



International Civil Aviation Organization

WORKING PAPER

A42-WP/358¹

TE/151

29/7/25

ASSEMBLY — 42ND SESSION

TECHNICAL COMMISSION

Agenda Item 24: Aviation Safety and Air Navigation Priority Initiatives

SAFETY FUNDAMENTALS: AERODROME CERTIFICATION

(Presented by Airports Council International (ACI) and Ethiopia)

EXECUTIVE SUMMARY

Airports Council International (ACI) and the International Civil Aviation Organization (ICAO) have worked collaboratively over the past 15 years in support of global aerodrome certification. Key initiatives such as the Airport Excellence (APEX) in Safety Programme, joint ICAO-ACI training efforts, the development of the ICAO-ACI Implementation Package (iPACK) on Certification, and contributions to Annex 14 enhancements have been implemented. These initiatives have led to measurable improvements in certification rates—particularly in resource-constrained regions—while building technical capacity among both airport operators and civil aviation authorities.

Despite these advances, significant challenges persist, including fragmented support from regulatory bodies, variable State commitment, and the inconsistent application of ICAO Recommended Practices and industry best practices at the national level. This paper emphasizes the need for greater global coordination among ICAO, ACI, and major regulatory authorities to streamline certification processes, align technical assistance efforts, and ensure more inclusive support to smaller airports and developing States.

Action: The Assembly is invited to:

- acknowledge the challenges faced by States and aerodrome operators in achieving and maintaining aerodrome certification and by doing this, prioritize certification as a global safety objective;
- support coordinated programmes to assist civil aviation authorities and aerodrome operators in preparation for and during the certification process, encouraging the involvement of mature States, ACI, and relevant stakeholders, including potential funding partners; and
- request that ICAO provides guidance to States in assessing the relevance of transposing ICAO Recommended Practices into their national regulatory frameworks, ensuring that such transposition is adapted to local conditions and does not create unnecessary barriers to aerodrome certification.

Strategic Goals:

This working paper relates to Strategic Goal *No Country Left Behind*.

¹ English, Arabic, Chinese, French, Russian and Spanish versions provided by ACI.

<i>Financial implications:</i>	Not applicable
<i>References:</i>	Annex 14 — <i>Aerodromes</i> , Volume I — <i>Aerodrome Design and Operations</i> .

1. INTRODUCTION

1.1 Aerodrome certification is one of the critical pillars of aviation safety, ensuring that airports meet internationally recognized standards for infrastructure, facilities, operations, and safety management. It provides a formal mechanism to verify that aerodromes are capable of enabling safe aircraft operations under both normal and emergency conditions. Certification fosters regulatory oversight, enhances operational consistency, and supports global interoperability, which is essential in an industry that relies on seamless international connectivity. Moreover, it strengthens stakeholder confidence—among regulators, aerodrome operators, airlines, and the traveling public—by demonstrating that an airport operates within a national structured safety framework aligned with ICAO Standards and Recommended Practices (SARPs), particularly the provisions listed in Standard 1.4.1 and Recommended Practice 1.4.2 of Annex 14 — *Aerodromes*, Volume I — *Aerodrome Design and Operations*.

1.2 For over 15 years, ACI and ICAO have partnered strategically to enhance aerodrome certification globally. This paper provides ACI's perspective on these efforts, showcasing results, identifying gaps, and offering recommendations for continuous improvement.

2. DISCUSSION

2.1 Due to slow aerodrome certification rates across many regions, a collaboration between ICAO and ACI initiated in 2010 and focused on building communication between ACI member airports and ICAO regulatory frameworks, assessing aerodrome certification levels, operational readiness, and raising awareness of standardized certification's importance.

2.2 In 2012, ACI introduced the Airport Excellence Programme (APEX) in Safety, based on peer review assessments with the objective to identify safety gaps, share practical solutions, and build capacity. Recognized by ICAO, APEX has conducted over 170 reviews worldwide, contributing to over a dozen certifications and building a community of over 400 safety experts.

