



OACI

Organización de Aviación Civil Internacional  
Oficina para Norteamérica, Centroamérica y Caribe

NOTA DE ESTUDIO

NACC/DCA/13 — NE/11  
28/07/25

**Decimotercera Reunión de Directores/as de Aviación Civil de Norteamérica, Centroamérica y Caribe  
(NACC/DCA/13)**

Santo Domingo, República Dominicana, 4 al 7 de agosto de 2025

**Cuestión 8 del  
Orden del Día:**

**Preparación para el 42º periodo de sesiones de la Asamblea de la OACI y  
ratificación de instrumentos de derecho aeronáutico internacional**

**SOLICITUD DE APOYO A LAS NOTAS DE ESTUDIO QUE PRESENTARÁ IATA EN LA ASAMBLEA No. 42 DE  
LA OACI**

(Presentada por IATA)

<b>RESUMEN EJECUTIVO</b>	
Las notas de estudio incluidas en el <b>Apéndice</b> a esta nota corresponden a aquellas que la IATA presentará ante la Asamblea No. 42 de la OACI en septiembre de 2025.	
<b>Acción:</b>	Se insta a la Secretaría a poner en disposición de los Estados Miembro los textos de las notas de estudio de IATA para la Asamblea de OACI y buscar el apoyo correspondiente por parte de los Estados.
<b>Objetivos estratégicos:</b>	<ul style="list-style-type: none"><li>• Seguridad Operacional</li><li>• Capacidad y eficiencia de la navegación aérea</li><li>• Seguridad de la aviación y facilitación</li><li>• Desarrollo económico del transporte aéreo</li><li>• Protección del medio ambiente</li></ul>

**1. Introducción**

1.1 La Asamblea de la OACI es el principal órgano de gobernanza de la organización, y reúne a sus 193 Estados miembros cada tres años en la sede de la OACI en Montreal, Canadá. Es durante esta Asamblea que se define la política global de la aviación internacional, se establecen orientaciones estratégicas y prioridades para la organización, se revisan el presupuesto y el trabajo de sus órganos, y se adoptan resoluciones sobre seguridad operacional, navegación aérea, medio ambiente, facilitación, transporte aéreo y desarrollo sostenible de la aviación. La próxima Asamblea se celebrará del 23 de septiembre a 3 de octubre.

1.2 En el desarrollo de la Asamblea, los Estados Miembros y las organizaciones relacionadas con la aviación elaboran y presentan diversas Notas de Estudio (NE) para su consideración. Estos documentos, que se hacen públicos para los demás miembros una vez que son divulgados oficialmente por la OACI,

poco antes del evento, incluyen temas fundamentales para la aviación y que requieren un estudio importante por parte de los Estados Miembros.

1.3 La oficina regional de OACI para la región Norte América, Centro América y Caribe desempeña un papel esencial en la coordinación regional previa a la Asamblea de la OACI, procurando que los países latinoamericanos presenten o adopten posiciones comunes sobre temas estratégicos. Esto se logra mediante reuniones preparatorias, la elaboración de documentos regionales y negociaciones que buscan equilibrar metas globales con capacidades locales.

1.4 Bajo ese entendido, IATA ha preparado algunas NE que se presentarán en la próxima Asamblea de la OACI, relacionados con diversos temas del presente y futuro de la aviación que las empresas de transporte aéreo consideran fundamentales en el desarrollo de esta y que desea poner a consideración de manera anticipada a los Estados Miembros de región NACC.

## 2. Desarrollo

2.1 Las NE preparadas por IATA para ser presentados en la Asamblea de la OACI se refieren a múltiples temas de interés de la industria aeronáutica. Hasta ahora, los documentos trabajados por IATA son los siguientes:

- Implementación de nuevos mandatos en la operación de aeronaves
- Identificación de la tripulación y el marco proporcionado por el Anexo 9
- Iniciativas de la industria para mejorar la regularidad, la eficiencia y los beneficios económicos al implementar las normas de seguridad contenidas en el Anexo 17
- Opiniones de la industria del transporte aéreo sobre la hoja de ruta de implementación del CAAF/3 de la OACI en el marco global para SAF, LCAF y otras energías más limpias para la aviación
- Compartir conocimientos de los programas USOAP y SSP-IA para evolucionar los SARPs de la OACI
- Celebrando 10 años de los principios fundamentales de la OACI sobre la protección del consumidor
- Impulsando la seguridad: mejorando la publicación de informes de investigación de accidentes y los mecanismos
- Opinión de IATA sobre las acciones críticas para garantizar una implementación robusta de CORSIA
- Resiliencia del espectro: equilibrando la eficiencia del espectro con la seguridad de la aviación
- Interferencia de radiofrecuencia (RFI) en GNSS
- Actividades adicionales necesarias para garantizar una implementación eficiente de FF-ICE para los usuarios del espacio aéreo
- Políticas de la OACI sobre la imposición de impuestos sobre los ingresos de las empresas de transporte aéreo internacional
- Accesibilidad en el transporte aéreo
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2.2 IATA pone a disposición de la Secretaría General los textos de las NE para que sean estudiados por los Estados Miembros con anterioridad a la Asamblea de la OACI.

2.3 El apoyo de los países de Norte América, Centro América y el Caribe a las iniciativas recogidas en estas NE es fundamental, de manera que IATA solicita su estudio y revisión.

**3. Medidas propuestas**

3.1 Se invita a que la Reunión a que:

- a) Tome nota de la información contenida en este documento;
- b) La Secretaría General ponga a disposición de los Estados Miembros los textos de las NE que IATA presentará en la Asamblea de la OACI.
- c) Se apoyen las NE en la Asamblea de la OACI.

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**APÉNDICE**



**WORKING PAPER**

**ASSEMBLY — 42ND SESSION**

**EXECUTIVE COMMITTEE**

**Agenda Item 12: Facilitation Programmes**

**CREW IDENTIFICATION AND THE FRAMEWORK PROVIDED BY ANNEX 9**

(Presented by International Air Transport Association (IATA), International Federation of Air Line Pilot's Association (IFALPA), International Transport Workers' Federation (ITF), The International Air Cargo Association (TIACA))

**EXECUTIVE SUMMARY**

The expedited movement of flight and cabin crew across international borders is essential to maintaining an efficient and economically viable international air transport system. Crew members generally pose low aviation security and immigration risks: they are subject to recurrent background checks, systematic security screening, and are admitted temporarily for clearly defined duty-related purposes.

Annex 9 – Facilitation mandates visa-free entry for crew holding a Crew Member Certificate (CMC). However, despite the longstanding framework pertaining to CMC, the uptake remains limited, both in terms of issuance by States and recognition by border control authorities. Conversely, many States already implement visa waiver practices for crew members based on a combination of identification and qualification documents, not limited to the CMC, and on the aviation security measures that crew are subject to.

This working paper provides an overview of global practices related to crew entry requirements and supports the pressing need to modernize Annex 9 provisions. The aim is to align the ICAO framework with current State practices and technological advancements in secure identification.

**Action:** The Assembly is invited to:

- a) Note the data and analysis presented in this working paper;
- b) Acknowledge the limited use and impact of the CMC as a singular facilitation document for crew identification; and
- c) Request ICAO to initiate a comprehensive review of Chapter 3, Section M of Annex 9, taking into consideration the multi-disciplinary nature of this section, with a view to modernizing its provisions to recognize the wider range of documents used by States for granting visa-free crew entry when on duty and the developments with regards to digital credentials.

<i>Strategic Objectives:</i>	This working paper relates to the Strategic Objective <i>Security and Facilitation</i> .
<i>Financial implications:</i>	It is not expected that there will be significant financial implications to ICAO, given this work can be developed by the existing working bodies. IATA is ready to support the developments required for addressing the proposed actions.
<i>References:</i>	ICAO Annex 9 – Facilitation ICAO Strategic Plan 2026 – 2050 Doha Declaration on Facilitation of International Air Transport

## 1. INTRODUCTION

1.1 Facilitating and expediting crew movements is essential for the efficiency and predictability of international air transport. Recognizing this, many States apply facilitation measures that distinguish crew from passengers, including exemptions from visa and travel authorization requirements.

1.2 Historically, Crew Member Certificates (CMCs) were introduced as a facilitation instrument. However, under the current framework established by Annex 9 to the Chicago Convention, the CMC has inadvertently become a limiting factor. Specifically, Standard 3.71 requires States to waive visa requirements solely for crew members holding a valid CMC. Despite the inclusion of the CMC provision in Annex 9 since its First Edition in 1949, only 16 Member States<sup>1</sup> currently issue such certificates. Consequently, the vast majority of international crew—those not in possession of a CMC—fall under Recommended Practice 3.71.1, which merely encourages States to waive visa requirements for them. This disparity in implementation undermines the original objective of global facilitation for aircrew.

1.3 Chapter 3, Section M of Annex 9—concerning the identification and entry of crew and other aircraft operator personnel—requires revision and modernization to align with the prevailing practices of the majority of Member States and air operators. In contemporary operations, a combination of crew identification and professional qualification documents, together with aviation security measures and technologies, enables States to verify crew identity and assess potential threats without necessitating the issuance of a visa or an electronic travel authorization (eTA). Documents commonly carried by crew while on duty include, but are not limited to, a valid passport, pilot licence, crew member identification card, company-issued identification, airport restricted area access pass, and cabin crew attestation.

## 2. DISCUSSION

2.1 In accordance with the note to Standard 3.67 of Annex 9, CMC is intended to serve as a secure form of identification for crew members, while their professional qualifications are reflected in the respective licences. However, the limited uptake of the CMC among States suggests that its identity function has not been prioritized and is surpassed by passports that are much more secure. Among the reasons cited by authorities for not issuing CMC are the costs related to such program and the resources required to manage it, while this document offers limited benefits to crew worldwide.

2.2 Since 1997, CMCs have been expected to be issued in the form of machine-readable cards, consistent with the specifications set out in Doc 9303, Part 5. These specifications have seen no updates in

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<sup>1</sup> Czech Republic, Egypt, Finland, France, Germany, Hong Kong, Panama, Qatar, Saudi Arabia, South Africa, Sri Lanka, Switzerland, Thailand, Türkiye, UAE, Vietnam. This list may not be exhaustive.

recent years, raising the question of whether they remain fully aligned with current technological capabilities and facilitation needs.

2.3 States have instead prioritized enhancing the security of passports, which remain the most widely recognized, secure and interoperable identity document for international travel. The progressive development of technical specifications under ICAO Doc 9303 has resulted in the introduction of the ePassport, currently regarded as the most secure form of travel document. A significant proportion of crew members are holders of such passports<sup>2</sup>. As a result, the identification function envisioned for the CMC has, in practice, been overtaken by the superior security features and broad international acceptance of the ePassport. In this context, the provisions contained in Annex 9, Chapter 3, Section M merit review and modernization to ensure alignment with current practices and technological advancements.

2.4 From a border control standpoint, the use of the CMC as a basis for visa exemption appears to have limited application. This observation is supported by an analysis conducted by IATA as part of an endeavour of the Control Authorities Working Group (CAWG), drawing on data collected between late 2024 and early 2025 from a range of sources, including IATA [Timatic](#) data<sup>3</sup>, Member States, aircraft operators, and other organizations such as IFALPA. As of August 2024, an assessment of crew entry requirements published by 121 States in the IATA Timatic database reveals the extent of CMC recognition for facilitation purposes.

