



Agenda Item 2: Global and regional context

**FOLLOW-UP TO RECOMMENDATIONS OF THE FOURTEENTH
AIR NAVIGATION CONFERENCE**

(Submitted by the Secretariat)

SUMMARY

The purpose of this paper is to report on the follow-up measures to the recommendations of the National Assembly Conf 14, especially the recommendations that have an impact on the work agenda of GREPECAS and the SAM/IG. It is expected that GREPECAS will be instructed regarding the implementation of these recommendations, while at the same time requiring the alignment of the actions of the regional implementation groups such as SAM/IG.

Reference

- Doc 10209 – Report on the AN Conf 14

1. Background

1.1 The Fourteenth Air Navigation Conference (AN Conf 14) was held in Montreal, Canada, August 26 to September 6, 2024. With the theme "*Improving Performance to Drive Sustainability*", the aim of the conference was to reach a global consensus on the performance improvement initiatives that can best help ICAO, Member States and industry to solve the environmental challenges facing global aviation and the rapid evolution of aviation operations and technologies with limited resources.

1.2 The conference provided an opportunity for detailed technical exchanges to agree on a number of high-level recommendations in the fields of air navigation and safety. The recommendations will be submitted to the Council for approval, and where appropriate the endorsement of the 42nd session of the Assembly in 2025 will also be sought.

1.3 AN-Conf/14 was a necessary link between the 41st and 42nd sessions of the Assembly. It provides a forum to review the work that is already prioritized and being developed as part of ICAO's 2023-2025 Business Plan, understand the new priorities for ICAO's future work, and provide timely guidance to the Organization so that the next Business Plan 2026-2028 to be submitted to the 42nd Session of the Assembly in 2025 has a work program with current priorities and the resources necessary for its execution.

1.4 The Final Report of the AN Conf 14 (English and Spanish versions), is published in ICAO Doc 10209, available at the link:

<https://oaci.sharepoint.com/:f:/r/sites/SAMIG-Grupodeimplementacin/Shared%20Documents/DOCUMENTOS%20TECNICOS/AN%20CONF%2014?csf=1&web=1&e=yBmMwr>

1.5 Supplement No. 1 (see also link above) to the above-mentioned document details the follow-up to the recommendations of the Conference, stating that the Council, at the sixth session of its 233rd session, held on 4 November 2024, and the Air Navigation Commission (ANC), at the sixth session of its 227th session, held on 10 October 2024, with powers delegated by the Council, took the corresponding decisions on the recommendations of the 14th Air Navigation Conference (AN-Conf/14).

1.6 The Council took note of the allocation of follow-up responsibilities with respect to recommendations **not related** to specific amendments to annexes (SARPs) made under questions 1 to 4 of the agenda of AN CONF 14. The above-mentioned Supplement is included in **Appendix A** to this note.

2. Discussion

2.1 The recommendations of the AN Conf 14 cover several topics that are part of the agenda of GREPECAS, the SAM/IG and the Study Groups. Other Study Notes at this meeting address these recommendations. The following recommendations are highlighted:

- Recommendation 1.1/2 – Resilience of the Air navigation system
- Recommendation 1.2/1 – Work to improve the harmonization of the Global Aviation Safety Plan and the Global Air Navigation Plan
- Recommendation 2.2/2 – Interference to the global navigation satellite system and contingency planning
- Recommendation 3.1/1 – Draft 30/10 – Optimized application of longitudinal separation minimums
- Recommendation 3.1/2 – Study on the feasibility of establishing an ICAO air navigation efficiency programme
- Recommendation 3.1/3 – Facilitate the successful deployment of trajectory-based operations
- Recommendation 3.1/4 – Free route airspace
- Recommendation 3.2/1 – Phasing out and/or optimizing the use of traditional systems
- Recommendation 3.2/2 – Transition to Flight and Flow Information Services for the Cooperative Environment and Cessation of ICAO Flight Plan 2012 by 2034
- Recommendation 3.3/1 – Global Strategic Level Update of the Seventh Edition of *the Global Air Navigation Plan* (GANP, Doc 9750)
- Recommendation 4.2/1 – Aviation Cybersecurity

INTERNATIONAL CIVIL AVIATION ORGANIZATION**FOURTEENTH AIR NAVIGATION CONFERENCE (AN-Conf/14)****Montréal, Canada, 26 August to 6 September 2024****SUPPLEMENT NO. 1**

1. The Council, at the sixth meeting of its 233rd Session on 4 November 2024, and the Air Navigation Commission at the sixth meeting of its 227th Session on 10 October 2024, under authority delegated by the Council, took action as indicated hereunder on the recommendations of the Fourteenth Air Navigation Conference (AN-Conf/14).

