



ICAO

International Civil Aviation Organization
Asia and Pacific Office

Thirteenth Meeting of the Regional Aviation Safety Group – Asia and Pacific Regions (RASG-APAC/13)

Hong Kong, China, 18-19 December 2023

Agenda Item 3: Update from ICAO HQ, APRAST and AIG outputs for RASG-APAC consideration and approval

PREPARATION FOR THE ICAO FOURTEENTH AIR NAVIGATION CONFERENCE (AN-CONF/14)

(Presented by the Secretariat)

EXECUTIVE SUMMARY	
This paper presents an update on the Fourteenth Air Navigation Conference (AN-Conf/14) planned to be held in Montréal, Canada, from 26 August to 6 September 2024.	
Action by the meeting is at paragraph 3	
<i>Strategic Objectives:</i>	<ul style="list-style-type: none"> • Safety • Air Navigation Capacity and Efficiency • Environmental Protection
<i>References:</i>	<ul style="list-style-type: none"> • C-WP/15510 • State letter ST 15/1-23/12 • AN-WP/9693

1. Introduction

1.1 The 41st Session of the ICAO Assembly emphasized the need for ICAO to focus its efforts on priority areas, which would include the recovery and sustainability of air transport, reduction of CO₂ emissions and resilience of the aviation system. The Assembly was reminded of the importance of convening divisional-type meetings, such as air navigation or high-level safety conferences ahead of Assembly sessions, as a means to recommend additional technical work for ICAO in the budget considerations for the next triennium.

1.2 On 30 November 2022, the Council took note, for planning purposes, of the programme of meetings for the years 2024 and 2025, including the Fourteenth Air Navigation Conference (AN-Conf/14) to be held in 2024.

2. Discussion

2.1 At the seventh meeting of its 223rd Session on 15 June 2023, the Air Navigation Commission considered the criteria and objectives for a global air navigation meeting/conference. The Commission agreed, in principle, to the convening of a Fourteenth Air Navigation Conference and requested the Secretary General to communicate the proposed list of subjects to States and appropriate international organizations.

2.2 ICAO issued State letter ref. ST 15/1-23/12 dated 10 July 2023 calling for comments from States and appropriate international organizations on the need for an AN-Conf/14 in 2024 to consider the list of tentative subjects.

2.3 States and international organizations were also asked whether they wished to propose additional subjects for consideration by the meeting, and guidance was provided on the principles to be applied in the preparation of such proposals.

2.4 On 12 October 2023, the Air Navigation Commission reviewed the comments received as presented in AN-WP/9693. The Commission confirmed that there was a need for an AN Conf/14 and agreed to recommend to the Council that the meeting be held in Montréal from 26 August to 6 September 2024.

2.5 On 1 November 2023, the ICAO Council, during its 230th Session agreed that an AN-Conf/14 be held in Montréal from 26 August to 6 September 2024 and that the languages of the meeting be Arabic, Chinese, English, French, Spanish and Russian.

2.6 The Conference will meet as one plenary session to provide experts with the opportunity to consider inter-related safety and air navigation elements together. Furthermore, information sessions will be held on 26 August 2024 to facilitate the conduct of the Conference and support focused discussion on the subjects presented for consideration by the Conference.

2.7 The agenda of the AN-Conf/14 in Appendix A is based on indicative subjects initially agreed upon by the Commission for circulation to States and international organizations and improved in light of comments and proposals received from States and international organizations.

2.8 The preparation and conduct of the conference will be guided by a set of principles. The establishment and early communication of such principles to Member States and international organizations will help align expectations, thus leading to more effective preparation and conduct of the conference.