- 99 States or 81,81% have a visa-free policy towards crew and require a combination of documents to identify crew. The most frequent combination of documents required is: a passport, a crew ID card or CMC, and a general Declaration. 25 of these States do not require a passport upon presentation of a Crew ID Card or CMC only, sometimes in combination with a General Declaration.
- Out of the 22 countries requiring a visa on crew, seven of them waive the visa requirement only for crew holding a CMC and apply a visa to other crew. Some States do apply a visa on crew even if they are holding a CMC and therefore do not recognize this document at all.

2.5 While this data is preliminary and summarized, it illustrates the low uptake on the CMC and that a majority of border authorities do not require this document at all for waiving visa purposes.

2.6 In comparison to passengers, crew members generally present a low immigration risk. Their entry into a State is purpose-driven, limited in duration, and governed by operational schedules determined by their employer rather than personal intent. The time spent in the territory of a State typically corresponds only to what is required for the performance of duty-related tasks. While specific statistical data may be limited, operational evidence suggests that crew members are not commonly associated with overstaying or asylum-seeking behavior. Additionally, upon arrival, crew usually make use of dedicated border control channels separate from those used by passengers and are often readily identifiable through their uniforms.

2.7 Crew are routinely subject to recurrent background security checks and systematic screening at the point of departure. These measures are conducted on a regular basis by the State responsible for the oversight of the aircraft operator. In accordance with Annex 9, Standard 3.70, crew identity cards and CMCs may only be issued following the completion of a background check conducted by, or on behalf of, the relevant public authority. This requirement is consistent with the provisions of Annex 17, Standard 3.5.2, and is subject to verification under the Universal Security Audit Programme – Continuous Monitoring Approach (USAP-CMA).

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<sup>2</sup> As per ICAO data, 160 Member States issue ePassports.

<sup>3</sup> IATA Timatic is a provider of real-time information on travel document requirements for international air travel.

2.8 Importantly, crew members contribute directly to the safeguarding of civil aviation by undertaking specific operational security responsibilities. These include conducting aircraft searches and pre-departure checks in accordance with Annex 17, Standard 4.3.1; ensuring the continuous protection of the flight crew compartment as prescribed in Standard 4.3.3; and applying behavioural detection techniques to monitor passengers for indicators of potentially threatening or disruptive conduct. These functions are integral to the overall safety and security of aircraft operations.

2.9 In updating Annex 9, Chapter 3, Section M, consideration should be given to the incorporation of modern technologies that facilitate the advance identification of crew members—such as the transmission of crew-related Advance Passenger Information (API). In parallel, several States are actively pursuing the digitalization of crew credentials. Notably, ICAO Annex 1 – Personnel Licensing contains Standards related to the issuance of electronic personnel licences (EPLs) for pilots, which can be electronically authenticated. These technological advancements should be considered as part of any effort to modernize the relevant provisions of Annex 9.

### 3. CONCLUSION

3.1 The current provisions of Annex 9 concerning the identification and entry of crew members, particularly those centred on the CMC, is obsolete and does not reflect the diversity of practices adopted globally, nor do they account for recent advancements in secure identification technologies. A relevant number of Member States have implemented facilitation measures for crew entry based on a combination of identification and professional qualification documents, most of which operate independently of the CMC framework.

3.2 In view of the consistently low immigration and security risk profile associated with crew members, coupled with their critical operational role in ensuring the secure and efficient functioning of civil aviation, there is a strong rationale for reviewing and updating the existing regulatory framework. Such an update would support greater alignment with contemporary practices and emerging technological capabilities.

3.3 Modernizing Chapter 3, Section M of Annex 9 would enable the recognition of a broader and more representative set of documents used by States to identify crew members along with the aviation security measures crew are subject to. This modernization would further take into consideration the developments pertaining to digital credentials and would enhance facilitation outcomes while maintaining high security standards.



**WORKING PAPER**

**ASSEMBLY — 42ND SESSION**

**EXECUTIVE COMMITTEE**

**Agenda Item 13: Aviation Security - Policy**

**INDUSTRY INITIATIVES FOR IMPROVING THE REGULARITY, THE EFFICIENCY AND ECONOMIC BENEFITS WHEN IMPLEMENTING THE SECURITY STANDARDS CONTAINED IN ANNEX 17**

(Presented by the International Air Transport Association - IATA)

**EXECUTIVE SUMMARY**

The International Air Transport Association (IATA) continuously improves its IATA Operational Safety Audit (IOSA) mandatory requirements and guidance materials, with the global objective of achieving effective, harmonized, and sustainable implementation of all security standards outlined in Annex 17 across all States.

This global industry security objective can only be achieved through close alignment of all relevant ICAO security reference documents and programmes. Continuous enhancement of Annex 17 provisions is essential for improving the effectiveness and economic sustainability of security measures implemented by industry stakeholders, and for strengthening the oversight functions carried out by regulators.

This working paper highlights potential areas for improvement in the work undertaken by ICAO bodies responsible for aviation security. It also presents relevant guidance materials, initiatives and position papers developed by IATA to support States and industry stakeholders in maintaining high-quality implementation of security standards.

**Action:** The Assembly is invited to:

Encourage all Contracting States, particularly those actively involved in relevant ICAO bodies responsible for aviation security, to make extensive use of technical input from the industry to further develop provisions and to enhance safety and security, but also promote regular, efficient and economically sustainable international air transport operations.

<i>Strategic Objectives:</i>	This working paper relates to the Strategic Objectives <i>Security and Facilitation</i> , and <i>Economic Development of Air Transport</i>
<i>Financial implications:</i>	It is not expected that there will be significant financial implications to ICAO, given this work can be developed by the existing working bodies. IATA is ready to support the developments required for addressing the proposed actions.
<i>References:</i>	

1. **EFFECTIVENESS AND ECONOMICAL SUSTAINABILITY OF SECURITY MEASURES**

1.1 Since the transition from the original ICAO Universal Security Audit Programme (USAP), launched in 2002, to the USAP Continuous Monitoring Approach (USAP-CMA) in 2013, the global sustainability indicators have fluctuated from 71,27% to 72,77%, with an average of 72,07% and a standard deviation of 0,53%. Furthermore, the latest USAP-CMA report (2024), in paragraph 3.3.2, highlights that fifteen (15) Standards from Annex 17 have not reached fifty (50) per cent of global indicative compliance. Notably, twelve (12) of these standards belong to Annex 17 Chapter 4 – *Preventive Security Measures*.

1.2 Albeit the USAP-CMA numbers, the operational fact is that most of preventive security measures have been successfully and sustainably implemented on a daily basis by most of the industry operators and entities, including External Service Providers (ESPs), across all States.

1.3 The foundational aims and objectives of ICAO, as outlined in Article 44 of the Chicago Convention, include not only the development of principles and techniques to enhance safety and security, but also the regular, efficient and economically sustainable development of international air transport. These goals can be effectively advanced through consideration of industry’s proposals in relevant ICAO bodies. This is especially critical when advocating for the continuous updating of Annex 17 and associated guidance materials to address implementation challenges identified by both operators and regulators.

## 2. AIRCRAFT OPERATOR SECURITY PROGRAMME (AOSP), SUPPLEMENTARY STATION PROCEDURES (SSPs) AND AVIATION SECURITY TRUST FRAMEWORK (ASTF)

2.1 A key example of the need for continuous updates is the introduction of a distinction between Aircraft Operator Security Programme (AOSP) and Supplementary Station Procedures (SSPs) in Amendment 18 to Annex 17, which became effective in November 2022. AOSPs are developed by airlines to meet the national requirements of their State of the Operator. SSPs, on the other hand, should only be developed when the AOSP doesn’t fully address the national requirements of the State(s) of the operations.

2.2 Although ICAO published public AOSP and SSPs guidance material<sup>1</sup> in June 2022, the relevant USAP-CMA Protocol Questions remained misaligned until their most recent adjustment in April 2025. This situation led to confusion in some States and the update of some provisions may still be required.

2.3 In parallel, IATA developed a range of guidance and position papers, including a video, all of which are available on IATA’s public Aviation Security website<sup>2</sup>, particularly the Position Papers webpage<sup>3</sup>.

2.4 Beyond guidance material, IATA has also launched an initiative aimed at improving both the efficiency and security of the aviation industry by leveraging digital trust technologies, the Aviation Security Trust Framework (ASTF). It seeks to streamline the verification process of the authenticity and validity of aviation security documents, like the official acknowledgment of endorsement of AOSPs and SSPs by relevant authorities. Additional resources include a White Paper<sup>4</sup>, a dedicated IATA ASTF website<sup>5</sup>, and an Information Paper presented by IATA at the most recent Aviation Security Panel (AVSECP) meeting forecasting ASTF’s scalable capabilities to other areas, ranging but not limited to, cargo security status, oversight auditing activities, or personnel / crew background checks.

## 3. SECURITY INCIDENT REPORTING

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<sup>1</sup> ICAO AOSP and SSP guidance: <https://www.icao.int/Security/SFP/Pages/AOSP-and-SSP.aspx>

<sup>2</sup> IATA Aviation Security: <https://www.iata.org/en/programs/security/>

<sup>3</sup> IATA Position Papers: <https://www.iata.org/en/programs/security/position-papers-press-releases/>

<sup>4</sup> IATA White Paper on ASTF: <https://www.iata.org/contentassets/1998554ac6624b97a2de8418938eaade/aviation-security-trust-framework-whitepaper-2025.pdf>

<sup>5</sup> IATA Aviation Security Trust Framework: <https://astf.iata.org/>

3.1 Another example highlighting the need for ongoing updates to Annex 17 is Standard 5.1.6, introduced in 2018. This standard implies that any entity responsible for the implementation of the national civil aviation security programme must report, in a practical and timely manner, any “information concerning incidents of acts of unlawful interference and preparatory acts thereto” to relevant authorities.

3.2 In response, ICAO published public Incident Reporting Guidance and Taxonomy<sup>6</sup>, in June 2022, “on the implementation of a reporting system, and established a common taxonomy, in an effort to structure and harmonize the reporting processes of aviation security occurrences and incidents”.

3.3 The ICAO guidance clearly defines the types of “information” that should be reported. IATA complemented this effort by publishing position papers on its Position Papers webpage<sup>3</sup>. The most recent on the Reporting of Aviation Security Occurrences and Incidents<sup>7</sup> outlines the expected reporting processes for industry stakeholders already engaged in occurrence and incident reporting for decades.

3.4 To avoid any potential confusion around Standard 5.1.6, specifically the distinction between the reporting acts of unlawful interference, including attempted or preparatory acts, normally performed by States to ICAO, and the reporting of security incidents by operators and entities to authorities, the wording of this standard needs to be revisited for ensuring effective implementation.

3.5 Globally effective, harmonized and economically sustainable systems for reporting security occurrences and incidents are essential. They not only enhance aviation security by enabling the detection of emerging threats and vulnerabilities through reporting, but also improve the timely sharing of critical information when serious incidents reported in one State could impact global supply chains or operations.

#### 4. SECURITY MANAGEMENT SYSTEM (SeMS)

4.1 The examples outlined above reflect the broader, integrated approach to Safety and Security Management Systems as promoted by the IATA Operational Safety Audit (IOSA) program and the IOSA Standards Manual (ISM) applicable to all IOSA registered airlines. The Safety Management System (SMS) has gained strong international recognition, particularly with the creation of a new ICAO Annex 19 in 2013. Meanwhile, the Security Management System (SeMS) became a mandatory requirement for all IOSA registered airlines in the second edition of the ISM (ISM/2) in 2007.

4.2 In January 2025, the seventeenth edition (ISM/17) further advanced the SeMS framework by expanding its scope to include External Service Providers (ESPs) implementing most of the operational security measures via outsourcing arrangements. IATA shares extensive information and guidance material through its SeMS webpage<sup>8</sup> and the SeMS Aviation Community<sup>9</sup> created in 2022 to assist ESPs.

