

Benchmarking Airport Charges Level

1. Background

- 1.1 The goal of the Aviation Strategy¹ is to strengthen the competitiveness and sustainability of the entire EU air transport value network. Tackling limits to growth in the air and on the ground, in particular by boosting the efficiency of airport services, is one of the three key priorities that the Commission has identified.
- 1.2 The Thessaloniki Forum of Airport Charges Regulators is tasked with 1) working on and making recommendations for a better common implementation of the Directive 2009/12/EC on Airport Charges (the “ACD”) and 2) promoting best practices in economic regulation of airports.² The ACD requires Member States to assign responsibility for supervising the setting of airport charges to Independent Supervisory Authorities (“ISAs”).
- 1.3 In this paper, the Forum provides recommendations on the use of Benchmarking of Airport Charges as a useful tool in assessing an airport’s³ performance as concerns the level of charges it applies against comparable airports.
- 1.4 The recommendations herein have been formulated by the Working Group of the Thessaloniki Forum on Airport Charges, taking into consideration the views of the airport and airline communities. Members of the working group are Belgium, Denmark, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Switzerland and the United Kingdom.
- 1.5 This report has been adopted by the Thessaloniki Forum in December 2019.

2. Caveats

- 2.1 The recommendations do not represent the views of the European Commission and do not in any way change the requirements of the ACD.
- 2.2 The scope of this paper does not include arriving at a position on whether the ACD should be reviewed.
- 2.3 This report should not be used as a limitation or constraint for Member States to apply their own methodologies when circumstances, regulation or other causes recommend it.

¹ https://ec.europa.eu/transport/modes/air/aviation-strategy_en

² <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32009L0012&from=EN>

³ Throughout this document: Airport refers to the Airport Managing Body or the Airport Authority. User or Airline refers to airlines operating or planning to operate at the airport during the period in which the charges being consulted on will be applicable (airlines planning to operate should formally notify the airport of this intention prior to the consultation). ISA refers to the Independent Supervisory Authority referred to in the Airport Charges Directive and designated by the individual Member State.

- 2.4 These recommendations will be kept under review and changed as and when deemed necessary by the Thessaloniki Forum.

3. Introduction to Benchmarking

- 3.1 Benchmarking is a strategy tool used by airport managers or regulators serving different purposes by comparing performance metrics with the most efficient performances of other companies inside and outside the industry. The question is if benchmarking, as an analysis tool, can be used by a regulator, by comparing airport charges, to inform regulatory decisions on whether to apply a regulation on charges and to decide on the type and degree of intervention.
- 3.2 Benchmarking can be a means to compare airport charges and can be used to determine whether an airport imposes charges above the charges of peer airports. On the other hand distortions could be introduced if inappropriate comparisons are made.
- 3.3 An unjustified and comparatively high level of charges can be an indicator of an airport charging above competitive levels (misusing its market power) and, as such, regulatory intervention may need to be considered to protect consumers' interests.
- 3.4 Many aspects have to be assessed in applying a specific benchmarking methodology, such as the choice of prices to be compared, the methodology to be used, the weighting coefficients and also the optimal use of the comparison results.
- 3.5 An inherent weakness of the comparison is the difficulty of gathering all the necessary information and the significant number of assumptions that need to be made to adjust the data set for reasons of comparability.
- 3.6 Aspects of an airport's activity, other than airport charges, that can also be benchmarked include specific indicators in the areas of safety and security, service quality, productivity, operating cost, profitability and environmental impacts.
- 3.7 In some jurisdictions, benchmarking methodologies are provided in airport Concession Agreements or National Regulation as in the Netherlands and Portugal.

4. Criteria to be defined for the selection of comparator airports

- 4.1 In order to ensure a reliable benchmarking process, key airport characteristics should be assessed and selected so as to identify similar characteristics, permitting a clear classification in similar groups of airports and a comparison of an airport to its most efficient peers. In that regard, peer airports should be selected according to objective, appropriate and verifiable criteria⁴ that affect the airports' metrics and performance.

⁴ Judgment of the Court, Case C-177/16, par.41

- 4.2 Criteria either similar with the criteria set in the European Commission's State Aid Guidelines⁵ or pertaining to general industry aspects could be set out when considering an appropriate peer group, as follows and not in order of importance:
- i. traffic volume (load factors, airport traffic). For example, different traffic levels have a different impact on relative charges levels.
 - ii. type of traffic (business or leisure or outbound destination, long medium and short haul, transfer passengers/OD). The relative importance of non aeronautical revenues.
 - iii. type and level of airport services provided: higher charges may reflect higher service standards or the provision of services that in other airports are financed by third parties, i.e. fire services.
 - iv. the proximity and connectivity of the airport to a large city.
 - v. the number of inhabitants in the catchment area of the airport and the prosperity of the surrounding area (GDP per capita). For example, higher costs of materials and labour are reflected in the cost base of the charges.
 - vi. the regulatory model: price capped charges, different charges structure (per use or per passenger), etc.
 - vii. infrastructure characteristics (similarities in the provision of runways, taxiways and aprons for the airlines, terminals' structure and operations for the passengers –e.g. shops, banking, other passenger facilities-, baggage handling systems, hangars and cargo facilities, car parking, offices).
 - viii. aviation costs, business model of the airlines that operate in the airport (hub vs. point to point, full service compared to low cost⁶ or 'value' service, etc).
 - ix. quality standards.
 - x. public/private ownership: a public or private status affects differently the accounts of airports and can also affect the performance of an airport complicating comparisons between airports.

