



WORKING PAPER

ASSEMBLY — 40TH SESSION

TECHNICAL COMMISSION

Agenda Item 30: Other issues to be considered by the Technical Commission

GLOBAL STANDARDS RELATED TO THE DESIGN, CERTIFICATION AND OPERATIONS OF WATER AERODROMES

(Presented by Indonesia and Canada)

EXECUTIVE SUMMARY

States have long since recognized the importance of developing seaplane bases (water aerodromes), which very well could be the best mode of transportation for States in geographical isolation, in addition to providing recreational access and evacuation in emergencies. There are no ICAO global provisions specifically related to the design, certification and operations of water aerodromes for seaplane operations. Additional provisions are required to further improve safety and encourage a strong civil aviation sector that can promote and sustain social and economic progress through responsible tourism, for example, which is one of the major economic drivers for Small Island Developing States (SIDS) and other States that depend heavily on water aerodrome operations. ICAO can further contribute to the United Nations (UN) 2030 Agenda on Sustainable Development and its 17 Sustainable Development Goals (SDGs) by developing ICAO provisions related to water aerodrome design, certification and operation.

Action: The Assembly is invited to:

- a) consider the draft Assembly resolution attached;
- b) request the Council review existing Standards and Recommended Practices (SARPs) related to Aerodromes; and
- c) develop specific SARPs in order to address the design, certification, management, safety and reporting requirements for water aerodrome operations.

<i>Strategic Objectives:</i>	This working paper relates to the Safety and Air Navigation Capacity and Efficiency Strategic Objectives.
<i>Financial implications:</i>	The activities referred to in this paper will be undertaken with resources available in the 2020-2022 Regular Programme Budget.
<i>References:</i>	Annex 14 — <i>Aerodromes</i> Doc 9774, <i>Manual on Certification of Aerodromes</i> Doc 9981, <i>Procedures for Air Navigation Services (PANS) – Aerodromes</i> Asia Pacific Regional Guidance On Requirements For The Design And Operations Of Water Aerodromes For Seaplane Operations Doc 9735, <i>Universal Safety Oversight Audit Programme Continuous Monitoring Manual</i>

1. INTRODUCTION

1.1 Air transport is an essential enabler of the United Nations (UN) 2030 Agenda on Sustainable Development and its 17 Sustainable Development Goals (SDGs). Achieving the goals relies on advances in mobility, including air transport that is safe, secure, efficient, economically sustainable and environmentally responsible.

1.2 ICAO's No Country Left Behind (NCLB) initiative concentrates the efforts of ICAO and Member States to support countries in implementing ICAO Standards and Recommended Practices (SARPs). The main goal of this work is to help ensure that SARPs implementation is harmonized globally so that all States have access to the significant socioeconomic benefits of safe and reliable air transport.

1.3 As part of the NCLB initiative, ICAO has a particular interest in supporting Small Island developing States (SIDS) in achieving the SDGs by encouraging activities strengthening their respective civil aviation sectors. A strong civil aviation network can promote and sustain social and economic progress through responsible tourism, for example, which is one of the major economic drivers in SIDS.

1.4 Currently, the United Nations Department of Economic and Social Affairs (UNDESA) identifies 57 SIDS. Improving aviation infrastructure, management and operations, is essential to connect the islands and make air travel safer, more efficient and facilitating economic development.

1.5 On the global level, seaplanes are being utilized more frequently to support islands with larger aircraft offering scheduled services. With more than seventeen thousand islands, the Republic of Indonesia is the world's largest island country. Most of the travel between the islands is only practically feasible by air. In Canada, the number of commercial flights originating from water aerodromes has significantly increased since 1999. Canada has 326 registered and more than 2,000 unregistered water aerodromes. There are more than 150 commercial float plane operators that operate 450 registered aircraft. With an estimated 500,000 passengers traveling in Canada by scheduled seaplane flights each year, these figures highlight the need for specific requirements for water aerodromes.

1.6 ICAO has not developed global standards related to the design, certification and operations of water aerodromes for seaplane operations. Given the magnitude of water aerodrome operations worldwide, many countries identified the growing global need for standardized regulations and procedures to certify water aerodromes for seaplane operations.

1.7 Indonesia and Canada are proposing that ICAO develop global provisions related to water aerodromes that would provide guidance for the certification, operations, management, safety and reporting requirements. It is further proposed that the provisions should set out specific requirements for water aerodromes, similar to those of land aerodromes and heliports, to ensure the safety of passengers and operators.

