Cir 327
AT/189

Regional Differences in International Airline Operating Economics: 2006 and 2007

Approved by the Secretary General
and published under his authority

International Civil Aviation Organization

TABLE OF CONTENTS

Chapter 1

INTRODUCTION

1.1 This circular has been prepared pursuant to ICAO Assembly Resolution A36-15, 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: 2006 and 2007* succeeds one which covered the years 2004 and 2005 and was published in 2008 (Circular 316-AT/135) and four previous studies: one covering the years 2002 and 2003 (published in Circular 310-AT/132), one covering the years 2000 and 2001 (published in Circular 306-AT/128), one covering the years 1998 and 1999 (published in Circular 293-AT/125) and one covering the years 1992 to 1997 (published in Circular 280-AT/117). 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 or every other year, although data have continued to be collected and analysed on an annual basis. The present circular focuses on the years 2006 and 2007 and makes some comparisons with 2005, the last year for which data are available in the previous Circular (Circular 316-AT/135).

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 2007 results are compared with those for 2005.

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. Facsimiles of 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 8.84 cents and 9.51 cents per passenger-kilometre performed for 2006 and 2007, respectively. However, the route group averages vary from a high of 15.7 cents in local Middle East to a low of 6.3 cents on routes across the North/Mid-Pacific in 2006 and from a high of 14.9 cents in local Europe to a low of 6.9 cents on the routes across the North/Mid-Pacific in 2007. Due to inadequate representation in reporting, two route groups for 2006: between and within Central America and the Caribbean and local Africa, and three for 2007: 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 2007 showed an increase of some 13 per cent from the level in 2005. Comparable data by route group between 2005 and 2007 are available for 13 individual route groups. All of them showed increases, ranging from a growth of almost 4 per cent for routes within Europe to some 23 per cent for routes across Mid-Atlantic and across the South 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 8.84 cents and 9.30 cents in 2006 and 2007, respectively. The figures for individual route groups range from a high of 14.2 cents on routes within the Middle East to a low of 6.7 cents on routes across the Pacific in 2006 and from a high of 14.2 cents on routes within Europe to a low of 6.9 cents on routes across the North/Mid-Pacific in 2007. 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 2007 and corresponding data for 2005 shows an increase of about 11 per cent in the estimated passenger cost per available seat-kilometre, from 6.39 cents to 7.11 cents. Since the worldwide average load factor at 76.4 per cent in 2007 showed an improvement of close to two percentage points, as compared to 2005, the cost per passenger-kilometre shows an increase of about 8.8 per cent, from 8.55 cents to 9.30 cents.

As far as the individual route groups are concerned, between 2005 and 2007, all 13 route groups for which comparable data were available showed increases in costs per passenger-kilometre ranging from about 16 per cent on routes across the South Pacific to some 1.5 per cent for those within North America.

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 2006 and 1.02 for 2007, with the ratios for individual route groups varying from 0.80 to 1.10 for 2006 and from 0.85 to 1.15 in 2007. Taking into account the relevant incidental revenues associated with international passenger traffic and the margins of uncertainty in estimated revenues and costs, the revenue/cost ratio for all international passenger traffic is estimated to be between 1.00 and 1.06 in 2006 and between 1.01 and 1.08 in 2007.

Of the 13 route groups for which comparable data were available, 11 showed an increase in their respective revenue/cost ratios between 2005 and 2007, while the remaining 2 showed no change or only marginal improvement. For 10 of the 11 route groups where there was an improvement in revenue/cost ratios in 2007 compared to 2005, 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 increase in yields on all these 10 route groups. These smaller increases combined with improvements of load factors resulted in the improvement of revenue/cost ratios. On one route group, 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 that difference and resulted in slight improvement of revenue/cost ratio in 2007 compared to 2005 on that route group. For the remaining two route groups where the revenue/cost ratio virtually did not change, the increases in unit costs per available seat-kilometre outpaced increases in yields; however, moderate improvements in load factors compensated the difference in these increases.

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 the 15 and 14 route groups included in the analysis for 2006 and 2007, respectively. Stage length and average block speed were the most important factors for 12 and 11 route groups in 2006 and 2007, respectively. Other factors making significant contributions included load factor, which was the most important factor for 2 route groups both in 2006 and 2007 and aircraft mix, which was the most important single factor for 1 route group both in 2006 and 2007. 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.