



ASSEMBLY — 42ND SESSION

TECHNICAL COMMISSION

Agenda Item 23: Global Aviation Safety and Air Navigation Plans

A COMPREHENSIVE STRATEGY FOR AIR NAVIGATION: ENDORSEMENT OF THE EIGHTH EDITION OF THE GLOBAL AIR NAVIGATION PLAN (GANP)

(Presented by the Council of ICAO)

EXECUTIVE SUMMARY

The ICAO Assembly, at its 39th Session, agreed on the expansion of the Global Air Navigation Plan (GANP) lifecycle through three-year minor and six-year major updates, as relevant, in order to provide stability. The seventh edition of the GANP, endorsed at the 41st Session of the Assembly, constituted a minor update, an eighth edition, containing major updates, and approved by Council on 2 July 2025, is hereby proposed for endorsement. This edition is the reflection of the global priorities set forth by the ICAO Assembly during its 41st Session and the [ICAO Strategic Plan 2026-2050](#) approved by Council on 1 November 2024. A proposed focus of the ninth edition of the GANP is also highlighted, based on the challenges faced by the aviation community to achieve its vision.

Action: The Assembly is invited to:

- endorse the eighth edition of the *Global Air Navigation Plan* (GANP, Doc 9750);
- request Member States, planning and implementation regional groups (PIRGs) and all members of the aviation community to continue improving the air navigation system in line with the GANP so that it adapts to global, regional and local opportunities and challenges in a timely and orderly manner;
- adopt the proposed revision to Assembly Resolution A41-6, as presented in the Appendix to this paper, in so far as it refers to the GANP; and
- direct ICAO to provide Member States with the necessary support to develop and implement national air navigation plans.

<i>Strategic Goals:</i>	This working paper relates to the Strategic Goals <i>Every flight is safe and secure; Aviation is environmentally sustainable; Aviation delivers seamless, accessible, and reliable mobility for all; The economic development of air transport assures the delivery of economic prosperity and societal well-being for all; and No country left behind.</i>
<i>Financial implications:</i>	The ICAO activities referred to in this paper are expected to be undertaken within the resources available in the 2026-2027-2028 Regular Budget and from extra budgetary contributions as guided by the ICAO Business Plan 2026-2028.
<i>References:</i>	Doc 9750, <i>Global Air Navigation Plan</i> (GANP Portal) – seventh edition Doc 10209, <i>Report of the Fourteenth Air Navigation Conference (AN Conf/14), Montréal, 26 August to 6 September 2024</i> , and Supplement No. 1 Doc 10184, <i>Assembly Resolutions in Force (as of 7 October 2022)</i> Doc 10186, <i>Assembly 41st Session. Montréal, 27 September - 7 October 2022. Report of the Technical Commission</i> Doc 10004, <i>Global Aviation Safety Plan</i>

1. INTRODUCTION

1.1 The ICAO Assembly, at its 39th Session, agreed on the expansion of the GANP lifecycle through of six years or more between each major update, three years for minor updates, as relevant to provide stability. The sixth edition of the GANP, endorsed by the Assembly during its 40th Session, constituted a major update and included a shift from a hardcopy to web-based format known as the [GANP Portal](#). The seventh edition of the GANP, endorsed at the 41st Session of the Assembly (A41), consisted of a minor update to the global technical level, i.e. the performance framework as well as the basic building block and ASBU frameworks. An eighth edition, containing major updates, is hereby proposed for endorsement.

1.2 The ICAO Assembly, at its 41st Session, in addition to endorsing the seventh edition of the Global Air Navigation Plan (GANP, Doc 9750) through Resolution A41-6: ICAO global planning for safety and air navigation, also set forth a series of global priorities.

1.3 On 1 November 2024, the Council approved the [ICAO Strategic Plan 2026-2050](#). The objective of this plan is to achieve a safe, secure and sustainable international civil aviation system that connects the world for the benefits of all nations and people. To achieve this vision, ICAO has identified six Strategic Goals, which are the guiding principles for ICAO's three main processes of work: development and standard setting, monitoring and auditing, and implementation support, including the Global Air Navigation Plan.

1.4 The eighth edition of the GANP, approved by Council (235/14), is the reflection of the global priorities set forth by the ICAO Assembly during its 41st Session and the [ICAO Strategic Plan 2026-2050](#) as approved by Council on 1 November 2024.

2. EIGHTH EDITION OF THE GANP

2.1 The ICAO Assembly during its 41st session underpinned the need to focus on priority areas including the recovery and sustainability of air transport, the reduction of CO₂ emissions¹ and the resilience of the aviation system, while maintaining safety. These priority areas are also reflected in the following Strategic Goals of ICAO: “every flight is safe and secure”, “aviation is environmentally sustainable”, “aviation delivers seamless, accessible, and reliable mobility for all” and “the economic development of air transport assures the delivery of economic prosperity and societal well-being for all”.