4.3 Finally, IATA has launched a formal SeMS Certification Program<sup>10</sup> designed to offer a structured framework that enables all aviation entities and organizations to proactively manage regulatory compliance, security risks, threats and vulnerabilities, while improving their security management system.

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<sup>6</sup> ICAO Incident Reporting Guidance and Taxonomy: <https://www.icao.int/Security/SFP/Pages/Incident-Reporting-Guidance-and-Taxonomy.aspx>

<sup>7</sup> IATA Position Paper on the Reporting of Aviation Security Occurrences and Incidents: <https://www.iata.org/contentassets/1998554ac6624b97a2de8418938eaade/2025-reporting-of-aviation-security-occurrences-and-incidents-april-2025.pdf>

<sup>8</sup> IATA SeMS webpage: <https://www.iata.org/en/programs/security/security-management-system-sems/>

<sup>9</sup> SeMS Aviation Community (contact [aviationsecurity@iata.org](mailto:aviationsecurity@iata.org))

<sup>10</sup> IATA SeMS Certification Program: <https://www.iata.org/en/services/certification/operations-safety-security/security-management-systems-sems/>



**WORKING PAPER**

**ASSEMBLY — 42ND SESSION**

**EXECUTIVE COMMITTEE**

**Agenda Item 14: Audit Programmes – Continuous Monitoring Approach**

**Sharing of Insights from the USOAP and SSP-IA programmes to evolve ICAO SARPs**

(Presented by the International Air Transport Association (IATA), International Business Aircraft Council (IBAC))

**EXECUTIVE SUMMARY**

The Universal Safety Oversight and Audit Programme (USOAP) was established to monitor the fulfilment of safety oversight obligations by states, including the assessment of the implementation of standards, recommended practices and guidance material. The State Safety Programme – Implementation Assessment (SSP-IA) is a complementary programme which assesses the effective implementation of a State Safety Programme by a State.

An effective risk-based surveillance programme takes the outcomes from surveillance activities as a source of intelligence to feed back into the programme to support its evolution, including the drafting of provisions.

There is a lack of visibility of insights gained from both the USOAP and SSP-IA for the expert groups (panels) charged with the drafting ICAO SARPs and guidance material. Consequently, an opportunity is missed to evolve provisions that take into consideration surveillance outcomes from USOAP and SSP-IA.

**Actions:**

- a) The Assembly is invited to recognize the importance of enhancing the visibility and timely accessibility of insights derived from the Universal Safety Oversight Audit Programme (USOAP) and the State Safety Programme Implementation Assessment (SSP-IA) mechanism to ICAO expert groups, particularly panels;
- b) The Assembly is invited to task ICAO with exploring enhancements to the governance of relevant programmes, with a view to enabling expert groups to respond more effectively to data-driven intelligence, thereby strengthening the evidence-based foundation of standard-setting activities; and
- c) The Assembly is invited to task ICAO with developing a structured mechanism to ensure that expert groups, including panels responsible for the development and initial drafting of Standards and Recommended Practices (SARPs), are systematically informed by relevant safety intelligence - particularly outcomes from the USOAP and SSP-IA activities—thereby providing data-driven information to the ICAO standard-setting process.

<i>Strategic Objectives:</i>	This working paper relates to the Strategic Objectives <i>Aviation Safety, and Air Navigation Capacity and Efficiency</i> .
<i>Financial implications:</i>	It is not expected that there will be significant financial implications to ICAO, given this work can be developed by the existing working bodies. IATA is ready to support the developments required for addressing the proposed actions.
<i>References:</i>	Annex 19 Amendment 2 – Safety Management ICAO Document 9859 4 <sup>th</sup> Edition – Safety Management Manual

## 1. INTRODUCTION

1.1 The Universal Safety Oversight and Audit Programme (USOAP) was established to monitor the fulfilment of safety oversight obligations by states, including the assessment of the implementation of standards, recommended practices and guidance material.

1.2 The State Safety Programme – Implementation Assessment (SSP-IA) is a complementary programme which assesses the effective implementation of a State Safety Programme by a State.

## 2. A RISK-BASED APPROACH

2.1 Risk based surveillance is widely recognised as a progressive approach for undertaking surveillance activities, with an associated standard in Annex 19 requiring states to implement such an approach: “*States shall establish procedures to prioritize surveillance activities towards those areas of greater safety concern or need*” [Annex 19, Amendment 2].

2.2 Surveillance outcomes can provide an indication of weak areas of provision implementation, that the provision was not well developed and requires evolution, or that enhanced guidance is required to support implementation.

2.3 An effective risk-based surveillance programme takes the outcomes from surveillance activities as a source of intelligence to feed back into the programme to support its evolution, including its provisions.

2.4 In the USOAP/SSP-IA setting, this translates into the findings and observations from the programmes being made available as part of the process for the drafting of standards and recommended practices (SARPs), and supporting guidance material, resulting in continuous improvement.

## 3. IMPROVED VISIBILITY

3.1 The initial drafting of SARPs is typically undertaken by subject matter experts participating in ICAO expert groups (panels), prior to the eventual adoption by the ICAO Council.

3.2 The details of USOAP findings and SSP-IA observations are made available to the state who received the audit, and in a de-identified format, to other member states. Additionally, the Lack of Effective Implementation (LEI) of Critical Elements scores are made available on ICAO website.

3.3 However, the detailed outcomes of surveillance (in an appropriately de-identified format) are not provided to the expert groups who undertake the initial drafting of SARP provisions.

3.4 Consequently, the drafting of provisions does not take into consideration real world safety management implementation challenges identified for service providers and states that are highlighted through the USOAP and via an SSP-IA.

3.5 ICAO provisions can only be evolved to their greatest potential if the expert groups charged with their drafting are furnished with insights obtained from the USOAP and SSP-IA.

#### **4. EVOLUTION OF ICAO PROVISIONS**

4.1 Prescriptive provisions provide a baseline level of risk mitigation. However, the benefits of performance-based provisions are widely recognised; where, instead of specifying a prescriptive means to meet an outcome or objective, the outcome is specified, where the service provider or state is free to determine the most effective and appropriate means to deliver this outcome.

4.2 Providing insights from the USOAP, SSP-IA program and de-identified differences filed by member states – “Electronic Filing of Differences” EFOD would provide enhanced information to identify the prescriptive based provisions which are suitable candidates to be evolved to be performance-based.

#### **5. CONCLUSION**

5.1 There is a lack of visibility of insights gained from both the USOAP and SSP-IA for the expert groups (panels) charged with the drafting ICAO SARPs and guidance material.

5.2 Consequently, an opportunity is missed for the evolution of ICAO SARPs to take into consideration surveillance outcomes from USOAP and SSP-IA.

5.3 Providing insights from the USOAP and SSP-IA would support to movement towards a greater number of provisions becoming performance based, rather than prescriptive.



International Civil Aviation Organization

**WORKING PAPER**

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**ASSEMBLY — 42ND SESSION**

**ECONOMIC COMMISSION**

**Agenda Item 26: Economic Development of Air Transport**

**CELEBRATING 10 YEARS OF ICAO'S CORE PRINCIPLES ON CONSUMER PROTECTION**

(Presented by the International Air Transport Association - IATA)

**EXECUTIVE SUMMARY**

In 2015, as endorsed by the Council and the 38<sup>th</sup> Assembly (A38) and in consultation with States, ICAO developed and adopted a set of Core Principles on Consumer Protection. IATA applauds ICAO for its leadership in taking such a significant development in order to encourage greater compatibility and coherence between the approaches taken by different States in a context of a proliferation of national and regional consumer regulation regimes.

In the intervening decade, there has been a further increase in regulatory initiatives leading to a variety of implementation challenges. In addition, experience has highlighted that a number of important aspects were not fully addressed or anticipated by the Core Principles. It is therefore timely for the Assembly to reaffirm support for the Core Principles and to consider whether additional guidance may be appropriate to assist States in following the Core Principles and to ensure that they are relevant for the next decade and beyond.

**Actions:** The Assembly is invited to:

- a) Reaffirm its support for the Core Principles;
- b) Invite States to ensure that the Core Principles are reflected when developing new regulation or amending existing regulation; and
- c) Request that ICAO consider the appropriateness of developing guidance to reflect developments since 2015.

<i>Strategic Objectives:</i>	This working paper relates to the Strategic Objective <i>Economic Development of Air Transport</i> .
<i>Financial implications:</i>	Negligible since this work can be developed within existing ICAO working bodies.
<i>References:</i>	<i>Convention for the Unification of Certain Rules for International Carriage by Air</i> <i>ICAO Core Principles on Consumer Protection</i>

## 1. INTRODUCTION

1.1 ICAO been aware of the issue of consumer regulation since the Fifth Worldwide Air Transport Conference in 2003, which concluded that States should take steps to avoid the legal uncertainty that could arise from the extra-territorial application of national laws. In 2012, in accordance with the recommendations of the Air Transport Regulation Panel ATRP, ICAO carried out a study on the effectiveness of consumer protection regulations. By the time of the Sixth Worldwide Air Transport Conference in 2013, ICAO acknowledged that more and more states were enacting consumer regulations in the field of air transport and that a coordinated approach was needed.

1.2 In 2015, as endorsed by the Council and the 38<sup>th</sup> Assembly and in consultation with States, ICAO developed and adopted a set of Core Principles on Consumer Protection (“the Core Principles”) as a response to the growing number of national and regional aviation-specific passenger rights or consumer regulations in recent years.

1.3 The Core Principles do not, and are not intended to, form part of the Chicago Convention framework. However, consumer regulation should not interfere with or contradict the Chicago Convention. In particular, national regulations should be compatible and consistent with the international treaty regimes on air carrier liability established by the Warsaw Convention of 1929 and the Montréal Convention of 1999. Moreover, national regulations should not interfere with another States’ ability to make legitimate policy choices, including the choice not to regulate. Consumer regulation should only apply to events occurring within the territory of the regulating State, or outside that territory with respect to aircraft registered there.

1.4 A second key principle is that consumer regulation should respect the need for proportionality. The Core Principles recognize that where States adopt consumer regulation, it is desirable to strike an appropriate balance between protection of consumers and industry competitiveness, taking into account States’ different social, political, and economic characteristics, and without prejudice to safety and security.

1.5 Third, the Core Principles state that consumer regulation should allow for consideration of the impact of mass disruption. The global air transport network is vulnerable to shocks such as volcanic eruptions, public health events such as COVID-19 or system outages such as the CrowdStrike incident in 2024. These incidents have network-wide consequences and affect all parties involved in the provision of air transport services.

1.6 Recognizing the dynamic nature of the air transport sector, the Core Principles were always intended to be a "living document", which could and should be refined and improved from time to time, based on experiences gained and feedback received. After 10 years, it is timely for the Assembly to reaffirm support for the Core Principles and to consider whether guidance may be appropriate in certain areas to assist States in following the Core Principles.

## 2. RECENT DEVELOPMENTS

2.1 Practical experience has highlighted a number of aspects which require attention in order for the Core Principles to achieve their stated goals. Some of these were already envisaged at the time that the Core Principles were adopted while others have emerged as a function of the way that the air transport sector has evolved.

2.2 The multitude of regimes today are not mutually recognized or coordinated. For example, for many common itineraries a passenger could be eligible to receive entitlements under two or even three consumer regulations. Although certain laws recognize the possibility of concurrent claims, they do not go far enough in ensuring that multiple claims do not arise. It is also critical that the policy prerogative of individual States to determine whether or not to introduce aviation-specific consumer regulation should be respected. In the same vein, the adoption of Consumer regulation by one State should not interfere with the sovereign decisions taken by third States with regards to their territory. Guidance on the consistent application of consumer regulation across jurisdictions would help in avoiding or mitigating such conflicts and overlaps.

