1

INTRODUCTION

1.1 This circular has been prepared pursuant to ICAO Assembly Resolution A38-14, Appendix F, 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: 2010 and 2011* succeeds the study which covered the years 2008 and 2009 and was published in 2012 (Circular 332-AT/191) and six previous studies covering the years 1992 to 2007. 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 2010 and 2011 and makes some comparisons with 2009, the last year for which data are available in the previous Circular (Circular 332-AT/191).

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 2011 results are compared with those for 2009.

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. The questionnaire 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 9.59 cents and 10.23 cents per passenger-kilometre performed for 2010 and 2011, respectively. However, the route group averages vary from a high of 12.6 cents in local Europe to a low of 7.6 cents on routes across the Mid-Atlantic in 2010 and from a high of 15.9 cents in local Africa to a low of 8.1 cents on the routes across the Mid-Atlantic in 2011. Due to inadequate representation in reporting, three route groups in 2010: between and within Central America and the Caribbean, local Middle East and local Africa, and two for 2011: between and within Central America and the Caribbean, 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 at 10.23 cents in 2011 showed an increase of some 16 per cent from the level in 2009. Comparable data by route group between 2009 and 2011 are available for 14 individual route groups. All of them showed increases, ranging from a growth of some 3 per cent for routes within Europe to some 24 per cent for routes across the North and Mid-Pacific.

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 9.55 cents and 10.45 cents in 2010 and 2011, respectively. The figures for individual route groups range from a high of 13.5 cents on routes within Europe to a low of 7.4 cents on routes across the North/Mid-Pacific in 2010 and from a high of 15.0 cents within Africa to a low of 8.4 cents on routes across the North/Mid-Pacific in 2011. 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 2011 and corresponding data for 2009 shows an increase of about 14 per cent in the estimated passenger cost per available seat-kilometre, from 7.07 cents to 8.05 cents. Since the worldwide average load factor at 77.0 per cent in 2011 showed an improvement of about 1.6 percentage points as compared to 2009, the cost per passenger-kilometre shows an increase of about 11.5 per cent, from 9.37 cents to 10.45 cents.

As far as the individual route groups are concerned, between 2009 and 2011, 13 out of 14 route groups for which comparable data were available showed increases in average costs per passenger-kilometre ranging from about 20 per cent on routes across the South Pacific to some 9 per cent for those within North America. One route group, i.e. within Europe, showed no change in the costs per passenger-kilometre.

Revenue/cost ratio (Chapter 3)

The ratio of passenger revenues to passenger costs for international routes as a whole is estimated at 1.00 for 2010 and 0.98 for 2011, with the ratios for individual route groups varying from 0.85 to 1.10 both in 2010 and 2011. Taking into account the relevant incidental revenues associated with international passenger traffic, the revenue/cost ratio for all international passenger traffic is estimated to be 1.04 in 2010 and 1.01 in 2011.

Of the 14 route groups analysed in this study for which comparable data were available, 9 showed an increase in their respective revenue/cost ratios between 2009 and 2011, while the remaining 5 showed no change or only a marginal improvement. For 7 of the 9 route groups where there was an improvement in their respective revenue/cost ratios in 2011 compared to 2009, yields expressed in cents per passenger-kilometre showed increases as did unit costs expressed in terms of cents per seat-kilometre; however, the increases in costs were smaller than the increases in yields on all these 7 route groups. These smaller increases in costs combined with improvements of load factors resulted in the improvement of revenue/cost ratios. On 2 route groups, where the increase in unit costs (per available seat-kilometre) was marginally higher than the increase in yields, improvement in load factor was sufficient to compensate for that difference; this resulted in slight improvement of revenue/cost ratio in 2011 compared to 2009 on these 2 route groups. For 4 out of 5 route groups where there was no change or only marginal improvement in the relevant revenue/cost ratio, the increases in unit costs per available seat-kilometre outpaced increases in yields; however, moderate improvements in load factors compensated for the difference in these increases. For the remaining one route group out of the 5, the increase in unit costs per available seat-kilometre was compensated by the increase in yields, and a small improvement in the load factor did not have much effect on the ratio.

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 each of the 14 and 15 route groups for which adequate data were available for 2010 and 2011, respectively. Stage length and average block speed were the most important factors for 12 route groups in both years. Other factors making significant contributions included load factor, which was the most important factor for 1 and 2 route groups in 2010 and 2011, respectively, and aircraft mix, which was the most important single factor for 1 route group in 2010. Two factors, i.e. aircraft mix and stage length and average block speed were equally the most important factors for 1 route group in 2011. 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.