## ICAO

## Circular 348-AT/193

## Regional Differences in International Airline Operating Economics: 2012 and 2013



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INTERNATIONAL CIVIL AVIATION ORGANIZATION

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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: 2012 and 2013 succeeds the study which covered the years 2010 and 2011 and was published in 2014 (Circular 339-AT/197) and seven previous studies covering the years 1992 to 2009. 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 2012 and 2013 and makes some comparisons with 2011, the last year for which data are available in the previous Circular (Circular 339-AT/197).
$1.2 \quad$ 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 2013 results are compared with those for 2011.
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 10.29 cents and 10.33 cents per passenger-kilometre performed for 2012 and 2013, respectively. However, the route group averages vary from a high of 16.6 cents in local Africa to a low of 7.9 cents on routes across the Mid-Atlantic in 2012 and from a high of 16.5 cents to a low of 8.3 cents on the same route groups in 2013. Due to inadequate representation in reporting, three route groups for 2012 : between and within Central America and the Caribbean, local South America and local Middle East, and two for 2013: 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 10.33 cents in 2013 showed an increase of some 1 per cent from the level in 2011. Comparable data by route group between 2013 and 2011 are available for 15 individual route groups. 11 of them showed increases, ranging from a growth of some 1 per cent for routes between Europe/Middle East/Africa and Asia/Pacific to some 8 per cent for routes between Canada, Mexico and the United States. On the remaining 4 route groups decreases occurred ranging from drops of some 1 per cent in local Asia/Pacific to 4 per cent in local Europe 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 was 10.26 cents and 10.14 cents in 2012 and 2013, respectively. The figures for individual route groups range from a high of 15.2 cents on routes within Africa to a low of 8.5 cents on routes across the North/Mid-Pacific in 2012 and from a high of 15.0 cents within Africa to a low of 8.4 cents on routes across the Mid-Atlantic in 2013. 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 2013 and corresponding data for 2011 shows a marginal decline of about 0.3 per cent in the estimated passenger cost per available seat-kilometre, from 8.05 cents to 8.03 cents. Since the worldwide average load factor at 79.2 per cent in 2013 showed an improvement of 2.2 percentage points as compared to 2011, the cost per passenger-kilometre shows a decrease of about 3 per cent, from 10.45 cents to 10.14 cents

As far as the individual route groups are concerned, between 2011 and 2013, 12 out of 15 route groups for which comparable data were available showed decreases in costs per passenger-kilometre ranging from about 7 per cent on routes across the Mid-Atlantic to some 1 per cent for those between North and Central America and within South America. Two route groups, i.e. over the South Atlantic and across the North/Mid-Pacific showed increases of about 2 and 4 per cent, respectively, while one route group, i.e. within Africa 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 2012 and 1.02 for 2013, with the ratios for individual route groups varying from 0.90 to 1.15 in 2012 and from 0.95 to 1.15 in 2013. 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 2012 and 1.05 in 2013.

Of the 15 route groups analysed in this study for which comparable data were available, 9 showed an increase in their respective revenue/cost ratios between 2011 and 2013, while 5 showed no change and

On 5 out of 9 route groups where there was an improvement in revenue/cost ratios in 2013 compared to 2011, unit costs expressed in cents per available seat-kilometres decreased. These decreases along with improvements in load factors and increases of yields resulted in the improvements in the ratios. On the remaining 4 route groups there were increases or no change in in the unit costs per available seatkilometre; however, increases in both load factors and yields were sufficient enough to push the revenue/cost ratios on these route groups up compared to 2011.

On 2 out of 5 route groups where there was no change in the revenue/cost ratios in 2013 compared to 2011, unit costs per available seat-kilometre dropped down but the yields decreased even more. The improvements in load factors were not sufficient to increase the ratio. On the remaining 3 route groups unit costs per available seat-kilometre went up or did not change. These route groups saw their load factors improve, which pushed the unit cost per passenger-kilometre down. However, the yields did not increase enough to improve the ratio in 2013 compared to 2011.

On the route group where the revenue/cost ratio deteriorated in 2013 compared to 2011, there was an increase in yield and load factor but it was not sufficient to compensate for the increase in the unit cost per available seat-kilometre.

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

Comparison of the various factors which contributed to differences from the world average cost per passenger-kilometre was carried out for the 14 and 15 route groups included in the analysis for 2012 and 2013, respectively. Stage length and average block speed were the most important factors for 11 route groups both in 2012 and 2013. Other factors making significant contributions included load factor, which was the most important factor for 2 and 1 route groups in 2012 and 2013, respectively, and aircraft mix, which was the most important single factor for 1 route group in 2013. Two factors, i.e. stage length and average block speed and load factor were equally the most important factors for 1 and 2 route groups in 2012 and 2013, respectively. 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.