2.3 Regarding the principle of proportionality, in practice many consumer regulation regimes create a significant financial burden that is ultimately passed on to passengers through higher ticket prices. Moreover, highly prescriptive examples of consumer regulation have been shown to be largely ineffective in reducing disruption such as delays and cancellations as the causes of disruption are frequently outside airlines' control.

2.4 In addition, experience over the past 10 years has highlighted several areas where development of guidance could be helpful. These include:

- a) Extraordinary Circumstances: The concept of *force majeure* or extraordinary circumstances has been incorporated into many consumer regulation regimes. However, there is not a clear or agreed definition of extraordinary circumstances nor is there a consistent list of scenarios considered to constitute extraordinary circumstances or *force majeure*.
- b) Massive Disruption: Although the Core Principles indicate that States should allow for consideration of the impact of massive disruptions, in practice there is not a consistent approach to responding to such disruption. ICAO should consider developing a set of practical principles or guidance for responding to mass-disruption episodes such as the Icelandic volcano, the COVID-19 pandemic or the global CrowdStrike outage. Such guidance should recognize the role of all stakeholders in responding to mass-disruption events, in particular the role of contingency planning.
- c) Shared Accountability: The Core Principles already recognize that all stakeholders have a role to play in responding to scenarios of massive disruption, however this whole system approach is equally relevant during normal operations. Air transport is a complex system in which a whole range of stakeholders are responsible for operational performance and service delivery. In order to ensure that all stakeholders in the value chain are properly incentivized, consideration could be given to developing guidance on shared accountability to properly reflect the interdependencies inherent in air transport operations.
- d) Role of Intermediaries: Where passengers purchase travel through an agent or intermediary, these parties have an important role in ensuring that passengers receive appropriate information and assistance in the event of disruption. This critical function is frequently omitted from consumer regulation regimes and ICAO guidance would be helpful in providing a consistent approach for States to adopt.

### 3. ACTION

3.1 The Assembly is invited to:

- a) Reaffirm its support for the Core Principles on Consumer Protection.
- b) Invite States to ensure that the Core Principles are reflected when developing new regulation or amending existing regulation.
- c) Request that ICAO consider the appropriateness of developing guidance to complement the Core Principles and to reflect developments since 2015. The work of ICAO should include the following tasks:
  - i. Develop guidance to address the risk of jurisdictional issues such as extra-territorial application and regulatory duplication.
  - ii. Develop a common definition of extraordinary circumstances (or similar terms to describe the same concept) as well as establishment of a non-exhaustive list of scenarios that should be understood as constituting extraordinary circumstances
  - iii. Develop guidance for preparing for and responding to mass-disruption events, including the role of contingency planning.
  - iv. Develop guidance to reflect the concept of shared accountability in normal operations as well as in the event of massive disruption in order to properly reflect the interdependencies in the aviation system and to ensure that all stakeholders are properly incentivized to minimize disruptions.
  - v. Recognize the role of intermediaries and consider developing guidance to reflect the responsibilities of intermediaries with relation to consumer regulation.

#### 4. CONCLUSIONS

4.1 The adoption of ICAO's Core Principles in 2015 was an important development in attempting to foster consistency and compatibility in regulatory regimes around the world. Nonetheless, the patchwork of consumer regulation today continues to create unintended consequences for consumers, inhibiting connectivity, increasing cost and reducing choice. After 10 years, the time is right to reaffirm support for the Core Principles and to develop additional guidance to ensure that they are fit for purpose for the next decade and beyond.



**WORKING PAPER**

**ASSEMBLY — 42ND SESSION**

**TECHNICAL COMMISSION**

**Agenda Item 24: Aviation Safety and Air Navigation Priority Initiatives**

**Driving Safety: Enhancing Accident Investigation Report Publication and Mechanisms**

(Presented by the International Air Transport Association (IATA), International Coordinating Council of Aerospace Industries Associations (ICCAIA), International Federation of Air Line Pilot's Association (IFALPA))

**EXECUTIVE SUMMARY**

The timely publication of final reports following aircraft accident investigations is a fundamental requirement under ICAO Annex 13.

The fourteenth meeting of the ICAO Air Navigation Conference (ANC/14) recognized the risk to the global aviation system when safety lessons learned from investigations are not applied in a timely manner. Between 2018-2023, as presented in the IATA Annual Safety Report, out of the 269 accidents classified by the IATA Accident Classification Task Force (ACTF), 57% resulted in a final report.

The Assembly is invited to:

- a) Urge ICAO to promote greater compliance with Annex 13 by calling on all States to fully implement its provisions, including the strict adherence to timelines set forth therein, to ensure the mandatory and timely publication of comprehensive, high-quality final reports.
- b) Urge ICAO to actively encourage States lacking the required capacity to conduct an aircraft accident investigation to enhance their own expertise or, where resources are limited, seek support through partnership with regional safety organizations, to meet their obligations under Annex 13.
- c) Request that ICAO consistently require States' Investigation Authorities to develop and sustain competencies through a dedicated accident investigation training programme.
- d) Urge States to establish fully independent investigation agencies, that are structurally and functionally separate from regulators, operators, and political authorities.
- e) Recommend that ICAO provide targeted support to States with demonstrated gaps in safety implementation, particularly those identified through USOAP audits, where deficiencies in accident and incident investigation are highlighted.
- f) Call upon ICAO to review the effectiveness of the Regional Accident and Incident Investigation Organization (RAIO) programme and, as appropriate, to take necessary measures to support States that lack sufficient resources to establish their own independent accident investigation authority.

<i>Strategic Objectives:</i>	This working paper relates to the Strategic Objective Aviation Safety.
<i>Financial implications:</i>	It is not expected that there will be significant financial implications to ICAO, given this work can be developed by the existing working bodies.
<i>References:</i>	Annex 13 (Aircraft Accident and Incident Investigation) to the Convention on International Civil Aviation)

## 1. INTRODUCTION

- 1.1 The timely publication of final reports following aircraft accident investigations is a fundamental requirement under ICAO Annex 13. The framework establishes short-, medium-, and long-term requirements for the accident investigation process. It also sets out requirements for the independence of the accident investigation authority.
- 1.2 The fourteenth meeting of the ICAO Air Navigation Conference (ANC/14) recognized the risk to the global aviation system when safety lessons learned from investigations are not applied in a timely manner.
- 1.3 Between 2018-2023, the IATA accident data and accident investigation final report, as presented in the IATA Annual Safety Report, show that out of the 269 accidents classified by the IATA Accident Classification Task Force (ACTF), only 57% resulted in a final report. This figure highlights significant capacity challenges and inconsistent compliance with ICAO Annex 13 obligations. IATA is committed to addressing this issue and will intensify efforts through a comprehensive roadmap to improving the quality and completion rate of final investigation reports. The ANC/14 Conference also reiterated the urgency for States to report and investigate accidents in a timely manner.

## 2. Discussion

- 2.1 Safety is the top priority for the International Air Transport Association (IATA). Promoting the importance of accident investigations, enhancing the effectiveness of investigation capabilities, the need for the timely publication of accident investigation reports, and establishing a safety recommendations repository derived from accident investigation reports are key objectives included in IATA's work plan.
- 2.2 Failure to publish thorough and timely accident investigation reports prevents operators, equipment manufacturers, regulators, infrastructure providers, and other concerned stakeholders from accessing critical information that could help prevent future accidents from occurring and further improve aviation safety. Delays in publishing these reports can hinder the identification of safety issues, impede timely corrective actions, and ultimately compromise aviation safety. IATA advocates for the timely publication of high-quality accident investigation reports that are thorough, complete, and provide a detailed description of the accident. These reports should identify contributing factors and offer actionable recommendations to prevent similar occurrences in the future.

- 2.3 Furthermore, complete accident investigations and accident reports enable accident survivors and the families of victims to understand the facts surrounding an accident. In contrast incomplete investigations and reports can undermine public confidence in aviation safety.
- 2.3.1 Ideally, an English version of final reports should always be published. As the international language of aviation, English facilitates the sharing of vital information, improves understanding of concerns amongst aviation professionals from other countries, and ensures a faster dissemination and implementation of safety recommendations.
- 2.4 The Safety Recommendations repository is a valuable tool for preventing future accidents and incidents. It plays a role in:
- 2.4.1 Identifying systemic safety issues – when multiple investigations result in similar recommendations, it indicates a recurring safety deficiency in aviation;
- 2.4.2 Assigning greater weight and urgency to global actions – encourages all stakeholders to be proactive when evidence suggests that an issue is not isolated;
- 2.4.3 Facilitating harmonized safety improvements – it supports the development of standardized safety enhancements and strengthens compliance monitoring efforts;
- 2.4.4 Improving investigation effectiveness – by making investigation reports more valuable, targeted, and impactful;
- 2.4.5 Creating a feedback loop – encouraging all stakeholders to mitigate known risks and take proactive measures to prevent future accidents.
- 2.5 To reiterate, aircraft accident investigations and their resulting recommendations are essential for advancing aviation safety, with the primary aim of preventing future occurrences. Investigating accidents is a cornerstone of global aviation safety, supported by robust regulations, procedures, and competent investigators. Training is crucial for developing and maintaining these competencies. IATA encourages ICAO to ensure States' investigation authorities maintain competency through dedicated accident investigation training courses.
- 2.6 Similar to the timely publication of final reports, the Preliminary Reports must also be published in a timely manner following an accident or incident to ensure the rapid dissemination of key factual information early in the process. This helps prevent misinterpretation, speculation, and the spread of misinformation. Timely release is crucial for communicating and highlighting safety issues identified in the investigation's early findings, allowing authorities to take corrective and preventive actions in a timely manner.
- 2.7 Social media has increasingly become a platform for widespread discussion and scrutiny, serving various purposes such as promoting social causes, sharing news, and connecting communities globally. Commercial air transport accidents often attract significant media attention, leading to swift and sustained public discourse. Given the pervasive nature of social media and the rapid spread of information, it is crucial to promptly release a Preliminary Report containing the facts to support accurate and responsible communication about the occurrence.

- 2.8 Protecting the identities of all involved in a serious incident or accident is essential to reduce stress, prevent harassment, and safeguard their overall well-being.
- 2.9 Despite the requirements set forth in ICAO Annex 13, there remains an unacceptable level of non-compliance with obligations under the Chicago Convention, resulting in significant delays or the complete absence of published reports.
- 2.10 This is supported by the results of the safety oversight audits, conducted under the ICAO Universal Safety Oversight Audit Programme (USOAP), which reveal that several States face difficulties in establishing effective systems for investigating accidents and incidents. These challenges are primarily due to:
- 2.10.1 Inadequate resources, technical expertise, or funding to conduct timely Annex 13 investigations.
- 2.10.2 Investigator competency, emphasizing that all aircraft accident investigators should be active, current, with updated skills, such as training in advanced data analysis techniques.
- 2.11 For States lacking the necessary resources for investigations, the establishment of a regional accident and incident investigation organization (RAIO) represent a practical approach to effectively conduct a full accident investigation to the delivery of a final report. IATA strongly encourages ICAO to assess the effectiveness of the RAIO program through the Regional Safety Oversight Organizations (RSOO) and the Regional Accident and Incident Investigation Organizations Assessment Programme (RRAP).
- 2.12 Furthermore, ICAO is urged to take necessary measures that enable and encourage States, with insufficient resources to establish their own independent accident investigation authority, to actively participate in a RAIO.
- 2.13 Some investigation agencies or authorities report to the Ministry of Transport, Ministry of Justice or Civil Aviation Authority, which can lead to conflicts of interests.
- 2.14 When a State's accident investigation agency is not independent of the State aviation authority, as required by ICAO, it may compromise the credibility of the investigation as well as the final report, the findings, and the uptake of the resulting recommendations.

