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ECONOMIC COMMISSION

Agenda Item 40: Economics of Airports and Air Navigation Services — Policy

A MECHANISM OF ECONOMIC INCENTIVES FOR QUALITY OF SERVICE AT INTERNATIONAL AIRPORTS IN BRAZIL

(Presented by Brazil)

EXECUTIVE SUMMARY

This working paper looks at the advisability of establishing an agenda for the discussion of economic incentives to promote quality of service at airports, using as an example Brazil's experience with these mechanisms and their results.

Action: The Assembly is invited to:

a) request the Council to establish a work programme to discuss economic incentives to promote quality of service at airports; and
b) request the Council to assess the possibility of developing a document on best practices for the mechanisms of economic incentives to promote quality of service at airports to serve as guidance for Member States interested in the matter.

Strategic Objectives:	This working paper relates to Strategic Objective D — *Economic Development of Air Transport.*
Financial implications:	Additional resources are not required.
References:	Not applicable.

[1] Spanish version provided by Brazil.

1. INTRODUCTION

1.1 According to the theory of regulation based on incentives and performance characteristics, public services delegated and provided by third parties must be regulated by incentive and performance-level mechanisms. Such mechanisms make it possible to obtain an adjustment based on results and not on means of production, thereby mitigating the problem of uneven information among entities.

1.2 Airports offer a variety of available services. Information on the cost of these services must be taken into account when charges are set by the regulator. Brazil adopted the airport concession model with the primary objective of promoting investment, but also personnel training measures, improvement of the flow of information with passengers and airlines, personnel training, optimization of processes and procedures in the sector, and improvement of the quality of airport infrastructure.

1.3 The service quality model adopted by the Brazilian government is based on the definition of parameters and metrics used to measure the services delivered at airports. Its aim is to incorporate into airport charges the result of QSI (quality of service indicator) measurement through the quality factor (C factor) obtained by the airport in question.

1.4 Given the relevance and usefulness of the subject, the purpose of this working paper is to establish an agenda for the formal discussion of the issue in the context of ICAO, taking into account the positive outcome of the Brazilian experience, and thus promoting the exchange of information and the assessment of other models used.

2. ECONOMIC INCENTIVES TO PROMOTE QUALITY OF SERVICE

2.1 Knowledge of the incentive mechanisms which countries use to make the delivery of services more efficient and to define their airport service quality targets is important to the understanding of the various regulatory frameworks and their results.

2.2 On a global scale, regulation has evolved toward a normative approach, adopting incentive and disincentive measures in order for regulated entities to display desired behaviour, which is generally associated with the improvement of service quality. Some of the principal documented mechanisms for promoting quality of service at airports are as follows: (i) publicizing of levels of service; (ii) adjustment of charges according to an index which reflects the level of service delivered; (iii) cost-reduction contracts; (iv) reduction of the tax burden; (v) recognition and prioritization of future contracts with the State (new airport holdings); and others.

2.3 These adjustment measures based on performance incentives encourage regulated entities to implement best practices for planning and operation and to achieve maximum efficiency taking into account the minimum parameters for quality of service. There is therefore a strong tendency to adopt efficiency and quality of service targets, through the application of measures involving penalties or bonuses for regulated entities, depending on the achievement or failure to achieve the objectives established by the regulator.

2.4 In Brazil, one of the main problems with regulation was the definition of the incentive to apply in order to promote quality of service at airports.

2.5 Thus, nationally, airport concession contracts have established that airport charges are to be adjusted annually in order to preserve the economic and financial balance agreed upon.

2.6 Brazilian economic regulation refers only to aviation activities (which are more susceptible to abuse of market power). Thus, the Brazilian model does not restrict, through any means, the development of commercial activities at an airport.

2.7 Charges are regulated according to a price cap model with non-discriminatory discounts which is widely recognized. Each airport in Brazil can impose six different types of charge: boarding (passenger), landing (weight), parking (weight), cargo, storage, and a connection charge which was recently created (passenger).

2.8 These charges are adjusted annually in accordance with a formula which takes into account three variables: IPCA (Brazilian consumer price index), an X factor (productivity factor), and a C factor (quality factor). The adjustment formula is thus as follows: IPCA - X – C. The X and C factors do not affect cargo and storage charges.