2.3 The assessed aerodrome data compiled from APEX assessments has improved ICAO's understanding of global challenges, informed updates to Annex 14, and guided development of ACI handbooks such as the Aerodrome Certification Guide and SMS Handbook.

2.4 In 2016, both, the ICAO Western and Central African (WACAF) and the Eastern and Southern African (ESAF) regional offices recommended APEX reviews as a first step in certification. This alignment achieved:

- a) increased certification rates by ~40 per cent in WACAF region;
- b) supported the ICAO No Country Left Behind initiative;
- c) built regulator capacity; and
- d) established mentorship networks.

2.5 The most recent collaborative initiative, launched in 2023, was the ICAO-ACI iPACK on Certification. This joint tool provides support for both regulators and aerodrome operators through assessments, documentation, training, and advisory services. It aligns technical support with regulatory expectations, ensuring coherent implementation.

2.6 Despite significant progress, several persistent challenges continue to hinder the widespread achievement of aerodrome certification. Many States face institutional and resource limitations, leading to delays in implementing or sustaining certification frameworks. Even where national safety programmes exist, there are often gaps between policy intent and operational implementation, particularly in States with limited technical capacity. Fragmented support across regulatory bodies further complicates progress. Varying approaches and timelines among some regulators have led to duplication, inefficiencies, and confusion for aerodrome operators. Greater coordination is needed to ensure global assistance efforts are harmonized and targeted.

2.7 Smaller airports are particularly affected, lacking the infrastructure and workforce needed to meet certification requirements. The absence of scalable models for resource-constrained airports remains a key barrier.

2.8 In some cases, ICAO Recommended Practices and industry best practices are adopted as national standards without adjustments for local conditions, effectively turning them into mandatory requirements. While well-intentioned, this can impose unintended burdens and hinder practical implementation and certification by both regulators and airport operators.

2.9 A key component of future certification support programs must include working with States to ensure that the application of Recommended Practices is clear, appropriately scoped, and does not introduce unnecessary barriers to certification. This requires openness from States to education, guidance, and constructive dialogue on practical implementation approaches.

2.10 This challenge has been raised and discussed at a regional level, both in the Fifth Meeting of the Asia/Pacific Aerodrome Design and Operations Task Force on 30 January to 2 February 2024 (AP-ADO/TF/5 – WP/15 refers) and the Twenty-first Meeting of the CAR/SAM Regional Planning and Implementation Group GREPECAS/21 on 14-17 November 2023 (GREPECAS/21 – WP/34 refers). Both meetings concluding that actions are needed to support States with the transposition of Annex 14 Recommended Practices into national or regional standards.

2.11 According to the ICAO Integrated Safety Trend Analysis and Reporting System (iSTARS), the ICAO Safety Report 2025 Edition, and data provided by ICAO Regional Offices, certification rates remain uneven across ICAO regions, highlighting the global implementation gap:

- a) 33 per cent in the Western and Central Africa (WACAF) Region;
- b) 52 per cent in the Eastern and Southern Africa (ESAF) Region;
- c) 65 per cent in North America (NAM) Region, excluding the US and Canada;
- d) 58 per cent in the Middle East, Central America, and Caribbean (MID and NACC) Regions;
- e) 42 per cent in the South American (SAM) Region; and
- f) 92 per cent in the Asia and Pacific (APAC) Region.

2.12 Without a more coordinated and inclusive global effort, these disparities are unlikely to be resolved, limiting progress on aerodrome certification as a foundation of aviation safety.

3. **CONCLUSION**

3.1 Aerodrome certification remains a significant challenge across many regions. Despite the ongoing efforts by ACI and ICAO to support and increase aerodrome certification, a more holistic approach is required—one that ensures adequate resources are available to bridge the persistent gaps between regions. Strengthening collaboration with additional stakeholders, particularly mature regulatory authorities, is essential to share best practices and accelerate global progress in aerodrome certification.

- END -