### **3. Conclusion**

- 3.1 The accident investigation process is one of the most important learning tools for advancing global aviation safety standards. However, in order to learn from an accident, the aviation industry requires investigation reports that are independent, complete, accessible and timely. States should adhere to the requirements outlined in ICAO Annex 13 and publish thorough final reports of accident investigations in accordance with the recommendations and especially the timelines required by this Annex, to ensure the continuous improvement of aviation safety.



**WORKING PAPER**

**ASSEMBLY — 42ND SESSION**

**TECHNICAL COMMISSION**

**Agenda Item 24: Aviation Safety and Air Navigation Priority Initiatives**

**SPECTRUM RESILIENCE: BALANCING SPECTRUM EFFICIENCY WITH AVIATION SAFETY**

(Presented by International Air Transport Association (IATA), International Federation of Air Line Pilots Associations (IFALPA) and Civil Air Navigation Services Organization (CANSO))

**EXECUTIVE SUMMARY**

The aviation industry stands at a pivotal juncture, where the sustainable management of the existing aeronautical spectrum faces challenges from other industries. Despite these challenges, the continued management of this spectrum remains paramount to ensuring flight safety and optimizing efficiency. As technologies such as 5G and 6G emerge, they present opportunities for enhanced communication and operational capabilities. However, they also introduce challenges related to potential interference with critical aeronautical systems, such as radio altimeters.

**Action:** The Assembly is invited to:

- a) Request the council to regularly assess the evolution of radio frequency interference (RFI) with aeronautical safety systems;
- b) Strengthen support for the ICAO policy on radio frequency spectrum by amending Resolution A41-7 “Support of the ICAO policy on radio frequency spectrum matters” as proposed in this paper;
- c) Reiterate the responsibility of all member States to ensure that aviation safety continues to be a matter of highest priority, and to maintain interference-free operation of aeronautical safety systems amid the introduction of new or additional services;
- d) Recommend that relevant ICAO expert groups implement strategies aimed at facilitating safe but faster innovation, development, certification, and implementation of 21<sup>st</sup>-century avionic systems.
- e) Request ICAO to continue organizing interactive workshops with the support of member States, aviation organizations, and industry, with special attention given to the continued protection of aeronautical safety services.

<i>Strategic Goals:</i>	This working paper relates to the Safety and Air Navigation Capacity and Efficiency Strategic Goals.
<i>Financial implications:</i>	N/A
<i>References:</i>	Assembly Resolution A41-7, Support of the ICAO policy on radio frequency spectrum matters Doc 9718 – Handbook on Radio Frequency Spectrum Requirements for Civil Aviation

## 1. INTRODUCTION

1.1 The invisible asset underlying all commercial aviation operations is the frequency spectrum, specifically the allocations granted by the International Telecommunications Union (ITU) to “safety of life” flight operations. It underpins the communications, navigation, and surveillance (CNS) systems critical to safe flight. Therefore, interference-free access to this spectrum is essential for the seamless operation of air traffic, ensuring that pilots, air traffic controllers, and ground personnel can exchange crucial information without disruptions.

1.2 As the telecommunications industry accelerates innovation and delivery of diverse applications powered by 5G, telecommunications operators are pressuring governments to release additional spectrum. This demand is leading to the allocation or reallocation of frequency bands adjacent to those used in aviation, increasing the threat of RFI to legacy avionic systems.

## 2. DISCUSSION

2.1 Recently, the telecommunications industry deployed networks based on 5G C-band technology in the spectrum below the radio altimeter band (4.2-4.4 GHz), which challenges the interference-free use of that segment of the aeronautical spectrum by legacy avionics. Some states activated 5G mitigation measures (with sunsets in 2026 and 2028) concurrent with the rollout of 5G C-band operations at or near airports.

2.1.1 New radio altimeter standards are in development by RTCA and EUROCAE. However, new radio altimeters built to this standard are unlikely to be widely available until the early 2030s. In addition, supply chain and aircraft downtime issues point to operational disruption over the next decade. Consequently, it is essential to continue mitigation of 5G RFI beyond the current sunset dates to ensure protection of RAD ALT systems.

2.1.2 Deployment of 5G is often mischaracterized as a national issue. In reality, airlines operate across multiple regulatory jurisdictions as commercial aircraft routinely fly across international borders. Therefore, varying requirements and mitigation measures may affect flight safety and operational efficiency.

2.2 Substantial regional efforts are underway to ensure continued safe coexistence between aviation operations and 5G deployments in the spectrum below the RAD ALT band. Concurrently, preparatory studies for ITU WRC-27 Agenda Item 1.7 are actively examining the potential introduction of International Mobile Telecommunications (IMT) services in the C-band segment at 4 400 - 4 800 MHz (above the radio altimeter band).

2.3 Consideration of IMT or other services above the radio altimeter band must be preceded by comprehensive studies incorporating operational scenarios during all phases of flight, including off-nominal flight profiles. Aviation safety must not be compromised by spectrum decisions made in the absence of rigorous technical and operational validation. A precautionary approach should be non-negotiable: spectrum policy must be guided by worst-case interference scenarios, validated safety margins, and a clear commitment to preserving the integrity of critical aeronautical systems.

2.4 Dynamic evolution of the global regulatory environment highlights a need for early, continuous, and structured collaboration between aviation and radio regulatory authorities. Such coordination is essential to ensure that future spectrum management decisions are fully aligned with the highest standards of aviation safety, operational resilience, and system integrity.

2.5 To ensure ongoing provision of safe and efficient global air navigation services (ANS) by balancing spectrum efficiency with the needs of aviation safety, this paper proposes that ICAO investigate and implement measures to significantly expedite a process for the development, standardization, and certification of novel 21<sup>st</sup> century avionic systems capable of harmonious spectrum coexistence with the telecommunications industry and other users of spectrum. IATA has published a Whitepaper highlighting such an evolution with respect to [Future Aircraft Communications](#).

2.6 Accelerated deployment of more spectrum efficient CNS technologies are crucial in an electromagnetic environment where substantial telecommunications advancements typically have a deployment cycle measured in years rather than decades (e.g., 4G to 5G and soon 6G - while aviation continues with Marconi era DSB-AM as its primary voice communications technology). This disparity in innovation and deployment timelines must be effectively addressed at ICAO level as governments look to spectrum auctions as a significant source of funds.

2.7 Interference-free access to the aeronautical frequency spectrum is crucial for ensuring the safety, efficiency, and growth of the aviation industry. It supports seamless CNS, enabling the sector to operate reliably and profitably. To preserve these capabilities, it is imperative that governments, regulatory authorities, and industry stakeholders collaborate to continue protecting the aeronautical frequency spectrum and ensure interference-free access. To this end, the Assembly is invited to amend resolution 41-7 to guide and support effective action by States, ICAO, and industry.

**A41-7-A42-xx: Support of the ICAO policy on radio frequency spectrum matters**

Insert and amend resolution accordingly;

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*Recognizing* that unresolved spectrum issues relating to aeronautical safety services have resulted in flight cancellations, degradations of air traffic management services, and interruptions of flight operations;

*Recognizing* that commercial aviation seamlessly spans across international borders and operates under diverse regulatory frameworks, unresolved spectrum issues relating to aeronautical safety services cannot be treated as a purely national issue while overlooking their impact on international flight operations.

*Recognizing* that to ensure optimal use of the frequency spectrum allocated to aviation, efficient frequency management and use of best practices are required;

.....

**The Assembly:**

1. *Urges* Member States, international organizations and other civil aviation stakeholders to support firmly the ICAO frequency spectrum strategy and the ICAO position at WRCs and in regional and other international activities conducted in preparation for WRCs, including by the following means:

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2. *Urges* Member States to actively engage with their radio regulatory authorities in order to realize harmonization of aviation interests with other national interests in preparation for and during ITU WRC;

3. *Urges* Member States to consider, as a priority, public and aviation safety when deciding how to enable new or additional services, and to consult with aviation safety regulators, subject matter experts and airspace users, to provide all necessary considerations and to establish regulatory measures to ensure that incumbent aviation systems and services are free from harmful interference;
4. *Requests* the Secretary General to bring to the attention of ITU the importance of adequate radio frequency spectrum allocation and protection for the safety of aviation;
5. *Instructs* the Council and the Secretary General, as a matter of high priority within the budget adopted by the Assembly, to ensure that the resources necessary to support the development and implementation of a comprehensive aviation frequency spectrum strategy as well as increased participation by ICAO in international and regional spectrum management activities are made available; and
6. *Declares* that this resolution supersedes Resolution ~~A38-6~~ A41-7.

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**WORKING PAPER**

**ASSEMBLY — 42ND SESSION**

**TECHNICAL COMMISSION**

**Agenda Item 24: Aviation Safety and Air Navigation Priority Initiatives**

**GNSS Radio Frequency Interference (RFI)**

(Presented by International Air Transport Association (IATA) and International Business Aircraft Council (IBAC))

**EXECUTIVE SUMMARY**

The Global Navigation Satellite System (GNSS) serves as a fundamental pillar of modern air transport operations. It provides the positioning, navigation, and timing (PNT) necessary for all phases of flight. From precision approaches to efficient en-route navigation and air traffic management (ATM) automation, GNSS underpins safety, efficiency, and environmental sustainability. The escalating prevalence and sophistication of deliberate radio frequency interference (RFI) pose a worsening threat to the integrity and accessibility of GNSS for civil aviation applications.

Although ITU resolutions aim to restrict deliberate State-level GNSS interference to within national borders, adversaries in various conflict zones are actively engaged in jamming and spoofing activities that adversely affect global air traffic operations. This paper underscores the operational consequences of GNSS RFI and urges ICAO member states and industry stakeholders to promptly implement effective measures to mitigate this immediate, critical, safety and economic risk.

**Action:** The Assembly is invited to:

- a) Acknowledge the paramount significance of GNSS in airline operations and the escalating threat posed by RFI.
- b) Endorse the proposed multi-faceted approach set out in section 3.2 of this paper, for mitigating GNSS RFI, encompassing enhanced monitoring, source identification, avionics fortification, operational protocols, and research and development endeavours.
- c) Urge member states to prioritize and expedite national and international initiatives to address GNSS RFI.

<i>Strategic Goals:</i>	This working paper relates to the Safety and Air Navigation Capacity and Efficiency Strategic Goals.
<i>Financial implications:</i>	

<i>References:</i>	Assembly Resolution A41- 8, Consolidated statement of continuing ICAO policies and practices related to a global air traffic management (ATM) system and communications, navigation, and surveillance/air traffic management (CNS/ATM) systems
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## 1. INTRODUCTION

1.1 Modern commercial aviation relies heavily on GNSS-based services for numerous safety-critical operations. These include precision approach procedures enabled by performance-based navigation that enhance safety and reduce delays. GNSS also enables optimized enroute navigation for fuel efficiency, and improved air traffic management. Global Positioning System (GPS) data is deeply integrated into aircraft systems such as FMS, AFCS, and data link communication systems. Additionally, surveillance systems like ADS-B Out rely on accurate GPS positioning to enhance situational awareness for ATM. The heavy reliance on GNSS complicates contingency planning and execution when subjected to radio frequency interference (RFI).