2.9 Guiding principles for the preparation and conduct of AN-Conf/14 should be as follows:

- a) Items should be precisely defined and be included only if they cannot be resolved or progressed by other means, such as via ICAO expert groups or through planning and implementation regional groups (PIRGs).
- b) Items related to the existing work programme of ICAO may be included if they identify opportunities to make significant changes in direction, such as a reprioritization or a change in the scale or the scope of work, or they have reached the necessary maturity for soliciting global direction.
- c) Items that have limited applicability, that relate to new complex procedures or that address the provision of new equipment, will only be considered if they have matured to the extent that the necessity for worldwide agreement is apparent.
- d) Items addressing inconsistencies in ICAO documents will only be considered if there are substantive implications.
- e) Exchange-of-views items should be included only in those circumstances when a broad discussion is needed on the applicability to civil aviation of new concepts or techniques.

2.10.1. The conference should address topics or issues that have not already been the subject of action taken by the ICAO Council or propose a substantial change thereto, for example, a reprioritization or a change in the scale or the scope of the work. Actions already taken by the Council include those related to the approval of the technical work programme of the Organization and the outcomes of the Assemblies, and the recommendations from air navigation or other high-level conferences that have ongoing applicability. Items that involve multidisciplinary subjects and have reached the necessary maturity for soliciting global direction should also be acceptable. Should a working paper be submitted that does not meet any of these criteria, it will be converted to an information paper for the conference, acknowledged in the AN-Conf/14 report and, additionally, be forwarded to the appropriate expert group(s) for consideration as necessary in progressing their concerned work programmes. To assist States and international organizations in this process, information on the approved technical work programme of ICAO will be provided in the invitation State letter.

2.10.2. Working papers prepared by the Secretariat will be action-oriented and are expected to form a sound basis for discussions and deliberations on all subjects. The originators of working papers from States and international organizations would normally indicate the appropriate agenda item for their papers. However, the need to group working papers with similar actions proposed may necessitate changes to the agenda item placement for a more efficient discussion of the relevant papers collectively.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information provided in the paper;
- b) encourage States to participate in the AN-Conf/14; and
- c) invite States to consider the agenda at Appendix A and the guiding principles for the preparation and conduct of AN-Conf/14 reflected in para 2.10.

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APPENDIX A

AGENDA FOR THE AN-CONF/14 MEETING (2024) (Theme: Performance Improvement Driving Sustainability)

INTRODUCTION

The 41st Session of the ICAO Assembly emphasized the need for ICAO to focus its efforts on priority areas, which would include the recovery and sustainability of air transport, reduction of CO₂ emissions and resilience of the aviation system. The Assembly also endorsed the ICAO strategy for safety and air navigation through the Global Aviation Safety Plan (GASP) and the Global Air Navigation Plan (GANP), incorporating an approach to keeping the Organization focused on risks and priorities based on data analysis. Furthermore, the Assembly was reminded of the importance of convening divisional-type meetings, such as air navigation or high-level safety conferences ahead of Assembly sessions, as a means to recommend additional technical work for ICAO in the budget considerations for the next triennium.

AN-Conf/14 is a necessary building block between the 41st and 42nd Sessions of the Assembly. It provides a forum to: describe the work that is already prioritized and underway in the ICAO 2023-2025 Business Plan; understand new priorities for ICAO's future work; and offer timely direction to the Organization as it prepares to present a Business Plan to the 42nd Session of the Assembly in 2025 that sets out a reprioritized work programme and the related resources required. Given the dominant nature of aviation's environmental challenge, and the need to agree to safety and air navigation strategic plans that build on the related agreements reached at the 41st Session of the Assembly, the Conference is intended to call for an intentional refocusing of effort so that priority can be given to existing or new technical activities that best support the achievement of the long-term aspirational goal for international aviation (LTAG) of net zero carbon emissions by 2050 and of other priority focus areas where ICAO activity is essential in order to secure an aviation system that continues to be safe and efficient, with improved resilience.