2.2 Global strategic level

2.2.1 The GANP strategy recognizes that the powerful socio-economic driver represented by the aviation industry is facing a variety of challenges. While air traffic, with its movement of passengers and goods around the world, is expected to double within the next fifteen years, new forms of demand, emerging technologies and innovative ways of doing business, together with human talent, are all bringing additional challenges and opportunities that call for an urgent transformation of the global air navigation system to boost social well-being worldwide. To put into effect the priority areas set by A41 and the Strategic Goals, it is important to include them in the evolution of the air navigation system by adding the following challenges and opportunities, i.e. “Supporting climate goals through innovation and efficiency” and “Maintaining operational performance through improved resilience”, to the GANP strategy.

¹ Note.— The 41st Session of the ICAO Assembly (A41) adopted a long-term global aspirational goal (LTAG) for international aviation of net-zero carbon emissions by 2050 (Resolution A41-21 refers).

2.2.2 Since the main principle of the GANP is that the need for performance should drive the evolution of the air navigation system, the performance ambitions on environment and resilience should be updated in the GANP strategy to read: “To minimize, through operational improvements that in particular reduce fuel burn, the adverse environmental impacts of aviation activity on the climate”, “To minimize, through operational improvements, the adverse local environmental impacts of aviation regarding noise and local air quality” and “The maintenance of service provision and system performance in the face of disruptive events”. This update will ensure an integrated approach to performance management; provide a link between the GANP and other initiatives under the ICAO Strategic Objective – Environmental Protection in line with the Fourteenth Air Navigation Conference (AN-Conf/14), Recommendation 1.2/1 — Work towards enhanced alignment of the Global Aviation Safety Plan and the Global Air Navigation Plan; and offer a coordinated approach to environment and resilience.

2.2.3 Innovations in aviation need to be accounted at the Strategic level. New entrants² need to be integrated in the air navigation system in a holistic way. Hence, building on the Strategic Goal related to mobility, a new approach, focused on the air navigation services required to integrate the new entrants, has been reflected in the GANP strategy. The provision of air navigation services will be, at least initially, linked to different airspaces although it is envisioned that, with time, the provision of services will evolve towards increasing integration of conventional and emerging airspace users. In addition, there is an increasing expectation that certain types of artificial intelligence will be used in advanced decision-support tools in the aviation industry. To embrace a common understanding of artificial intelligence as well as to understand its impact on operations and the human in the system the United Nations (UN) principles³ for using artificial intelligence have been included into the GANP strategy. The GANP strategy is available at [Deliverable 1](#).

2.3 Global Technical Level

2.3.1 Driven by the Strategic Goal of “No country left behind”, the GANP provides a global technical level to support the implementation of the strategy and help ensure that no stakeholder is left behind. The updates to the strategy in the eighth edition of the GANP have been reflected at the technical level through: further guidance on the application of a performance-based approach, available at [Deliverable 4](#), to optimize the allocation of resources; an update of the GANP performance framework on environment and resilience available at [Deliverable 5](#); and an update to the Aviation System Block Upgrade framework available at [Deliverable 2a](#) and [Deliverable 2b](#). Also, during the 13th Air Navigation Conference (AN-Conf/13) and A40, ICAO was requested to enhance the visibility of the link between the strategic and technical levels of the GANP. In order to achieve this, a mapping between the ASBU framework and the conceptual roadmap was proposed. This mapping, available at [Deliverable 3](#), shows the progression of the ASBU framework (technical level) within the conceptual roadmap (strategic level).

2.4 Regional and National Levels

2.4.1 Regional and national air navigation planning are crucial to realize the vision articulated in the GANP. They ensure consistency, harmonization and coordination of efforts, from the development of operational improvements to their implementation in order to improve the air navigation system at a global level. Such levels provide the global aviation community with a common basis for short- and medium-term implementation planning.

² The term “New entrants” encompasses a variety of aircraft and mission types such as, but not limited to, electric or solar powered, vertical lift, unmanned, airships, balloons and a variety of flying operations below, above and within the range of altitudes generally used by aviation today.

³ [CEB_2022_2_Add.1 \(AI ethics principles\).pdf](#)

2.4.2 The regional level addresses regional and subregional performance and operational needs, constraints and opportunities through the ICAO regional air navigation plans and other initiatives aligned with the global strategic and technical levels. To support the implementation of regional planning, a web-based solution for the management of the regional air navigation plans is currently under development.