2.9 The charge adjustment formula includes the C factor, which relates to the quality of service measured at airports by means of the QSIs established under the concession contract. Thus, concessionaires must perform monthly assessments of their performance through the QSI.

2.10 The results obtained by means of the QSI will be used for the annual quality factor verification index (C factor) and their objective will be to incorporate the airport charges into the airport result.

2.11 In addition, the C factor can be applied on a case-by-case basis, with cumulative effects (similar to those of a compound interest rate) or non-cumulative effects (similar to those of a simple interest rate). Brazil approved the non-cumulative option at all airports using this model.

2.12 This option is the result of the regulator’s understanding that the level of service reflected by the QSI must be considered at every period and that incentives must be generated in accordance with the results obtained during each period. Thus, an excellent level of service in initial years will not have a cumulative impact on subsequent years unless the airport operator maintains the same level of service. There is therefore a constant incentive to maintain a high level of service at an airport.

2.13 As regards the application of the C factor, the value can vary from a 7.5% decrease to a 2% bonus in respect of charges, where the decrease is related to non-achievement of the desired minimum values for the aspects of service assessed, and the bonus is associated with the achievement of the objectives set for the aspects of service assessed.

2.14 This mechanism acts as a system of incentives, the balance between the maximum value of the regulated charge and the level of service delivered by the airport. As well, the C factor is valid until the subsequent charge increase (one year).

2.15 In Brazil, the QSI has been measured at Brasília International Airport (SBBR), São Paulo/Guarulhos International Airport (SBGR), and Viracopos/Campinas International Airport (SBKP) airports since February 2013. Their performance is reflected in the charge adjustments made in 2015 and 2016. SBSG airport has been measuring the QSI since June 2015, and the first charges affected

were those of 2016. SBCF and SBGL airports have been measuring the QSI since January 2015, but their performance will affect the charge adjustment for the year 2017.

2.16 The evolution of service quality at airport terminals can be seen in the results obtained for the C factor, presented in Table 1 below.

TABLE 1 – C FACTOR RESULTS FOR AIRPORTS UNDER CONCESSION

ICAO CODE	AD LOCATION	C FACTOR – 2015 (%)	C FACTOR – 2016 (%)
SBGR	GUARULHOS	- 0.2350	0.5450 [2]
SBBR	BRASILIA	0.4050	0.9450 [2]
SBKP	CAMPINAS	0.8050	1.1450 [2]
SBSG	SÃO GONÇALO DO AMARANTE	-	0.7000 [2]
SBCF	CONFINS	-	-1.3000 [3]
SBGL	RIO DE JANEIRO	-	0.0000 [3]

2.17 Lastly, the objective of having charges affected this way is to encourage the concessionaire to invest in improving the quality of airport services and infrastructure and thus to strike a balance between the value of the regulated charge and the quality of the service delivered by the airport.

3. CONCLUSION

3.1 This working paper invites the Assembly to request the Council to create an agenda for the discussion of economic incentives to promote airport service quality for the purpose of improving the corresponding regulation. This working paper also invites the Assembly to request the Council to assess the possibility of developing a document on best practices for the mechanisms of economic incentives to promote quality of service at airports in order to guide Member States interested in the matter.

3.2 It is appropriate and relevant to promote formal discussion, in the context of ICAO, of the economic incentives used by Member States to foster quality of service at airports.

3.3 This paper also discusses Brazil's experience with regulating quality services at airports by means of the quality of service indicators measured at airports under concession and their impact on the annual adjustment of charges at Brazilian airports.

— END —

[2] C factor results which will be applied to the 2016 charge adjustment of the Brasília (SBBR), Guarulhos (SBGR), Campinas (SBKP), and São Gonçalo do Amarante (SBSG) airports.

[3] The Confins (SBCF) and Galeão (SBGL) airports have conducted monthly assessments of their performance through quality of service indicators (QSIs) since 2015, but the concession contracts stipulate that QSI results will only be applied to charges, through the C factor, as of 2017.