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ASSEMBLY — 42ND SESSION

REPORT OF THE EXECUTIVE COMMITTEE ON AGENDA ITEM 20

(Presented by the Chairperson of the Executive Committee)

The attached report on Agenda Item 20 has been approved by the Executive Committee. Resolution 20/1 is recommended for adoption by the Plenary.

Note.— After removal of this covering sheet, this paper should be inserted in the appropriate place in the report folder.

(7 pages)

Agenda Item 20: Innovation in Aviation

Artificial Intelligence

20.1 At its sixth meeting, the Committee reviewed A42-WP/29, presented by the Council of ICAO, which highlighted the measures taken during the last triennium to implement Assembly Resolution A40-27 – *Innovation in aviation*, which, significantly, includes the approval by the Council of the ICAO Policy on Innovation. This foundational document was developed to address the findings and recommendations stemming from an independent assessment conducted by the United Nations System Staff College (UNSSC). It ensures continuity in key innovation -related activities including the ICAO Industry Consultative Forum (ICF), the continuous, enhanced and inclusive dialogue with stakeholders and provides actions to include out-of-sector innovators that can significantly and positively impact the aviation sector. In the core activity of global policies and standards, ICAO has deployed a Standardization Roadmap to help keep regulations ahead of innovation. From a strategic perspective, innovation has been positioned as a High Priority Enabler in the 2026-2050 Strategic Plan, allowing it to be more efficiently used to help delivering on all strategic goals.

20.2 Based on these developments, A42-WP/29 presented an update to Assembly Resolution A40-27 and recommended clauses to strengthen the implementation of the ICAO Policy on Innovation, particularly by urging States and stakeholders to take action that complement those of ICAO. These updates would help ensure a sector-wide alignment on innovation. The Committee agreed with the need for ICAO to engage with States on regulatory and implementation aspects for the use of artificial intelligence (AI).

20.3 The Committee reviewed A42-WP/401, presented by Belize on behalf of the Central American Corporation for Air Navigation Services (COCESNA) Member States¹, which provided an analysis of the opportunities and benefits that AI offers civil aviation, highlighting its positive impact on operations management.

20.4 The Committee reviewed A42-WP/389, presented by Colombia, supported by Latin American Civil Aviation Commission (LACAC) Member States², which highlighted that it is crucial to understand the potential of AI and take into account various factors in its proper use.

20.5 The Committee reviewed A42-WP/246, presented by Saudi Arabia, which outlined how AI can enhance the Organization's ability to develop, validate and implement Standards and Recommended Practices (SARPs) and guidance material in a more agile, data-driven, efficient manner.

20.6 The Committee reviewed A42-WP/234, presented by Singapore, co-authored by Thailand and co-sponsored by Canada, China and the Republic of Korea, which proposed that ICAO take a leading role with respect to applications of AI in aviation.

¹ Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua

² Belize, Bolivia (Plurinational State of), Chile, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Uruguay, Venezuela (Bolivarian Republic of).

20.7 The Committee reviewed A42-WP/375, presented by the United Arab Emirates, which addressed the strategic imperative for the integration of AI within civil aviation authorities.

20.8 All papers recommended various actions that ICAO may consider taking for it to play a proactive and leading role in the use of AI in Aviation.

20.9 The Committee noted the initiatives outlined in the papers and the common themes including: the need for ICAO to develop comprehensive regulatory frameworks and standardized approaches to AI implementation; the need for capacity building and training; and enhanced collaboration between ICAO, Member States, industry and academia. The Committee noted that some States recommended that the Organization first consider developing a strategic vision and high-level framework for the use of AI in aviation and cautioned that developing a regulatory framework and taking many of the other actions proposed in the working papers would be premature. The Committee recognized AI is a key enabler but urged caution in being overly prescriptive at this early stage.

20.10 The Committee noted the relevant ongoing and planned activities by ICAO, under the relevant sections of the action plan of the ICAO Policy on Innovation. These include the following:

- 1) currently several expert groups of ICAO are discussing AI in various forms and that this is expected to grow over the course of the next triennium; and
- 2) the Secretariat continues to coordinate these activities with a view to ensure that cross-cutting matters are harmonized; and
- 3) the Secretariat is initiating a collaborative effort on performing a strategic foresight exercise on AI in aviation. This effort will involve States, the United Nations, industry, academia and others. Once the project has been formulated, a State letter will be issued, inviting States and international organizations to be involved;

20.11 The Committee welcomed the initiatives of Member States to further global and regional discussions on AI. The Committee recognized the value of such events to the furtherance of ICAO's work on the subject and noted the mechanisms in place for the relevant inputs to be made to ICAO.

20.12 While noting the significant focus on AI during the discussions, the Committee agreed not to enumerate any specific innovations to ensure that it remained stable over a longer period of time, avoiding the need to amend text in response to changes in the landscape of innovations used by aviation.

20.13 The Committee noted the rapid advancements and increasing adoption of AI across many industries, including aviation, and agreed with the need for a collaborative and inclusive approach for all relevant stakeholders.

20.14 The Committee specifically noted the need to adopt an implementation approach for AI that promotes discussions between regulatory authorities and system manufacturers.

20.15 The Committee recognized the potential benefits of a structured approach for leveraging AI across all of ICAO's activities, and noted the need to integrate the subject of AI, where relevant, into

the work programme of the Organization. In this regard the Committee also agreed that there was a need for ICAO to study the use of AI by regulators.

20.16 The Committee recognized the various issues raised across all papers, and noted that the best course of action should be determined by the Council of ICAO, in consideration of the policy on innovation as well as the need and availability of extra budgetary resources.