2.4.3 The development of national air navigation plans (NANPs), in coordination with relevant stakeholders and in alignment with regional and global plans, is a strategic part of a State's national aviation planning framework and is crucial to achieve the common vision being developed in the GANP. To support national planning, a template and associated guidance material for the NANPs is under development and will be made available at the [GANP Portal](#).

3. OUTLOOK FOR THE NINTH EDITION OF THE GANP

3.1 States are facing significant challenges in implementing the GANP. These challenges are due to the inherent complexity of the air navigation system and exacerbated by the lack of guidance, the ongoing transition to a performance-based approach, the need to keep pace with the current frequency of updates to the GANP and the consequent lack of synchronization between updates to global, regional and national air navigation plans. The low-level development of National Air Navigation Plans (NANPs) highlights the difficulties being faced. At a regional level, while efforts have been made to implement operational improvements, progress remains uneven, and the integration of initiatives across regions is impeded by the absence of clear guidance and direction at the global level. This has led to inefficiencies and hindered the achievement of a globally harmonized implementation.

3.2 The objective of the AN-Conf/14, under the theme "Performance Improvement Driving Sustainability", was to reach a global consensus on performance improvement initiatives that would best enable ICAO, Member States and industry to address aviation's global environmental challenges and the rapid evolution in aviation operations and technologies, within the context of constrained resources. The Conference made a series of recommendations for specific operational improvements within the ASBU framework, which are interconnected.

3.3 A review period is necessary to identify and analyse the specific challenges faced by States and regions and to address these in a structured and proactive manner. The ninth edition of the GANP should offer greater stability and better assist States and other stakeholders in understanding the envisioned evolution of the global air navigation system and their roles and responsibilities towards achieving the vision of an integrated, harmonized, globally interoperable and seamless system. This evolution should be agreed globally and must take into consideration the needs of States and regions.

4. ASSEMBLY RESOLUTION

4.1 In accordance with Assembly Resolution A41-6, the Global Aviation Safety Plan (GASP) and the GANP support the Strategic Goals of the Organization. The partial draft resolution presented in the Appendix to this paper focuses on the GANP, thus superseding A41-6: *ICAO Global planning for safety and air navigation*.

4.2 When reviewing the draft resolution in the appendix, and for the purposes of this paper, refer to Appendix B, dealing specifically with the GANP. The preamble of the draft resolution and Appendix A, dealing specifically with the GASP, are presented in A42-WP/17-TE/1, also under Agenda Item 23.

5. CONCLUSION

5.1 In this fast and ever-changing landscape, the achievement of sustainable growth within the international air transport system strongly relies on a high-performing and seamless global air navigation system. Building on the priorities set forth by the 41st session of the ICAO Assembly as well as ICAO's Strategic Plan 2026-2050, the eighth edition of the GANP presents an updated strategy and provides associated implementation support through its global technical, regional and national levels. By bringing the aviation community together and ensuring that no stakeholder is left behind, the eighth edition of the GANP aims to achieve an agile, safe, secure, sustainable, high-performing and interoperable global air navigation system.

5.2 Moving forward, based on the challenges faced by the aviation community to implement the GANP, it is proposed that the ninth edition of the GANP focuses on offering greater stability and providing clear directions on the envisioned evolution of the global air navigation system, taking into consideration regional and national needs.

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APPENDIX

DRAFT RESOLUTION FOR ADOPTION BY THE 42ND SESSION OF THE ASSEMBLY

A42-xx: ICAO global planning for safety and air navigation

Whereas ICAO strives to achieve ~~the goal of~~ a safe and orderly development of civil aviation through cooperation among Member States and other stakeholders;

Whereas ~~to realize this goal, the Organization~~ ICAO has established Strategic Objectives Goals in its 2026-2050 Strategic Plan, including objectivesgoals related to for safety and for capacity and efficiency;

Recognizing the importance of global frameworks and regional and national plans to support the Strategic Objectives Goals of ICAO;

Recognizing the importance of effective implementation of regional and national plans and initiatives based on the global frameworks;

Recognizing that further progress in improving the global safety, capacity and efficiency of civil aviation is best achieved through a cooperative, collaborative and coordinated approach in partnership with all stakeholders under the leadership of ICAO; and

Noting the approval by the Council of the ~~2023-2025-2026-2028~~ edition of the Global Aviation Safety Plan (GASP) and of the ~~seventh-eighth~~ edition of the Global Air Navigation Plan (GANP);

The Assembly:

1. *Endorses* the ~~2023-2025-2026-2028~~ edition of the Global Aviation Safety Plan (GASP) and the ~~seventh-eighth~~ edition of the Global Air Navigation Plan (GANP) as the global strategic directions for safety and air navigation, respectively;
2. *Resolves* that ICAO shall implement and keep current the GASP and the GANP to support the relevant Strategic Objectives Goals of the Organization, while ensuring necessary stability and alignment;
3. *Resolves* that these global plans shall be implemented and kept current in close cooperation, collaboration and coordination with all concerned stakeholders;
4. *Resolves* that these global plans shall provide the frameworks in which regional, subregional and national plans will be developed and implemented, thus ensuring consistency, harmonization and coordination of efforts aimed at improving international civil aviation safety, capacity and efficiency;
5. *Urges* Member States to develop sustainable solutions to fully exercise their safety oversight and air navigation responsibilities which can be achieved by sharing resources, utilizing internal and/or external resources, such as regional and subregional organizations and the expertise of other States;

6. *Urges* Member States to demonstrate the political will necessary for taking remedial actions to address safety and air navigation deficiencies, including those identified by Universal Safety Oversight Audit Programme (USOAP), through the GASP, the GANP and the ICAO regional planning process;
7. *Urges* Member States, the industry and financing institutions to provide the needed support for the coordinated implementation of the GASP and GANP, as well as regional and national plans, avoiding duplication of efforts;
8. *Calls upon* States and invites other stakeholders to cooperate in the development and implementation of regional, subregional and national plans based on the frameworks of the GASP and GANP;
9. *Instructs* the Secretary General to promote, make available and effectively communicate the GASP and the GANP, and provide the necessary support to Member States to develop and implement national plans; and
10. *Declares* that this resolution supersedes Resolution ~~A40-1~~ A41-6 on ICAO global planning for safety and air navigation.

APPENDIX A

Global Aviation Safety Plan (GASP)

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APPENDIX B

Global Air Navigation Plan (GANP)

Whereas the enhancement of the safety, capacity and efficiency of aviation operations is a key element of the ICAO Strategic ~~Objectives~~ Goals;

Having adopted Resolution ~~A41-10~~ A42-xx, a consolidated statement of continuing ICAO policies and associated practices related specifically to air navigation;

Recognizing the importance of GANP as an operational strategy and part of the basket of measures to achieve ICAO's global aspirational goals on CO₂ emissions; ~~and~~

Recognizing that many States and regions are developing new air navigation plans for their own air navigation modernization and transformation; ~~and~~

Recognizing that sharing of best practices, lessons learned, and provision of guidance material can support States in the introduction of operational improvements in a cost-effective manner through the adoption of advanced systems without going through intermediate steps;

The Assembly:

1. *Instructs* the Council to use the guidance in the Global Air Navigation Plan (GANP) to develop and prioritize the technical work programme of ICAO in the field of air navigation;
- ~~2. *Urges* the Council to provide States with a standardization roadmap, as announced in the GANP, as a basis for the work programme of ICAO;~~
- ~~3-2.~~ *Calls upon* States, planning and implementation regional groups (PIRGs), and the aviation industry to utilize the guidance provided in the GANP for planning and implementation activities which establish priorities, targets and indicators consistent with globally-harmonized objectives, taking into account operational needs;
- ~~4-3.~~ *Calls upon* States to take into consideration the GANP guidelines for the implementation of operational improvements as part of their national strategy to reduce the environmental impact, including CO₂ emissions, from international aviation;
- ~~5-4.~~ *Calls upon* States, PIRGs, and the aviation industry to provide timely information to ICAO, and to each other, regarding the implementation status of the GANP, including the lessons learned from the implementation of the operational improvements outlined in the ASBU framework;
- ~~6-5.~~ *Invites* PIRGs to use ICAO standardized tools or adequate regional tools to monitor and, in collaboration with ICAO, analyse the implementation status of air navigation systems;
- ~~7-6.~~ *Instructs* the Council to publish the results of the analysis on the regional performance dashboards including, as a minimum, the key implementation priorities and accrued environmental benefits associated with the implementation of the operational improvements outlined in the ASBU framework;
- ~~8-7.~~ *Urges* States that are developing new air navigation plans, for their own air navigation modernization, to coordinate with ICAO and align their plans within the framework of their respective PIRGs so as to ensure regional harmonization, and global compatibility and interoperability;
- ~~9-8.~~ *Instructs* the Council to continue developing the GANP, keeping it current with evolving and emerging technologies and operational requirements; and
- ~~10-9.~~ *Invites* ICAO to progress in the development of guidance material related to the national air navigation plan during the upcoming revisions of the GANP and collect and share best practices, lessons learned, and benchmark results related to the implementation of operational improvements.

— END —