1.2 The increasing frequency and geographic spread of GNSS RFI, particularly in regions experiencing geopolitical instability, has introduced a significant threat to the reliability and integrity of satellite-based services. Despite global efforts to monitor and report such events, GNSS interference incidents are no longer isolated or rare. Instead, they represent a persistent and growing risk to aviation safety and efficiency.

1.3 Various ICAO expert groups dedicate significant time and resources to addressing this issue. Over the longer term, the development of standards related to alternative positioning, navigation, and timing (APNT) and spectrum resilience may address some aspects of GNSS RFI. However, commercial aviation seeks urgent resolution of “day of operation” RFI impacts, which can involve re-routes, denied entry to certain airspace, and reversion to minimum operational network (MON) all of which directly affect flight efficiency and safety.

## 2. DISCUSSION

2.1 The increasing density of radio frequency emitters globally, coupled with the miniaturization and widespread availability of electronic jamming devices, exacerbates the RFI problem. Airlines are observing a rise in GNSS interference events, ranging from temporary signal degradation to complete loss of functionality, requiring immediate and often disruptive operational responses.

2.2 A loss of positional accuracy undermines the ability to maintain precise flight paths and safe separation between aircraft, increasing the risk of mid-air collisions or controlled flight into terrain (CFIT), particularly in complex or congested airspace. Precision approaches may be degraded, forcing aircraft to rely on less accurate alternatives that may not always be available, leading to go-arounds or diversions. Additionally, disruptions to air traffic management systems and critical onboard systems that depend on GNSS data can result in cascading failures and reduced situational awareness.

2.3 GNSS RFI events increase the complexity of flight operations. Pilots must quickly adapt to degraded navigation capabilities, coordinate with air traffic control, and implement alternative procedures, all while managing heightened workload during critical flight phases. Air traffic controllers, in

turn, must handle increased traffic complexity with reduced automation support, often requiring greater separation between aircraft. Airline operations centres must also respond in real time, adjusting flight plans, fuel loads, and crew assignments while ensuring compliance with regulatory requirements when GNSS navigation is compromised.

### 3. CONCLUSION

3.1 Effectively addressing GNSS RFI requires a coordinated, multi-faceted approach involving ICAO member states, regulatory authorities, industry stakeholders, and equipment manufacturers.

3.2 This Assembly is invited to endorse the **multifaceted approach** and urges ICAO to accelerate work under its program to achieve those actions.

#### 1. **Effective ICAO / State Coordination: Military RFI**

- a) Military entities are currently the most significant originators of deliberate, debilitating GNSS RFI impacting civil aviation. Despite prior requests from ICAO, some states persist in jamming and spoofing international civil aviation.

#### 2. **Enhanced Monitoring and Reporting: Non-military RFI**

- a) **Standardized Incident Reporting:** Development and implementation of a robust, standardized global reporting mechanism for GNSS RFI events, including details on location, duration, characteristics, and impact on operations. This data is crucial for trend analysis, source identification, and risk assessment.
- b) **Improved Detection Capabilities:** Encouraging and supporting the development and deployment of advanced RFI detection and localization systems, terrestrial, airborne and space based.

#### 3. **Source Identification and Mitigation:**

- a) **International Cooperation:** Strengthening cross-border cooperation and information sharing between states to identify and mitigate RFI sources, particularly those with a broad geographical impact.
- b) **Regulatory Enforcement:** Urging member states to rigorously enforce national regulations concerning the sale, possession, and use of GNSS jamming devices, and prosecuting offenders to the full extent of the law.
- c) **Spectrum Management:** Advocating for more stringent international and national spectrum management policies to protect GNSS frequencies from adjacent and out-of-band interference, including the allocation of appropriate guard bands.
- d) **Public Awareness Campaigns:** Educating the public on the dangers and illegality of GNSS jamming devices.

#### 4. **Aircraft and Avionic Resilience:**

- a) **Development of Robust Receivers:** Encouraging avionic manufacturers to proactively develop and deploy more resilient GNSS receivers with enhanced anti-jamming and anti-spoofing capabilities, including advanced filtering techniques, adaptive nulling, and multi-constellation/multi-frequency reception. The removal of Controlled Radiation Pattern Antennas from some restricted sales lists provides an initial opportunity to have a timely impact on reducing GNSS RFI.
- b) **Certification Standards:** Updating and harmonizing ICAO PBN and equipment certification standards to account for the evolving RFI threat, ensuring that new aircraft and avionics are adequately resilient.
- c) **Enhanced Integrity Monitoring:** Promoting the use and further development of airborne and ground-based integrity monitoring systems (e.g., RAIM, ABAS, GBAS) to provide timely alerts of GNSS signal degradation.

#### 5. **Operational Procedures and Training:**

- a) **Contingency Planning:** Developing and regularly reviewing robust contingency procedures for GNSS outages, including clearly defined alternative navigation strategies and communication protocols for pilots and ATC.
- b) **Pilot Training:** Ensuring comprehensive training for flight crews on recognizing, managing, and reporting GNSS RFI events, and on transitioning to alternative navigation methods.
- c) **ATC Training:** Providing air traffic controllers with the necessary training and tools to manage air traffic effectively during GNSS degraded events.

#### 6. **Research and Development: Alternative / Complementary PNT Technologies:** Supporting research and encouraging investment in complementary PNT technologies to augment and back up GNSS.

#### 7. **Address cybersecurity aspects of GNSS:** developing cyber hardening strategy, including encryption and authentication of timing and navigation data, to protect against malicious attacks, including spoofing.



**WORKING PAPER**

**ASSEMBLY — 42ND SESSION**

**TECHNICAL COMMISSION**

**Agenda Item 24: Aviation Safety and Air Navigation Priority Initiatives**

**ADDITIONAL ACTIVITIES NEEDED TO ENSURE AN EFFICIENT FF-ICE  
IMPLEMENTATION FOR AIRSPACE USERS**

(Presented by the International Air Transport Association (IATA) and  
International Federation of Air Line Pilots Associations (IFALPA))

**EXECUTIVE SUMMARY**

The 14th Air Navigation Conference highlighted the importance of ensuring a seamless transition towards flight and flow for a collaborative environment (FF-ICE). Several aspects need to be properly considered to ensure airspace users can receive all the information needed to create a trajectory as efficient as possible and consistently implement FF-ICE. If not properly addressed, airspace users' trajectories will be less than optimal and thus lead to more fuel uplift. In addition, if the FF-ICE services are not consistently implemented across the globe, airspace users flying globally will need to develop many different interfaces potentially leading to ambiguities and less than efficient handling of the trajectory.

**Action:** The Assembly is invited to:

- a) request ICAO to develop complementary provisions necessary to ensure a harmonized implementation of flight and flow for a collaborative environment;
- b) urge ICAO to develop a comprehensive FF-ICE roadmap including aspects such as the provision of the relevant airspace constraints and detailed digital meteorological information along the flight trajectory to ensure minimal operational challenges to airspace users;
- c) request ICAO to ensure roadmap buy-in at the regional and national level; and
- d) request ICAO member States to endorse and implement the FF-ICE roadmap.

<i>Strategic Goals:</i>	This working paper relates to the Safety, Air Navigation Capacity and Efficiency Strategic Objectives.
<i>Financial implications:</i>	N/A
<i>References:</i>	ANConf/14 recommendation 3.2/2 – Transition to flight and flow – information for a collaborative environment services and cessation of ICAO 2012 flight plan by 2034

## 1. INTRODUCTION

1.1 The Flight and Flow Information for a Collaborative Environment (FF-ICE) release 1 provisions that became applicable in November 2024, provided a new mechanism to exchange flight plan and flight plan related information while the existing flight plan 2012 format and distribution rules remained available.

1.2 The 14<sup>th</sup> Air Navigation Conference recognized that keeping two formats for the exchange of flight plan was not a long-term solution. The conference therefore agreed in recommendation 3.2/2 that the global cessation date of ICAO 2012 flight plan should be 2034. By that date, only FF-ICE should be used to exchange flight plan and flight plan related information.

1.3 Recommendation 3.2/2 also called for the development of national and regional implementation plans to transition to flight and flow for a collaborative environment supported by ICAO provisions and guidance.

## 2. DISCUSSION

2.1 Pursuant to the outcomes of the 14<sup>th</sup> Air Navigation Conference, additional details would need to be addressed to ensure a seamless transition for airspace users.

2.1.1 Amending ICAO provisions to remove all references to flight plan 2012 does not guarantee that the implementation of flight and flow for a collaborative environment is harmonized. The flight plan 2012 format as described in PANS-ATM and transmitted over the AFTN follows a well-defined and understood set of rules. Flight and flow for a collaborative environment is meant to be exchanged following system wide information management (SWIM). PANS-IM provides the principles to be followed for such exchanges including the need to adhere to an exchange format such as FIXM. The information service overview described in PANS-IM is a discovery feature not a standard. There is therefore a need to explain how the FF-ICE services are to be built to ensure interoperability. This is meant to happen via information service definition developed for each FF-ICE service. The sooner those become available and explained to States, the higher the chances are that States will implement FF-ICE the same way. If not, airspace users will have to potentially adjust the way flight plans are delivered to each State as, for example, the FF-ICE filing service may be slightly different.

2.1.2 Regional planning is essential for a successful implementation of FF-ICE, but with the agreement for a flight plan 2012 cessation date in less than 10 years from now, it becomes crucial to provide education and training to all the States that did not participate to the ICAO provision development process so that they understand why they need to implement FF-ICE and why it is necessary to achieve the transition at the same time.

2.2 Airspace users and their flight planning system providers are investing to support the use of FF-ICE services as they see FF-ICE as an essential pillar to unlock TBO thanks to the availability of more flight information. But the benefits can only be reaped if States make use of that additional information and consistently throughout the flight. Airspace users flight duration increases with the latest generation of long-haul aircraft, but the fuel efficiency that comes with those aircraft may be negated if ANSPs flight planning systems cannot properly make use of the planned trajectory changes, such as flight level and route adjustments, where and when needed.

2.3 Transitioning to FF-ICE is not just a change of format, it is also about providing via the flight plan, aircraft trajectory which have been carefully crafted from departure to arrival assuming ANSPs flight planning system throughout the flight can handle trajectories expressed as a list of lat-long and not waypoint and route names as is the case today. This list is meant to be the result of a pre-departure negotiation between the airspace user and the ANSPs through automation. Without such negotiation or an incomplete one, the airspace user trajectory optimization may be jeopardized. At the regional level, it is therefore important that the implementation of FF-ICE is planned so as to include not only the acceptance of FF-ICE services instead of FPL2012 messages, but also the necessary ANSPs automation systems adaptation to provide feedback during the pre-departure negotiation and the use of the addition trajectory information contained in the FF-ICE trajectory so that the planned flight efficiency can be granted.

2.4 An optimized flight trajectory is the result of many factors including a better knowledge of all the constraints that may affect the flight, be they airspace or meteorology related. It is therefore important for ANSPs and meteorological information providers to provide the airspace and weather information in a digital format so that it can be effectively used by the airspace users flight planning systems. Airspace users embraced FF-ICE with the belief that all constraints would be made known to them prior to departure thanks to the new FF-ICE services, allowing them to optimize the trajectory and the fuel embarked. Each overflowed ANSP unable to provide such information forces airspace users to create a trajectory based on the known AIP instead of the latest airspace situation leading to a less efficient flight as more fuel embarked is usually the result of unknown airspace conditions. This also means that ANSPs overflowed several hours after departure should be able to analyze the proposed flight plan pre-departure and not close to the flight reaching their boundary.