20.17 Information papers presented by Türkiye (A42-WP/511 and A42-WP/512) and the International Coordinating Council of Aerospace Industries Associations (ICCAIA) (A42-WP/489), were noted by the Committee.

Other matters related to innovation in aviation

20.18 The Committee reviewed A42-WP/217, Revision No. 1, presented by Brazil and supported by Latin American Civil Aviation (LACAC) Member States³, which advocated for the adoption of regulatory sandboxes as an effective mechanism to enhance regulatory agility, resilience and evidence-based decision-making in civil aviation. The Committee agreed that ICAO incorporate references to sandboxes, where appropriate, within its guidance material, and welcomed the call for Member States to adopt sandbox approaches as part of their regulatory toolkits, while always ensuring that safety and air traffic services considerations remain central to any experimentation framework.

20.19 The Committee reviewed A42-WP/218, presented by Saudi Arabia, which highlighted the Future Aviation Forum (FAF) that took place in 2024. The paper also highlighted that the next edition, planned for April 2026, will build on the momentum by fostering deeper international partnerships, advancing ICAO-aligned priorities and showing transformative aviation solutions. The Committee noted the information on the FAF and welcomed the initiative outlined in the paper.

20.20 Information papers presented by Indonesia (A42-WP/633), the Republic of Korea (A42-WP/602), Hermes Air Transport Organisation (A42-WP/420), and the International Forum of Aviation Research (IFAR) (A42-WP/678), were noted by the Committee.

20.21 In light of the discussion, the Committee agreed to submit, for adoption by the Plenary, the following resolution, to supersede Assembly Resolution A40-27:

Resolution 20/1: Innovation in Aviation

Whereas Article 44 of the Convention on International Civil Aviation states that among the aims and objectives of ICAO are development of the principles and techniques of international air navigation and fostering of the planning and development of international air transport so as to meet the needs of the people of the world for safe, regular and economical air transport;

Whereas Article 37 of the Convention stipulates that ICAO shall adopt and amend from time to time, as may be necessary, international standards and recommended practices and procedures dealing with [...] and such other matters concerned with the safety, regularity, and efficiency of air navigation as may from time to time appear appropriate;

³ Argentina, Belize, Bolivia (Plurinational State of), Chile, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Jamaica, Nicaragua, Panama, Paraguay, Peru, Uruguay, Venezuela (Bolivarian Republic of).

~~Whereas several ICAO Conferences have recognized the real and potential benefits and challenges that innovation can bring to the safety, efficiency, security, facilitation and to the economic and environmental sustainability of air transport and that Member States should be provided the opportunity to realize these benefits in a manner that leaves no country behind;~~

Whereas the ICAO Strategic Plan 2026-2050 recognizes the real and potential benefits and challenges that innovation can bring to the air transport sector and aims to provide Member States with the tools, knowledge and mindsets to realize these benefits in a manner that leaves no country behind and as a consequence identifies innovation as a high priority enabler critical to the successful implementation of the strategic goals.

Recognizing that ICAO provisions apply to civil aviation all civil airspace users, and the absence of normative activity at the global level may hamper the realization of innovative technological solutions and prevent the materialization of their benefits in aviation; and to that end ICAO can benefit from continued interaction with industry to identify the latest technological developments their timely integration;

Recognizing that the nature and pace of innovations require regulators at the national, regional and global level avail themselves of new methodologies, as well as the relevant framework provided by ICAO, that facilitate the timely evaluation and assessment of technological innovation developments in a technology agnostic manner;

Acknowledging the ICAO Policy on Innovation;

The Assembly:

1. Directs the Council to implement the Policy on Innovation;

2. Urges all Member States that have experience in facilitating the introduction of innovation in civil aviation, and that have evolved their regulatory methods to better evaluate and assess the application of such innovations, to share their experience with other States through ICAO;

3. Directs the Council to assess the need, as well as the resources required, to evolve the processes of the Organization, including its working methods with the industry in order to keep pace with innovations that affect the sustainable development of civil aviation;

4. Directs the Council on the basis of the conclusions arising from the assessment to be undertaken pursuant to operative clause 2, to develop, high level policies to address the findings of the aforementioned assessment and subsequently provide a framework that will help ensure the timely development of global policies and standards that support the continuing improvement of safety, efficiency, security, facilitation, economic and environmental performance; Calls on Member States to support the efforts of ICAO to help ensure that all States have a fair opportunity to develop and deploy innovations in aviation; including through leveraging the assistance, capacity building and training frameworks of relevance that are offered by ICAO in line with the ICAO policy on innovation;

5. Directs the Council to instruct the Secretary General to further liaise with States, governmental and non-governmental organizations, the private sector, academia and the relevant United Nations system

~~entities in order to establish an inclusive dialogue at strategic level that will encourage further collaboration and sharing of experience in relation to innovation; and~~ *Encourages* Member States to make use of the framework, provided by ICAO, that will help ensure the timely analysis of the need to develop global policies, standards and other provisions in a technology agnostic manner, and tools that support the continuing advancement of innovation in the international aviation sector, while avoiding the adoption of premature innovations;

5. ~~*Directs the Council to urgently consider the establishment of a high level body with the industry to regularly provide strategic advice to the Council concerning innovation in aviation.*~~ *Calls* on Member States to support the efforts of ICAO to promote an environment where innovation in aviation can flourish in all ICAO regions in line with the Strategic Goal of No Country Left Behind (NCLB), and in continued partnership with industry;

6. *Calls* on Members States to encourage and support the engagement with the relevant ICAO processes by emerging aviation stakeholders, as well as out of sector stakeholders who have developed innovations that might be applied to achieving the ICAO Strategic Goals and;

7. *Declares* that this resolution supersedes Resolution A40-27.

— END —