⁵ Communication From The Commission, Guidelines on State Aid to airports and airlines, 2014/C 99/03

⁶ICAO, DOC 9626

'a low-cost carrier generally refers to an air carrier that has a relatively low-cost structure in comparison with other comparable carriers and offers low fares or rates. Such a carrier may be independent, the division or subsidiary of a major carrier or, in some instances, the ex-charter arm of an airline group.'

'a full-service carrier is an air carrier, typically a traditional national or major carrier that operates on a relatively extensive route network (thus also referred to as a legacy carrier or network carrier) and provides a full range of services including different seating classes, in-flight entertainment, meals and beverages, on-board store, and ground facilities such as waiting lounges for premium class passengers or frequent flyer programme members;'

- xii. common ownership: several airports are in joint ownership. The cost for some corporate overheads are likely to be shared between the airports and may also complicate comparisons between airports and may undermine their usefulness and effectiveness.
 - xii. till structure.
- 4.3 For selecting a credible sample of peer airports, similarities in the above criteria should be identified and metrics have to be produced. When recorded, all the above metrics should be weighted according to the contribution attributed to each metric to the price finally compared. These indicators should be the prime criteria for the sample selection.
- 4.4 For the selection of comparator airports, stakeholders may also be consulted on the methodology for that selection.
- 4.5 A sample of comparators based on the largest representative volume of peer airports that can reasonably be selected in the time available, is likely to be necessary for having a 'statistically valid' sample for a robust analysis. There is a trade-off to be found between the sample size and the degree of similarity required to have a meaningful analysis. As there is no one-size-fits-all rule, this should be done on case to case basis.
- 4.6 Difficulties involved in the enforcement of the above criteria, involve risks for any price comparison.⁷

5. What to compare for an airport charges benchmarking

- 5.1 Present and historical data for the basket of comparator airports for similar accounting periods are required.
- 5.2 In cases of **benchmarking airport charges**, discounts and incentives⁸, taxes and ground handling or other differently treated costs should be accounted for. For example, incentives may lead to traffic growth which affects airport unit cost. Also, the charge structure and the similarity of airport services covered by the charges should be analysed (peak/off peak charges, environmental charges (emissions, noise, etc), types of charges and services/infrastructure included (that in same airports

⁷ Opinion of Advocate General, Case C-177/16, par.39-40: '...comparing prices across different geographic markets, competitors and/or time periods also presents risks. Markets are rarely so homogenous that a meaningful comparison can be made immediately and automatically. A number of 'adjustments' to the data which emerges from the market(s) used as a point of comparison may be necessary before that data can be used to determine the benchmark price...To start with, so far as concerns geographic comparisons, elements such as — to name but a few — domestic taxes, the particular characteristics of the national labour market and local consumers' preferences may significantly affect the final prices of the relevant product or service. 24 With regard to comparisons across competitors, it should not be overlooked that differences in prices may simply reflect different qualities: a more expensive product may objectively be (or be merely perceived to be) of superior quality.'

⁸ Leigh Fisher, Comparing and Capping Airport Charges at Regulated Airports, 2013

could be bundled). For example, security is financed either through passenger charges or in some cases through security charges.

- 5.3 **Aeronautical Revenues** per Passenger or per movement can also be compared as a good proxy for actual charges after discounts, if available per airport and not group of airports (e.g. AENA, Aéroports de Paris).
- 5.4 **Total revenues** could also be selected and divided by the number of passengers or movements, with corrections regarding the nature of activities corresponding to the revenues, for reasons of proper comparability.

