



WORKING PAPER

ASSEMBLY — 40TH SESSION

EXECUTIVE COMMITTEE

Agenda Item 15: Environmental Protection – General provisions, Aircraft Noise and Local Air Quality– Policy and Standardization

CONTRIBUTIONS AND ADVANCES IN CIVIL AVIATION IN LATIN AMERICA IN TERMS OF NOISE AND LOCAL AIR QUALITY

(Presented by Costa Rica, and sponsored by LACAC Member States)²

EXECUTIVE SUMMARY

This working paper presents progress achieved by the Latin American region in the environmental field, regarding noise and local air quality, pursuant to Annex 16 and its various volumes, and Resolution A39-01 approved at the 39th session of the ICAO Assembly. Member States of the Latin American Civil Aviation Commission (LACAC) have proactively promoted initiatives to improve environmental performance by taking action to reduce noise and improve local air quality, reduce greenhouse gas emissions, and plan airport facilities, among other things, which have led to aeronautical regulations and major activities that have had successful results.

Action: The Assembly is invited to:

- a) Take note of the information presented herein;
- b) Take into account progress achieved by Latin American States in environmental protection and initiatives to implement ICAO standards on the subject;
- c) Continue to build States' capacities through seminars and workshops on the environment; and
- d) Promote specific action to give developing States access to funding and technology transfers.

<i>Strategic Objectives:</i>	This working paper relates to Strategic Objective E – Environmental Protection
<i>Financial implications:</i>	Additional financial resources are required for the implementation of environmental initiatives.

¹ Spanish version provided by Costa Rica

² Belize, Bolivia, Brazil, Costa Rica, Colombia, Cuba, Ecuador, El Salvador, Guatemala, Honduras, Jamaica, México, Nicaragua, Panama, Paraguay, Peru, Dominican Republic, Uruguay and Venezuela.

<i>References:</i>	<ul style="list-style-type: none">• Resolution A39-01 <i>Consolidated statement of continuing ICAO policies and practices related to environmental protection – General provisions, noise and local air quality.</i>• Resolution A21-07 <i>Guidelines related to the Environment and Civil Aviation in Latin America.</i>• <i>Strategic Plan of the Latin American Civil Aviation Commission (LACAC).</i>
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1. INTRODUCTION

1.1 In accordance with the Convention on Biological Diversity (2016), “the Latin America and Caribbean (LAC) region supports rich biological diversity, with around sixty per cent of global terrestrial life found within it, alongside diverse freshwater and marine flora and fauna. The LAC region’s biomes extend from wetlands and coastal ecosystems to deserts, tropical forests, extensive savannah grasslands and high-altitude Andean habitats. The lowland forests are amongst the most species-rich on Earth, and the mountain forests and moorlands (*páramos*) of the Andes host a wide range of endemic and narrow range species”. Furthermore, the Central American Atlantic coast has the second largest coral reef in the world. “This regional diversity is driven by a number of environmental factors, including a complex evolutionary history and highly variable geography, geology and climate.” The foregoing reflects the importance of environmental protection and improvement, which makes it possible to cope with the effects of climate in order to avoid degradation of the region’s existing biodiversity.

1.2 In view of the foregoing, the environmental issue has been widely discussed in the framework of activities conducted by various working groups of the Latin American Civil Aviation Commission (LACAC), resulting in the preparation of various documents and instruments that have informed initiatives in LACAC Member States.

1.3 Importantly, plans have been made in LACAC’s current working biennium to update resolutions and recommendations on the environment so that they can be reflected in the endeavours of Member States and in the updating of documents approved by ICAO on the subject.

1.4 Similarly, each Latin American State has promoted initiatives domestically to implement ICAO standards, recommended practices and resolutions, primarily on noise, local air quality, land use planning and management among other subjects, which are updated every three years during Assembly sessions.

2. ANALYSIS

2.1 With regard to noise, States have incorporated requirements into their laws in order to minimize its environmental impact, pursuant to Annex 16, Volume I, and have promoted work with airport operators and with aircraft manufacturers.

2.2 For example, Brazil has worked with Embraer on the certification of its aircraft and, as a result, new types of aircraft have been certified recently in accordance with noise requirements established by the Annex 16, Volume I, and under the Brazilian Civil Aviation Regulation 36.