2.5 The above examples demonstrate that, without additional work from ICAO and proper understanding by States of the need to not only accept the new flight plan format but also adapt their automation systems, airspace users will not get the benefits that FF-ICE are due to generate. In addition, ICAO should develop a comprehensive roadmap including FF-ICE related tasks as well as complementary activities such as the deployment of the necessary communication infrastructure or a means to provide the latest airspace constraints preferably via an ATFM capability. This roadmap should be shared with and endorsed by States.

### 3. CONCLUSION

The Assembly is invited to:

- a) request ICAO to develop complementary provisions necessary to ensure a harmonized implementation of flight and flow for a collaborative environment;
- b) urge ICAO to develop a comprehensive FF-ICE roadmap including aspects such as the provision of the relevant airspace constraints and detailed digital meteorological information along the flight trajectory to ensure minimal operational challenges to airspace users;
- c) request ICAO to ensure roadmap buy-in at the regional and national level; and
- d) request ICAO member States to endorse and implement the FF-ICE roadmap.



**WORKING PAPER**

**ASSEMBLY — 42ND SESSION**

**EXECUTIVE COMMITTEE**

**Agenda Item 22 : Other high-level policy issues to be considered by the Executive Committee**

**RECENT CHALLENGES TO ICAO POLICIES ON THE IMPOSITION OF TAXES ON THE INCOME OF INTERNATIONAL AIR TRANSPORT ENTERPRISES AND ON THE USE OF INTERNATIONAL AIR TRANSPORT SERVICES**

(Presented by the International Air Transport Association (IATA))

**EXECUTIVE SUMMARY**

The UN Economic and Social Council recently endorsed significant changes to *Article 8 of the United Nations Model Double Taxation Convention between Developed and Developing Countries* (the UN Model Convention) impacting taxation of the income of air transport. Separately, we observe an increasing and persistent policy fragmentation across States regarding taxation of the use of international air transport. Of particular concern are coordinated or multilateral initiatives which undermine ICAO's primacy and leadership in policies pertaining to international aviation and compromise the integrity of global efforts under the Chicago Convention and ICAO Assembly Resolutions.

**Action:** The Assembly is invited to:

- a) Note the revision to Article 8 of the UN Model Convention.
- b) Encourage States to coordinate with their relevant taxation or finance authorities regarding compliance with the *Assembly Resolution A41-27, Appendix B – Taxation*.
- c) Urge States to implement ICAO's Resolutions and Policies on Taxation in the Field of International Air Transport (Doc 8632) within their jurisdictions and to invite all appropriate national authorities to comply with such to avoid double or discriminatory taxation on air transport.
- d) Urge States to abide by *Assembly Resolution A41-22* specifying CORSIA as the only global market-based measure for international aviation CO<sub>2</sub> emissions and call for States and other UN agencies to refrain from introducing national/regional/international policy fragmentation.

<i>Strategic Objectives:</i>	This working paper relates to Strategic Objective – <i>Economic Development of Air Transport</i>
<i>Financial implications:</i>	<i>Negligible</i>
<i>References:</i>	<i>ICAO Doc 8632, Policies on Taxation in the Field of International Air Transport. ICAO Assembly Resolutions A41-21, A41-22 and A41-27. UN Model Double Taxation Convention between Developed and Developing Countries. Reports of the Committee of Experts on International Cooperation in Tax Matters on its twenty-ninth session, in October 2024, and its thirtieth session, in March 2025.</i>

## **1. Developments in relation to taxes on the INCOME of international air transport enterprises**

1.1 On 10 June 2025, the UN Economic and Social Council (ECOSOC) endorsed amendments to Article 8 of the UN Model Double Taxation Convention Between Developed and Developing Countries, as approved by a subsidiary expert body (membership in personal capacity), the Committee of Experts on International Cooperation in Tax Matters (UN Tax Committee) in October 2024 and March 2025.

1.2 These developments disregard and directly contradict ICAO's policies on taxation, increase the risk of double taxation of airline income, and create challenges to bilateral Air Services Agreements.

1.3 The amendments to Article 8 introduce a source-based taxation preferred model (Alternative A) which shifts from the exclusive residence-State taxation historically applied to income from international air transport in the UN Model Convention (Alternative B). The Attachment details the new Article 8.

1.4 ICAO's Policies on Taxation in the Field of International Air Transport (Doc 8632) recommend exclusive residence State taxation (where an airline profit is taxed only in the State of effective management of the airline). The ICAO approach is designed to avoid multiple taxation of the income of air transport enterprises, based upon the principle of reciprocity. In addition, the 41st Session of the ICAO Assembly, as outlined in *Assembly Resolution A41-27*, urged Member States to follow ICAO's Policies and to avoid double taxation in the field of air transport. The amendments to Article 8 will generate situations of multiple taxation, a concern explicitly acknowledged by the UN Tax Committee.

1.5 The UN Tax Committee also acknowledge, but disregard, the impact on airline financial sustainability; "*airlines historically have had modest profits and operating an airline involves large expenses, such that taxation on a gross basis, with no recognition of expenses, may result in over-taxation*".

1.6 Furthermore, bilateral Air Services Agreements (ASAs) negotiated under the expectation of residence-based taxation may require renegotiation, creating uncertainty that becomes a barrier to investment and route development. The ASAs set specific conditions that allow airlines of the bilateral partners (States) to reap economic and social benefits. Any changes to these conditions could also potentially jeopardize the operation of valued air services between the respective countries.

1.7 Such a disruption extends beyond taxation to affect the broader bilateral aviation relationship, as tax provisions are often integral to the overall balance of negotiated benefits. The incorporation of tax provisions in ASAs is deliberate, designed to create a predictable operational and fiscal environment for air carriers. These reciprocal tax exemptions are not incidental but are fundamental to the balance of benefits negotiated between States. It is crucial to approach potential challenges to these agreements with caution, recognizing their status as international treaties and the complex web of rights and obligations they create.

## **2. Developments in relation to taxes on the USE of international air transport services**

2.1 The ICAO 41<sup>st</sup> Assembly, again with reference to Doc 8632, urged Member States to follow ICAO's Policies on taxation "and to avoid imposing discriminatory taxes on international aviation."<sup>1</sup> The Assembly also established the Carbon Offsetting and Reduction Scheme for International Aviation (CORSA) as the "only global market-based measure [MBM] applying to CO<sub>2</sub> emissions from international aviation so as to avoid a possible patchwork of duplicative State or regional MBMs, thus ensuring that international aviation CO<sub>2</sub> emissions should be accounted for only once."<sup>2</sup>

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<sup>1</sup> ICAO Assembly [Resolution A41-27](#)

<sup>2</sup> ICAO [Assembly Resolution A41-22](#)

2.2 IATA observes increasing and persistent policy fragmentation among governments, particularly in Europe and Africa. A rising number of countries impose or consider taxes on the use of air transport to address environmental concerns. However, such taxes do not reduce emissions directly, and it is often uncertain whether the funds collected are allocated to pay for measures that do. In this way, such taxes are generally inefficient and inequitable in nature and come with adverse economic and social consequences. They impact affordability, connectivity, employment, and business activity, including tourism, all of which are the most detrimental to developing economies. Often unaccompanied by thorough financial and environmental cost-benefit analysis, the harm caused by these taxes can exceed any gains, potentially leading to a *decrease* in overall tax revenues, and no certifiable CO<sub>2</sub> emissions reductions.

2.3 These fragmented policy initiatives diverge from existing regulations and severely weaken the globally harmonized ICAO framework. Of particular concern are coordinated or multilateral initiatives that disregard ICAO's primacy and leadership regarding policies for the international aviation sector, and that compromise the integrity of global efforts under the Chicago Convention and ICAO Assembly Resolutions.

2.4 While the sovereign right of governments to impose taxes is recognized, such fragmentation severely undermines efforts to address emissions from international aviation and threatens the global international air traffic system. Countries implementing such taxes are also ICAO Member States and were instrumental in developing and establishing CORSIA. The unified implementation of CORSIA by all Member States without regional or national derogations, is vital to uphold its exclusivity to address international air transport CO<sub>2</sub> emissions. For aircraft operators, policy fragmentation imperils the global network, adds administrative and financial burdens, diverts crucial funds away from proven decarbonization solutions, such as the purchase of sustainable aviation fuel and carbon offsetting credits, and risks double charging the same tonne of CO<sub>2</sub> emissions.

2.5 In line with the authority vested in ICAO by its Member States as the sole legitimate forum for developing and globally harmonizing policies that support international civil aviation, it is vital that other UN agencies, Member States' relevant finance authorities, along with any other relevant body seeking to engage in this arena, respect the deliberations and decisions of the States taken under the auspices of ICAO.

### **3. Conclusion and call to action by States**

3.1 We respectfully draw the Assembly's attention to these recent developments and critical issues in the imposition of taxes of the income of international air transport enterprises and of the use of international air transport services.

3.2 ICAO's Policies on Taxation represent more than just technical guidance—they constitute essential development infrastructure. Like international postal agreements or telecommunications protocols, these frameworks enable global systems that create value far exceeding their individual components. States that abandon this consensus risk fragmenting a system that has proven remarkably effective at connecting their economies to global opportunities.

3.3 Aviation's greatest value lies not in direct revenue generation but in its multiplier effect on economic development. Each new route creates business opportunities, facilitates knowledge transfer, and integrates markets, increasing the productivity of every industry that uses its services. The Chicago Convention's vision of overseeing and developing air transport "soundly and economically" has enabled aviation to become one of the most effective catalysts of global economic development and integration, generating far more value through facilitated trade, tourism, and investment than taxes could ever yield.

3.4 The continued viability of this global system depends fundamentally on consistent and predictable regulatory and fiscal frameworks. Recognizing these interconnected challenges, we urge States to take actions as outlined in the Executive Summary.

## ATTACHMENT A

### REVISED ARTICLE 8 IN UNITED NATIONS MODEL DOUBLE TAXATION CONVENTION BETWEEN DEVELOPED AND DEVELOPING COUNTRIES

#### *Article 8* **International Shipping and Air Transport**

##### **Article 8 (Alternative A)**

1. Income arising in a Contracting State from the operation by a resident of the other Contracting State of ships or aircraft in international traffic may be taxed in that other State.
2. However, income from the operation of ships or aircraft in international traffic arising in a Contracting State may also be taxed in the Contracting State in which it arises and according to the laws of that State, but if the beneficial owner of the income is a resident of the other Contracting State, the tax so charged in the State in which the income arises shall not exceed:
  - (a) if the taxation law of that State imposes tax on such income on a net basis, 50 per cent of the tax that would be imposed by that State on that income in the absence of this Convention, or
  - (b) \_\_\_ per cent [the percentage is to be established through bilateral negotiations] of the gross amount of the payments underlying such income,

whichever is lower.

3. For the purposes of this Article, “income from the operation of ships or aircraft in international traffic” means the total gross amount received in consideration for the carriage of passengers, mail, livestock or goods in international traffic.
4. For the purposes of this Article, income from the operation of ships or aircraft in international traffic shall be deemed to arise in a Contracting State if that income is received for the carriage of passengers, livestock, mail or goods, where such carriage:
  - (a) starts from a location in that Contracting State and ends at a location outside that Contracting State; or
  - (b) ends at a location in that Contracting State and starts from a location outside that State.

5. The provisions of paragraphs 1 and 2 shall also apply to income from the participation in a pool, a joint business or an international operating agency engaged in the operation of ships or aircraft.

##### **Article 8 (Alternative B)**

1. Profits of an enterprise of a Contracting State from the operation of ships or aircraft in international traffic shall be taxable only in that State.
2. The provisions of paragraph 1 shall also apply to profits from the participation in a pool, a joint business or an international operating agency.