2. **RECOMMENDATIONS FOR AMENDMENT OF STANDARDS AND RECOMMENDED PRACTICES (RSPP)**

2.1 The Conference made no recommendations for amendment to Annexes.

3. **RECOMMENDATIONS OTHER THAN FOR STANDARDS AND RECOMMENDED PRACTICES AND PROCEDURES**

3.1 The Council noted that the following will be the allocation of follow-up responsibility for other than specific amendments to Annexes recommendations made under Agenda Items 1 to 4:

RECOMMENDATIONS APPROVED BY AN-CONF/14	FOLLOW-UP ACTION	
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)
<p>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; and 1.3: Evolution of the Technical Commission of the ICAO Assembly</p>		
<p>Recommendation 1.1/1 – Support to ICAO’s programmatic business planning approach initiated by the Business Plan 2023 - 2025 priority focus areas</p> <p>That States:</p> <ul style="list-style-type: none"> a) consider the applicable ICAO priority focus areas as well as the future prioritized work programmes of ICAO when reviewing their implementation strategies and plans, including their regulatory framework; and b) together with international organizations, and assisted by the industry where appropriate, endeavour to provide support and voluntary contributions (financial or in-kind) to the activities within the priority focus areas; <p>that ICAO:</p> <ul style="list-style-type: none"> c) based on the experience with the priority focus areas, extend the methodology of programmatic approach to the activities in the next Business Plans; and d) through the planning and implementation regional groups and the regional aviation safety groups, in accordance with the Global Air Navigation Plan and the Global Aviation Safety Plan and their respective regional plans, incorporate into their work programmes and projects, initiatives taking into account alignment with the ICAO priority focus areas. 	<ul style="list-style-type: none"> a) and b): Approved, and requested the Secretary General to take appropriate actions and bring to the attention of States. c): Approved, and requested the Secretary General to, based on the experience with the priority focus areas, extend the methodology of programmatic approach to the activities in the next Business Plans. d) Approved, and requested the Secretary General, through the planning and implementation regional groups and the regional aviation safety groups, in accordance with the Global Air Navigation Plan and the Global Aviation Safety Plan and their respective regional plans, to incorporate into their work programmes and projects, initiatives taking into account alignment with the ICAO priority focus areas. 	<ul style="list-style-type: none"> a) and b): Noted. c) and d): Noted.

RECOMMENDATIONS APPROVED BY AN-CONF/14	FOLLOW-UP ACTION	
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)
<p>Recommendation 1.1/2 – Resilience of the air navigation system</p> <p>That States:</p> <p>a) implement airspace optimization initiatives covered by ICAO provisions, such as air traffic flow management, flexible use of airspace and civil-military cooperation;</p> <p>b) share advance information related to anticipated disruptions; and</p> <p>that ICAO:</p> <p>c) together with States and industry, develop global guidance on air traffic management contingency management, including the recovery phase, as well as regional frameworks, to support the implementation of Annex 11 — <i>Air Traffic Services</i>.</p>	<p>a) and b): Approved, and requested the Secretary General to take appropriate actions and bring to the attention of States.</p> <p>c): Noted.</p>	<p>a) and b): Noted.</p> <p>c): Approved, and requested the Secretary General to develop global guidance on air traffic management contingency management, including the recovery phase, as well as regional frameworks, to support the implementation of Annex 11 — <i>Air Traffic Services</i>.</p>
<p>Recommendation 1.2/1 – Work towards enhanced alignment of the Global Aviation Safety Plan and the Global Air Navigation Plan</p> <p>That States:</p> <p>a) agree, in principle, with the incorporation of the following updates into the relevant portions of the 2026-2028 edition of the Global Aviation Safety Plan and the eighth edition of the Global Air Navigation Plan:</p> <p>1) removal of duplicate indicators from the respective Plans, as part of the longer-term work towards building a common performance framework for all Global Plans, and containing a comprehensive set of indicators;</p> <p>2) revision of the roles and responsibilities of key aviation stakeholders and ICAO to align the content;</p>	<p>a) to c): Approved, and requested the Secretary General to take appropriate actions and bring to the attention of States.</p>	<p>a) to c): Noted.</p>

RECOMMENDATIONS APPROVED BY AN-CONF/14	FOLLOW-UP ACTION	
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)
<p>3) revision of the process for Global Plans’ development, including how the Plans input into the work programme of ICAO;</p> <p>4) definition of the respective scopes (i.e., types of operations addressed) and time horizons (i.e., the final target date) in each Global Plan;</p> <p>b) foster collaboration between the Global Plans and the appropriate expert group(s); and</p> <p>c) agree that further consideration of a more integrated, collaborative approach to managing various types of aviation risks, be considered for the 2029-2031 edition of the GASP and the ninth edition of the GANP, where appropriate;</p> <p>that ICAO:</p> <p>d) take into consideration input from the Conference regarding proposals for enhanced strategic alignment of the Global Plans for subsequent inclusion in the GASP and GANP, while taking into account the differing nature and specificities of the domain of each Global Plan; and</p> <p>e) develop guidance on how the Global Plans will support each other.</p>	<p>d) and e): Noted.</p>	<p>d): Approved, and requested the Secretary General to take into consideration input from the Conference for enhanced strategic alignment of the Global Plans for subsequent inclusion in the 2026-2028 edition of the <i>Global Aviation Safety Plan</i> and the eighth edition of the <i>Global Air Navigation Plan</i>, while taking into account the differing nature and specificities of the domain of each Global Plan, for subsequent endorsement at the 42nd Session of the ICAO Assembly.</p> <p>e): Approved, and requested the Secretary General to develop guidance on how the Global Plans will support each other.</p>