2.3 Furthermore, with regard to work with airports, operational measures have been established in order to limit noise by establishing maximum noise levels, engine testing areas, operational noise abatement procedures and operational restrictions, as can be observed in various aeronautical information publications (AIP) and regulations, in action promoted by the Civil Aeronautical Institute of Cuba and in the significant results obtained by implementing new noise abatement procedures at Peru's Jorge Chávez International Airport. Furthermore, States have promoted environmental studies on noise in order to support more appropriate noise mitigation measures, as in the work which is under way at El Salvador's Saint Oscar Arnulfo Romero y Galdámez International Airport.

2.4 Importantly, noise abatement procedures have been included in national regulations such as Peru's Law No. 30370, which regulates environmental management of aircraft-generated noise, in order to regulate noise generated by the aircraft of national and international airline companies operating in Peruvian territory, the Dominican Republic's RAD 14.43 (b) and Cuba's RAC-16.

2.5 With regard to land use planning and management requirements relating to the application of sustainable development, indicators have been incorporated and have been used by the State from time to time to verify and assess environment activities in terms of aeronautical noise (pollution in areas near airports), air quality (pollution in areas near airports which can be affected by emissions from airport activity), waste (total waste production, sorted as organic, hazardous, recyclable waste), inventories of greenhouse gases (total GHG emissions by mobile and fixed surface sources), biodiversity (direct and indirect airport impact on the diversity of fauna and flora in surrounding areas), water resources (final consumption and its effect on the quality of water resources used inside the airport), and use of material and resources (re-use).

2.6 Provisions on land use planning and management that have been incorporated into national regulatory frameworks include the amendment to Brazilian Civil Aviation Regulation (RBAC) 161, which now provides for airport noise zoning plans; as a result, 40 specific noise zoning plans (PEZR) and 1,764 basic noise zoning plans (PBZR) were recorded in ANAC as at 29 March 2019. Similarly, in the Dominican Republic, noise emission and environmentally disturbing or harmful in sounds produced by fixed or moving surface equipment and machinery have been regulated in RAD 14.141(d). Furthermore, the Cuban State has established indicators for the conduct of the relevant noise study in new projects.

2.7 Moreover, air safety protection features have been included in environmental regulations, such as Peru's Legislative Decree No. 1278, approving the General Law on Solid Waste in Peru, and the related regulation, incorporating provisions on the construction and operation of infrastructure used for the final disposal of solid waste near airports and requiring a protection area with a 13 km radius from the airport reference point (ARP). A reference can also be made to D.S. No. 005-2019-MINAM which sets maximum permissible limits on noise generated by aircraft operating in the national territory.

2.8 In connection with the environmental law, provisions relating to local air quality have been included in regulations, such as Brazil's amendments to the Brazilian Civil Aviation Regulation 34 on aeronautical engine emissions, which has incorporated the transitional law on nvPM mass connected with laws on emissions on non-volatile particulate matter, which entered into force in February 2019, and will apply to new types of engine from 2020.

2.9 Other local air quality initiatives include the introduction of continuous descent and ascent profiles, reduction in APU use at international airports, use of renewable energy to power airport terminals (successful initiative in the Dominican Republic), request for valid technical vehicle inspection certificates for all vehicles entering restricted airport zones (initiative promoted by Peru), through which greenhouse gas emission has been reduced in areas adjacent to airports.

3. CONCLUSION

3.1 Aware of the importance of environmental protection, LACAC Member States have individually and regionally, through LACAC, driven major initiatives to improve the environmental performance of the Latin American civil aviation sector, as reflected in the various initiatives described above.

3.2 Furthermore, the initiatives show the importance of tasks coordinated among various stakeholders in order to improve environmental performance, whether in the aeronautical field (Civil Aviation Authorities, airport concessionaires and airline companies) or specifically in the environment field (each State's national environmental authorities).

3.3 LACAC Member States recognize ICAO's valuable efforts and guidelines in air transport-related environmental issues and urge it to continue this work and its assistance to States in order to strengthen action taken to care for and protect world environmental systems.

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