6. Benchmarking of airport charges methodology

- 6.1 In each case the benchmarking method should be correct and sufficient for the purposes of establishing the benchmark price.
- 6.2 Correctness implies that for example, possible peers have not been excluded arbitrarily and that the exercise focuses on the most efficient benchmarks.
- 6.3 Sufficiency implies that the method of the comparison followed is sufficient for the purposes of establishing the efficient benchmark price.
- 6.4 Consideration should be given to differences in charges that may simply reflect different qualities⁹ or input costs. At airports in the scope of ACD, charges are calculated taking into account expected operating and capital expenditure costs, the historical value of the regulatory asset base, the costs of financing as well as forecast traffic and commercial margins depending on the till system. Also, charges may be affected by quality performance indexes, inflation and productivity targets.
- 6.5 Differences between airports (efficiency levels, quality, costs financed by the government, the level of use of capacity, current investment activities as they may have large impact on charges since depreciation is usually included in the relevant cost base, etc.) should also be adequately taken into account.
- 6.6 The availability of correct and relevant data (including discounts and remedies) is a key factor of crucial importance for benchmarking.
- 6.7 Consulting benchmarking methodology with stakeholder airports and airlines could be useful in order to collect further information and ensure transparency.
- 6.8 Benchmarking studies should be in any case carefully assessed and stress tested to avoid subjective and one-dimensional conclusions.
- 6.9 For a ranking of the results that allows comparisons, corrections for inflation (CPI Index) or currency can be applied to the original data that is usually available in local

⁹ Opinion of Advocate General Wahl, Court of Justice of the EU, Case C-177/16, par.40

currency units.¹⁰

6.10 Errors can occur in cases of comparing prices without analysing all aspects influencing those prices.

6.11 The Forum realises, based on the above, that the benchmarking instrument should be applied with great caution in the economic regulation of airports.

7. Availability of data

7.1 Airport charges should be published on the websites of all airports, together with an explanation of their application, and should include an English translation.

8. Other aspects of airports that can be benchmarked, beside airport charges levels, but relevant to these

8.1 In order to fully understand the results of the charges benchmarking it is also important to have a service levels benchmarking of the same airports.

8.2 Other aspects in airport operations can also be compared:

- Levels of aviation Opex across airports, given that inherent differences in airports' operating environments (e.g. labour costs) are taken into account¹¹.

- **Profitability** (e.g. EBITDA, EBIT), even for across sectors comparisons.

- Cost of construction of similar infrastructures across airports or sectors (e.g. runways, taxiways, shopping malls, car parkings, connecting infrastructures etc.).

- **Quality** of Services and satisfaction indices: when transparent, appropriate and consulted with the industry, an appropriate set of benchmark indicators can be set. Benchmarking performed by airports should be independently run and based on indicators and techniques disclosed and well analysed in order to increase transparency.

- Capacity, both airside and landside.

The examples above illustrate the relevance of comparison of specific aspects of airports, beside charges. It might bring useful information to the regulator, especially when a benchmark on charges is unpracticable due to a limited sample of comparators.

Moreover, comparison across sectors can also be relevant for some specific dimensions. This allows widening the sample while at the same time aligning on best practices across sectors.

¹⁰ In some cases conversion of prices to Special Drawing Right (SDR) is preferred.

¹¹ <https://www.strategyand.pwc.com/media/file/Airport-operators-quest-for-efficiency.pdf>

9. Use of benchmarking on airport charges to inform the regulatory decisions

- 9.1 Concluding, it seems important to make the following observations. As a general principle¹², airport charges should reflect provision of services in the most cost effective manner and with an appropriate level of quality. Economic regulation should provide incentives to airports to set charges as above.
- 9.2 The **relative ranking** of the airport being assessed against its most relevant peer group comparator airports, as the result of the benchmarking analysis, can be used as one indication assessed against others and with recognition of all kind of shortcomings and uncertainties for each specific case, to facilitate regulatory decisions, unless otherwise specified by the ISA and other national authorities or specified in concession agreements.
- 9.3 In a market power assessment context, a benchmarking could be used as one indication assessed against others and with recognition of all kind of shortcomings and uncertainties for each specific case to assess if prices are too high and therefore might be an indicator of charges being above competitive levels, dominance and/or risk of abuse of significant market power.
- 9.4 Revenue or Return benchmarking could be used as an alert to further investigate if an airport might be abusing its market power (if it has a revenue/return considerably above its peers). A service quality benchmarking could also work as an alert assessed against others and with recognition of all kind of shortcomings and uncertainties for each specific case either for under-investing or abuse of market power, considering business model and market differentiations.
- 9.5 Also, as a positive side effect of conducting regular benchmarking studies, airports may have the incentive to improve their performance to achieve higher performance ranking.
- 9.6 Benchmarking could provide an authority with additional information when assessing the reasonableness of disputes about airport charges. ISAs should be cautious about using it on its own because of the limitations of comparability and heterogeneity of airports noted earlier in this paper.
- 9.7 Benchmarking of airport charges level cannot be recommended as a methodology in setting airport charges when most of the conditions required for a reliable benchmarking analysis are not met and when used in isolation, due to inherent limitations that can lead to charges not being related to the cost of providing the services and potentially leading to excessive pricing and/or inefficiencies.
- 9.8 When benchmarking of airport charges is not feasible, it might be relevant to consider benchmarking of other aspects of airport operations, such as costs of construction and levels of aviation OPEX, quality of services or cost of capital, given

¹² ICAO, Airport Economic Manual Doc 9562

that local differences are properly accounted for. For some aspects, such costs of capital, across sector comparison can provide useful information.