Agenda Item 1: Update on the ICAO 2023-2025 Business Plan and Long-term Strategic Planning

- 1.1: Reprioritization of the ICAO 2023-2025 Business Plan
- 1.2: Strategic alignment of global plans for performance improvement
- 1.3: Evolution of the Technical Commission of the ICAO Assembly

As a response to an Organization-wide reprioritization exercise of activities indicated in the 2023-2025 Business Plan, as well as new activities emanating from the 41st Session of the Assembly, in conjunction with an associated review of resource allocations, the ICAO Council agreed on a list of priority focus areas as follows: LTAG; Cybersecurity and Information System Resilience; ICAO Crisis Response Mechanism/Framework; Advanced Air Mobility/New Entrants; USOAP/USAP Evolution and Engagement; Implementation Support; and the Transformational Objective, on the understanding that these focus areas would complement but not replace the Strategic Objectives (C-DEC 229/1 refers). These priority focus areas support an international civil aviation system that is safe, secure, efficient, economically viable and that minimizes the adverse environmental effects of civil aviation activities. Besides the Organization-wide reprioritization exercise, the ICAO Council agreed to the development of a long-term ICAO strategic plan, which should function as the umbrella for future ICAO triennial Business Plans. Under this agenda item, the Conference will be presented with the reprioritization mechanism; the impact of the reprioritization on the global plans and strategic objectives; and safety and air navigation priorities, including relevant subjects raised during the consultation on the need for the Conference (State letter ST 15/1-23/12 dated 10 July 2023 refers). The Conference will also consider how global plans

Appendix A

can be appropriately linked in the longer term to complement each other in addressing existing and new challenges, avoid duplications and achieve synergies. In the context of offering timely direction in the preparation for the 42nd Session of the Assembly in 2025, the Conference will also be provided with an opportunity to discuss how to refocus the Technical Commission of the ICAO Assembly.

The Conference will be invited to put forward recommendations on the:

- a) alignment of short-term ICAO activities targeted with the seven priority focus areas;
- b) alignment of future triennial Business Plans with the long-term strategic plan;
- c) strategic alignment of global plans for performance improvement; and
- d) evolution of the Technical Commission of the ICAO Assembly.

Agenda Item 2: Timely and safe use of new technologies

- 2.1: Evolving aircraft technologies contributing to LTAG
- 2.2: Addressing safety risks related to evolving aviation technologies
- 2.3: 2026-2028 Edition of the Global Aviation Safety Plan (GASP)

ICAO and its Member States are encouraged to work with manufacturers and aircraft operators to accelerate the introduction of increasingly fuel-efficient aircraft and facilitate cost-effective fleet renewal. Accordingly, there will be safety risks from the coexistence of aircraft powered by aviation kerosene (including sustainable aviation fuel (SAF)), electricity and hydrogen and new aircraft with modified parameters such as wider wingspan. Such coexistence will have an impact on aerodrome operations and air traffic management (ATM) amongst other technical disciplines, which may lead to operational and infrastructure changes. Furthermore, it is essential to address the safety impact of introducing new aviation technologies, including the concept of operations, accompanying public policies, standards development and issues related to the required resources and expertise, to ensure the associated safety risks are systemically assessed and effectively managed. The Global Aviation Safety Plan Study Group (GASP-SG) has been working on the list of proposals for the next edition of the GASP, including the selection of global high-risk categories of occurrences as well as the proposed goals, targets and indicators. The Conference will provide an opportunity to discuss: a) new technological developments and a strategy to enable the timely and safe use of new technologies, including relevant subjects raised during the consultation on the need for the Conference (SL ST 15/1-23/12 refers); b) progress made by the GASP-SG on the revision of the Global Aviation Safety Plan (GASP, Doc 10004) and the list of proposals, including the selection of the global high-risk categories (G-HRCs) as well as proposed goals, targets and indicators.

The Conference will be invited to put forward recommendations on:

- a) future aerodrome infrastructure and operations to accommodate new aircraft technologies, such as hydrogen-powered and electric aircraft;
- b) strategies to evolve existing frameworks to support the safe introduction of new aircraft technologies; and
- c) the development of the 2026-2028 Edition of the Global Aviation Safety Plan (GASP).