2. DISCUSSION

2.1 ICAO Annex 14 — *Aerodromes* does not differentiate between land and water as a surface from which aircraft can operate. It only defines that an aerodrome can be an area of land or water. It is important to note that operations of aeroplanes on water differ significantly from those conducted on land, and the criteria used for certification of land aerodromes may not be appropriate for certification of water aerodromes. In addition to aviation legislation, a seaplane in contact with the water is subject to maritime regulations, including the International Regulations for the Prevention of Collision at sea and local bylaws.

2.2 One fundamental certification criterion requires the aerodrome certificate holder to establish and maintain an appropriate safety management system (SMS), which remains the same for both land and water aerodromes.

2.3 States have long recognized the importance of developing seaplane bases (water aerodromes) which could be the best mode of transportation in geographical isolation in addition to providing recreational access and evacuation in emergencies.

2.4 As there are no ICAO global provisions specifically related to water aerodromes, the Asia/Pacific Air Navigation Planning and Implementation Regional Group (APANPIRG/24) in 2015 took the lead and established a small working group on water aerodromes, comprising of experts from Indonesia, the Maldives, New Zealand, Sri Lanka, and the United States, in order to develop a model regulation for water aerodromes for use as a reference document in the Asia/Pacific region.

2.5 This regional document provides guidance to assist operators in planning, designing and constructing water aerodromes and associated facilities. Although based on the existing land aerodrome criteria, the different operational and safety risks when operating onto and from water are recognized and addressed in the regional guidance material.

2.6 Several States developed their own regulations for water aerodromes for use as a reference document, such as Canada's current work on regulatory initiatives. It is important to note that there are no ICAO global provisions related to water aerodromes available to States which could serve as basis for the design, certification and operation of water aerodromes. None of these individual efforts are coordinated or adhere to a globally accepted Standard.

2.7 Universal Safety Oversight Audit Programme (USOAP) Continuous Monitoring Approach (CMA) Protocol Questions (PQs) are the primary tool for assessing the level of effective implementation (EI) of a given State's safety oversight system. They are based on ICAO SARPs, Procedures for Air Navigation Services (PANS), ICAO documents, other guidance material and take into consideration the critical elements (CEs).

2.8 States are encouraged to perform self-assessment as an important tool in order to prepare for a USOAP CMA activity. However, given that there are no ICAO global provisions related to water aerodromes, there are no PQs related to certification and operation of water aerodromes and ground aids in water operations. Therefore, there is no indication available to States regarding global adherence to water aerodrome operations. This has a significant impact on Small Island developing States and other States that largely depend on water aerodrome operations.

3. CONCLUSION

3.1 In support of the UN 2030 Agenda on Sustainable Development and its 17 SDGs, and as part of the ICAO NCLB initiative, ICAO has an obligation to support the SIDS and other States in achieving the SDGs by strengthening their civil aviation sectors.

3.2 This may be achieved in part by development and promulgation of global provisions specifically related to the design, certification and operations of water aerodromes for seaplane operations. This action will further improve safety and encourage a strong civil aviation sector that can promote and sustain social and economic progress for SIDS and other States that depend on water aerodromes.

APPENDIX

DRAFT RESOLUTION FOR ADOPTION BY THE 40TH SESSION OF THE ASSEMBLY

<p>A40-xx: Aviation's contribution towards the United Nations 2030 Agenda for Sustainable Development</p>
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Whereas the No Country Left Behind (NCLB) initiative aims at assisting States in effectively implementing ICAO Standards and Recommended Practices (SARPs), plans, policies and programmes, as well as addressing significant safety and security concerns so as to ensure that all States have access to the significant socioeconomic benefits of air transport;

Whereas the General Assembly of the United Nations adopted the Transforming our World: The 2030 Agenda for Sustainable Development that includes a set of 17 universal and transformative goals supported by 169 targets that balance the economic, social and environmental dimensions of sustainable development;

Recognizing that previous Assemblies directed the Secretary General to consider the special needs and characteristics of Least Developed Countries (LDCs), Land Locked Countries (LLDCs) and Small Island Developing States (SIDS), identified within the framework of the United Nations, in the coordination, prioritization, facilitation and implementation of assistance programmes aimed at enhancing their air transport systems;

Recognizing the need to support States with global provisions related to areas only accessible by seaplane operations in order to improve safety and encourage a strong civil aviation sector that can promote and sustain social and economic progress through responsible tourism, for example, which is a primary economic driver;

Considering the need to promulgate global provisions specifically related to the design, certification and operations of water aerodromes for seaplane operations so as to meet the needs of all Member States for safe, regular, efficient and economical air transport;

The Assembly:

Requests the Council, within the current allocated budget and as a matter of priority, to review existing SARPs related to aerodromes and to develop specific Standards and Recommended Practices in the appropriate Annexes to the Convention in order to address the design, certification, management, safety and reporting requirements for water aerodromes operations.

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