**WORKING PAPER**

**ASSEMBLY — 42ND SESSION**

**EXECUTIVE COMMITTEE**

**Agenda Item 12: Facilitation Programmes**

**THE IMPORTANCE OF A GLOBAL ACCESSIBILITY STRATEGY AND UNIFORM REGULATIONS, STANDARDS AND PROCEDURES**

(Presented by the International Air Transport Association (IATA)  
and Airports Council International (ACI))

**EXECUTIVE SUMMARY**

The number of elderly and persons with disabilities makes up a significant and growing percentage of the world's population, and is increasing through population growth, medical advances and the ageing process. Aviation, like all other transport modes, needs to recognize and accommodate this growing passenger segment to reach a disability-inclusive air transport system.

Resolution A41-15, adopted at the 41st Session of the ICAO Assembly in 2022, requested the Council to develop an effective strategy and work programme for passengers with disabilities and reduced mobility, aiming to achieve a disability-inclusive transport system in cooperation with all stakeholders. The Resolution also encouraged States to strive for uniformity in their transport accessibility regulations, standards and procedures.

**Actions:** The ICAO Assembly is invited to:

- a) Recommend ICAO to ask States to strive for uniformity in their legislative design, actively involving industry stakeholders and persons with disabilities through their representative organisation in the policymaking cycle.
- b) Encourage States to support the ICAO Working Group on Accessible Aviation and include representatives of the disability community.

<i>Strategic Objectives:</i>	This working paper relates to the Strategic Objectives of Aviation Security and Facilitation, and Economic Development of Air Transport.
<i>Financial implications:</i>	It is not expected that there will be significant financial implications to ICAO, given this work can be developed by the existing working bodies.

<i>References:</i>	UN Convention on the Rights of Persons with Disabilities <sup>1</sup> ICAO Assembly Resolution A41-15 ICAO DOHA Declaration
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## 1. INTRODUCTION

1.1 The ICAO General Assembly Resolution A41-15: Accessibility in International Civil Aviation mandated the ICAO Council to develop an effective strategy and work program on accessibility for passengers with disabilities.

1.2 Recognising the clear mandate of the General Assembly, a group of States from the ICAO Working Group on Accessible Aviation under the Facilitation Panel and representatives from the aviation industry have drafted an outline of the accessibility strategic framework.

1.3 Further to the Council of ICAO designating 2024 as the Year of Facilitation (FAL2024), ICAO, jointly with Airports Council International (ACI) and the International Air Transport Association (IATA), conducted a very successful Symposium on Accessibility in International Civil Aviation on 2 and 3 December 2024.

1.4 Under the proposed theme “*Inclusive and universally accessible Air Transport for Persons with Disabilities and Reduced Mobility*”, the Accessibility Symposium addressed the facilitation of air transport for persons with disabilities and reduced mobility, as well as the challenges and efforts of States, industry, and other stakeholders to enhance international collaboration for practical solutions regarding accessibility. The Symposium also concluded that the involvement of persons with lived experience is key in accessibility decision-making processes, and they should be included in the ICAO Working Group on Accessible Aviation.

1.5 The Ministerial Facilitation Conference held in April 2025 and the Doha Declaration prioritised the inclusion and accessibility of air transport services to persons with visible and non-visible disabilities and reduced mobility by ensuring their involvement in decision-making processes, fostering data collection and sharing, and advancing personnel training, among other efforts to achieve a disability-inclusive air transport system.

1.6 The Doha Declaration aligns with other ICAO Long-Term Strategies, whose aim is to protect and ensure the full and equal enjoyment of all human rights and fundamental freedoms for all persons with disabilities, including freedom of movement.

## 2. THE NECESSITY TO ENHANCE ACCESSIBILITY INITIATIVES AND REINFORCE THE ICAO STRATEGIC FRAMEWORK.

2.1 Over the past years, the existence of barriers capable of discouraging part of the population from travelling has been a matter of concern and has gradually given rise to national regulations aimed at overcoming those limitations to the practice of activities, including air transport, which should be accessible by law.

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<sup>1</sup> <https://www.ohchr.org/EN/HRBodies/CRPD/Pages/ConventionRightsPersonsWithDisabilities.aspx>

2.2 Without a clear, consistent, and strategic global framework led by ICAO, regulations are fragmented and may not lay the necessary foundations to achieve accessible and universal air transport on a coordinated basis.

2.3 This fragmentation does not help passengers travel with peace of mind, nor does it facilitate the industry's consolidation of policies and processes, leaving room for interpretation by the experts responsible for the work.

2.4 Industries and states are dedicated to delivering seamless and cohesive accessible services throughout a passenger's journey. Through collaboration, we can enhance accessibility and guarantee that every traveller experiences a smooth and enjoyable process, as intended by all stakeholders involved.

2.5 Along these lines, IATA and ACI call on ICAO Member States to continue ensuring consistent design and application of regulations, working within the international cooperation framework to avoid inconsistent service delivery.

2.6 The ICAO Working Group on Accessible Aviation has drafted a long-term disability strategy and collected a list of regulatory requirements in a compendium that encompasses policies and practices designed to ensure that individuals with disabilities can travel by air safely and comfortably, including access to services, accommodations, and relevant information. The strategy is aimed to be presented for approval at the next meeting of the Facilitation Panel in December 2025.

### 3. CONCLUSION

3.1 The need of the hour from ICAO is a sound response to the call to action from passengers, industry, and States in the accessibility field, harmoniously leading States, airlines, airports and passengers.

3.2 It is now time to continue bringing national efforts into the ICAO-guided regulatory working group, which will help address the patchwork of inconsistent accessibility regulations that already act as a barrier to making air travel a comfortable and positive experience for all.

3.3 For this, it is essential that the General Assembly urge ICAO and its Member States to continue supporting and further expand the work of the Working Group on Accessible Aviation, and to include representatives from the disability community, as well as deliver its strategy and work plan for accessible aviation.



International Civil Aviation Organization

**WORKING PAPER**

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**ASSEMBLY — 42ND SESSION**

**TECHNICAL COMMISSION**

**Agenda Item 24: Aviation Safety and Air Navigation Priority Initiatives**

**Implementation of New Mandates in Aircraft Operation**

(Presented by International Air Transport Association (IATA), International Coordinating Council of Aerospace Industries Associations (ICCAIA))

**EXECUTIVE SUMMARY**

The safe and reliable operation of the commercial aviation fleet is constantly improved by implementing new aircraft and equipment capabilities as well as procedural novelties to operationalize such capabilities.

The corresponding ICAO SARPs and their timeline of Adopted – Effective – Applicable dates are essential to ensuring a globally harmonized implementation by States of the respective mandates regarding aircraft equipage and operation.

Establishing such a timeline, and particularly the viability of the applicability date of the SARPs, is fundamentally connected to the aviation industry and aviation operators' readiness to implement the mandates which require adequate resources and capacities (including supply chain related ones).

The implementation process of ICAO SARPs generated mandates such as aircraft equipage for Global Aeronautical Distress and Safety System – Autonomous Distress Tracking (GADSS-ADT), and aircraft equipage for Runway Overrun Awareness and Alerting System (ROAAS). Another example is the transition from Aircraft Classification Number/Pavement Classification Number (ACN/PCN) system to Aircraft Classification Rating/Pavement Classification Rating (ACR/PCR) system.

These are all recent cases proving that the effectiveness of ICAO efforts to validate the feasibility of SARP implementation timeline and ensure its globally harmonized rollout by States must be improved in view of securing all aviation stakeholders' ability to comply as well as creating a robust mechanism by which the aviation industry dynamics can be taken into account over the years which ensures proper timing between SARPs' adoption, effective and applicability dates.

<b>Action:</b> The Assembly is invited to: a) Acknowledge that service providers hold the final responsibility for compliance and consequently, are the most exposed stakeholders to variabilities in the execution of implementation chain tasks. b) Recommend that ICAO establish a mechanism by which mandates that are SARPS generated have the applicability date established in a realistic timeline. Proper monitoring should also be included to allow for flexibility in face of global disruptions such as Pandemics.	
<i>Strategic Objectives:</i>	This working paper relates to the Strategic Objectives <i>Aviation Safety and Air Navigation Capacity and Efficiency</i> .
<i>Financial implications:</i>	It is not expected that there will be significant financial implications to ICAO, given this work can be developed by the existing working bodies. IATA is ready to contribute to the development of the proposed mechanism.
<i>References:</i>	Assembly Resolution A41- 23, Increasing the efficiency and effectiveness of ICAO

## 1. INTRODUCTION

1.1 The aircraft design, certification, production and operation are by nature heavily regulated areas; design and certification of commercial aircraft is a process extended over a minimum of 5-10-year period and often reaching a 15-year milestone, production of an aircraft type/model/variant expands typically over 25-30 years post certification and so does the life expectancy of an individual aircraft after its Entry into Service (EIS). There are timeline exceptions for production line termination and aircraft permanent withdrawal from service, but their occurrence is not changing the average pattern mentioned.

1.2 With such long-time life cycle of the aircraft asset, the governing aviation regulation changes lead often to mandating modifications that affect aircraft line-fit, forward-fit and, sometimes, retrofit.

1.3 The Amendment 40-A, was partially revised by Amendment 44, which was partially revised by Amendment 48 to Annex 6, Part 1, regarding the requirement that all aeroplanes of a maximum certificated take-off mass of over 27 000 kg for which the individual certificate of airworthiness is first issued on or after 1 January 2024, shall autonomously transmit information from which a position can be determined by the operator at least once every minute, when in distress (GADSS-ADT).

1.4 The Amendment 47 to Annex 6, Part 1 addresses, inter alia, the equipage of aircraft with ROAAS and operational credits; turbine-engine aeroplanes of a maximum certificated take-off mass in excess of 5 700 kg, for which the individual certificate of airworthiness is first issued on or after 1 January 2026, shall be equipped with ROAAS equipment.

1.5 The Amendment 14 to Annex 14, Vol.1 addresses the introduction of ACR-PCR; this method, replacing the ACN-PCN one has been effective since July 2020 and has become fully applicable since November 2024, with all States having to transition to the new methodology and all airports having to publish their PCRs.

## 2. DISCUSSION

2.1 The repeated revisions via amendments mentioned in point 1.3 of this paper required a series of discussions between ICAO, ICCAIA and IATA, various OEMs, AIRP, FLTOPSP, States and ANC in order to find a compromise which represents a challenging mixture of forward and retro fit elements; additionally, compliance with the SARP is not integrally achieved and several States have implemented exemptions which resulted in delay of the implementation.

2.2 Consultation between IATA and ICCAIA, with repeated involvement of their respectively represented communities, indicated the impossibility of meeting the mandates mentioned in a consistent manner across the aviation ecosystem within the specified timeline.

2.3 The de-facto non-compliance status is not only concerning already past deadlines, as applicable per points 1.3 and 1.5, but could also be reliably estimated for the future deadline applicable per point 1.4.

2.4 In general, and as exemplified ensuing cases 1.3, 1.4 and 1.5, an applicability date was established in the confidence that necessary equipment and resources would be available for full implementation. In some cases, a proper analysis of supply chain, maturity of technology and other factors would have established a more realistic timeline for implementation. The absence of such considerations resulted in non-compliance by a significant part, and sometimes a majority of the aviation industry. This led to States acting in an uncoordinated regulatory effort to find acceptable solutions avoiding bringing to a halt the operation of airlines. This resulted in significant regulator and industry resources invested in such efforts. This could be avoided by an adequate globally applicable regulatory framework/mechanism which ICAO could consider implementing (see actions proposed under 3.a) and 3.b)).

## 3. PROPOSED ACTION

Actions by the Assembly are proposed in the summary box