Agenda Item 3: Air Navigation System Performance Improvement

- 3.1: Proposals to improve the efficiency of air navigation services contributing to LTAG
- 3.2: Phasing out legacy systems
- 3.3: Eighth Edition of the Global Air Navigation Plan (GANP)

The ICAO LTAG Report¹ shows that there are opportunities to reduce CO₂ emissions through enhanced operational efficiency across all phases of flights on the ground and in the air, which has a direct impact on fuel savings. For example, various operational measures contribute to fuel savings by reducing the length of a flight trajectory (the distance between its end points) and allowing the use of optimum flight levels. On a separate but related subject, the voluntary introduction of various operational measures using new technologies over the years has resulted in multiple layers of mixed-mode operation, which may persist for a long period of time. However, prolonged mixed-mode operations caused by continuing to support the use of legacy systems would impede the take-up rate of the operational measures required for the improvement of efficiency in the global air navigation system. In addition, the Eighth Edition of the Global Air Navigation Plan (GANP) is envisioned to focus on the environment and resilience in terms of performance as agreed at the 41st Session of the Assembly and to reflect the priority focus areas both in the global strategic level and the global technical level, through the Aviation System Block Upgrade (ASBU) framework. The Conference will provide an opportunity to discuss: a) opportunities and challenges including roadblocks and critical areas required for performance improvement, including relevant subjects raised during the consultation on the need for the Conference (SL ST 15/1-23/12 refers); b) proposals for improving the efficiency of air navigation services delivery leading to performance improvement on a wider and more consistent scale, thus having a direct impact on contributing to LTAG; c) global strategies for phasing out/sunseting legacy systems; and d) progress made by the Global Air Navigation Plan Study Group (GANP-SG) concerning proposals for the eighth edition of the GANP. The Conference will also discuss the value of well-chosen performance indicators when assessing progress, and when directing effort and support, towards achieving improvements across agreed priority performance areas.

The Conference will be invited to put forward recommendations on:

- a) strategies and new initiatives for performance improvement on a wider and more consistent scale ; and
- b) the technical update of the eighth edition of the GANP.

Agenda Item 4: Hyper-connectivity of air navigation system

- 4.1: Connected aircraft concept and associated challenges
- 4.2: Cybersecurity and information system resilience

Future ATM solutions are aimed at improving operational efficiency and accommodating the needs of emerging communities. These traffic management solutions are heavily dependent on the collection, processing, and use of information, and require extensive information exchange between the airborne vehicles and aviation system participants – more than is done today. Implementation of these new ATM solutions has raised concerns in the aviation community regarding the effectiveness of existing standards, procedures and processes to ensure the risks involved in the exchange of messages in a digitally connected environment are kept at an acceptable level. Cyber threats are capable of disrupting the safe, secure and efficient provision of aviation services. The protection and resilience of civil aviation systems, information, and data to cyber threats and risks is hence a common goal for all stakeholders. Adequate regulatory

¹ Report on the Feasibility of a Long-term Aspirational Goal (LTAG) for International Civil Aviation CO₂ Emission Reductions, Appendix M4 Operations Sub Group Report.

Appendix A

frameworks and governance of aviation cybersecurity are needed to ensure a harmonized and coordinated approach to the topic across the different aviation domains, in order to address cyber threats and risks to the sector. The Conference will provide an opportunity to discuss: a) a connected aircraft concept and associated challenges, including relevant subjects raised during the consultation on the need for the Conference (SL ST 15/1-23/12 refers); and b) the latest policy developments on aviation cybersecurity.

The Conference will be invited to put forward recommendations on:

- a) the endorsement of the draft connected aircraft concept and actions required to ensure effective implementation of the concept to enable the hyper-connectivity of air navigation systems; and
- b) actions required to address cyber threats and risks to the civil aviation sector.

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