10. Benchmarking analysis paradigms in other sectors

- 10.1 In Italy, quantitative methods are being applied by ART to perform regulatory benchmarking of transport undertakings. In particular, ART has already applied the stochastic frontier analysis to assess the efficiency gap and fix efficiency targets in the motorway and regional railway sector and is considering the application of the method in other areas.
- 10.2 In the Netherlands, ACM has executed a cost benchmarking among European Gas Transmission System Operators as an input for charge regulation of the Dutch national gas transport network.

11. Issues raised by Stakeholders

- 11.1 In the meetings of the working group, associations of airlines and airports presented their views.
- 11.2 According to the Airlines representatives (A4E, ERA, AIRE, IATA) it is inappropriate to benchmark airport charges. Profitability and quality of service are more suitable to benchmark, as well as cost efficiency if local differences are properly accounted for. Benchmarking could bring value to the airports sector through out-of-industry comparisons, in competitive sectors, applied to clearly defined and specific areas such as CAPEX needed to deliver a multi-storey car-parking space, WACC achieved by developers in financing infrastructure and OPEX required to service large public-access buildings.
- 11.3 According to the Airports Council International (ACI-Europe), benchmarking should only be used for regulation with extreme caution. Benchmarking is one tool amongst others that a regulator can use. The primary purpose of benchmarking is for an airport operator to inform its own management decisions and aid the airport in traffic development. For that, airports use benchmarking to support traffic development and to demonstrate competitiveness. Airports operate under very different circumstances in terms of aviation activities, commercial activities, site constraints, governance and ownership structure, etc., and as a result, individual airports will find different performance indicators to be most relevant and useful. Airport benchmarking is divided into two types of comparisons: (1) internal (or self-benchmarking)—where an airport compares its performance with itself over time; and (2) external (or peer benchmarking). When comparing one airport to another, some of the typical factors that drive different results and should be considered in making comparisons include: passenger volume, capacity constraints, mix of international and domestic traffic, mix of local and transfer passengers, mix of passenger carrier service(network, low cost, charter), mix of passenger versus cargo activity, degree of outsourcing, range of services provided by the airport,

airport development program status, weather conditions, geographic location, urban versus rural location, physical size of the airport, public transportation access and usage, regulatory environment, local labor conditions, and ownership and governance structure. A consideration of the airport's investment cycle is paramount when benchmarking costs, capital expenditure or operating expenditure, or revenues. Ultimately, whether for airport management or for a regulator, in the view of ACI-Europe benchmarking should not be an end in itself.

Appendix A

Benchmarking example

PORTUGAL

The **Concession Agreement** for airport services in the Portuguese mainland and in the autonomous region of Madeira and Azores, signed between the Portuguese State and ANA - Aeroportos de Portugal, S.A. (hereafter referred to as the Concessionaire), establishes an airport charges benchmarking methodology.

The Benchmarking is applied biannually only in relation to the regulated charges of the Lisbon airport, that is an ACD airport.

The Concessionaire does the Benchmarking and presents its findings to the Portuguese Civil Aviation Authority (CAA), which has 30 days to validate them.

The Portuguese CAA replicates the benchmarking itself, in order to validate the data presented by the Concessionaire. This process has not been outsourced.

The benchmarking includes 12 airports already selected in the concession contract. The Portuguese CAA collects the charges information from the airports website, analyses the scope of the different charges in order to understand if they are comparable. Whenever a charge is not totally comparable with the others, the CAA contacts the airport in order to better understand what is included and what kind of adjustment is needed. Once these questions are cleared, the CAA applies the charges to the two specific cases that were defined in the concession agreement and computes the average cost per airport. The concession agreement defines the type of flight, plane, occupation rate and parking time to consider in the cost calculation.

The 12 airports that were incorporated in the concession agreement were **selected** based upon the business model. More precisely, the airports with a business model similar to Lisbon in terms of: being the hub for at least one airline; having low cost companies; serving a major city.

The charges benchmarking uses public information available at the 12 airports websites. The charges considered do not include the effect of any bilateral incentives agreed between airlines and airports. The benchmarking test was defined by the working group that developed the concession contract, considering inputs from stakeholders.

The benchmarking is performed on regulated charges: Landing fee (landing/ take-off); charge on main terminal for departing passengers; Security charge (only those which generate revenue for the airport operator); Parking and Air Bridges fees for one hour of usage; Special Assistance fee for Passenger with Reduced Mobility (PRM).

The benchmarking does not include air navigation charges, government taxes, handling, catering or fueling charges.