RECOMMENDATIONS APPROVED BY AN-CONF/14	FOLLOW-UP ACTION	
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)
<p>Recommendation 1.3/1 – Evolution of the ICAO Assembly Technical Commission</p> <p>That States:</p> <p>a) prepare their participation, including the submission of working papers for the Technical Commission of the 42nd Session of the Assembly, with a particular focus on matters related to the Global Aviation Safety Plan, the Global Air Navigation Plan, new Assembly Resolutions and amendments to existing Resolutions; and</p> <p>that ICAO:</p> <p>b) prepare the draft agenda for the Technical Commission at the 42nd Session of the Assembly with a view to enhancing the efficiency of the Assembly including considering the lessons learned from the Technical Commission of the 41st Session of the ICAO Assembly;</p> <p>c) study the options for the evolution of future Technical Commissions taking into account the sovereignty of the Assembly and the need to secure equal opportunity for States to contribute to the technical work of ICAO;</p> <p>d) develop options for the evolution and scope of the Technical Commission within the wider context of the efficiency and effectiveness of the Assembly; and</p>	<p>a) Approved, and requested the Secretary General to take appropriate actions and bring to the attention of States.</p> <p>b) Approved, and requested the Secretary General to prepare the draft agenda for the Technical Commission at the 42nd Session of the Assembly with a view to enhancing the efficiency of the Assembly, including considering the lessons learned from the Technical Commission of the 41st Session of the ICAO Assembly.</p> <p>c) Approved, and requested the Secretary General to study the options for the evolution of future Technical Commissions taking into account the sovereignty of the Assembly and the need to secure equal opportunity for States to contribute to the technical work of ICAO.</p> <p>d) Approved, and requested the Secretary General to develop options for the evolution and scope of the Technical Commission within the wider context of the efficiency and effectiveness of the Assembly.</p>	<p>a): Noted.</p> <p>b) to e): Noted.</p>

RECOMMENDATIONS APPROVED BY AN-CONF/14	FOLLOW-UP ACTION	
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)
e) consider presenting a working paper to the 42nd Session of the ICAO Assembly on the options for the evolution of future Technical Commissions.	e) Approved, and requested the Secretary General to consider presenting a working paper to the 42nd Session of the ICAO Assembly on the options for the evolution of future Technical Commissions.	
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; and 2.3: 2026-2028 Edition of the Global Aviation Safety Plan (GASP)		
Recommendation 2.1/1 – Evolving aircraft technologies contributing to the long-term aspirational goal That States: <ul style="list-style-type: none"> a) working with industry, assess the compatibility of existing aerodrome infrastructure, systems and operational procedures with the upcoming new aircraft technologies and identify the changes that would be required to achieve full integration; b) in collaboration with industry and academia, collect and share information and experience with ICAO on the possible impact of new aircraft technologies on the global aviation system, including aerodrome infrastructure, new energy infrastructure, aircraft performance and characteristics and flight operations; c) initiate planning for aerodrome infrastructure and operational changes, where necessary, to integrate new aircraft technologies and with consideration to the economic impact as well as potential climate change impacts; d) use regulatory sandboxes, where appropriate, to facilitate the collection and analysis of real-world data to support the development of harmonized, robust regulatory frameworks aligned with ICAO guidance; and e) develop comprehensive public awareness and engagement programmes regarding benefits, safety and environmental advantages of new and emerging technologies such as electric-powered aircraft; 	a) to e): Approved, and requested the Secretary General to take appropriate actions and bring to the attention of States.	a) to e): Noted.

RECOMMENDATIONS APPROVED BY AN-CONF/14	FOLLOW-UP ACTION	
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)
<p>d) develop, through appropriate regional mechanisms, harmonized regional regulatory frameworks and interoperable systems to ensure effective integration of unmanned aircraft systems, where appropriate;</p> <p>that ICAO:</p> <p>e) along with States and industry, identify how to better engage with aviation innovators in order to benefit from a wider range of experience and expertise in addressing the safe introduction of new and evolving aviation technologies and concepts;</p> <p>f) support the safe integration of mature technologies and concepts of global interest by developing Standards and Recommended Practices, when necessary, and with minimal required changes to the existing provisions to facilitate global integration;</p> <p>g) develop guidance to support States in identifying hazards and managing safety risks related to emerging issues in order to safely implement advanced air mobility, including electric vertical take-off and landing operations;</p> <p>h) consider how hazard identification and risk assessment methodologies and tools based on systems-thinking may be used to further support safety risk management and address the interaction between the different types of risks encountered across the various domains (safety, security, facilitation, environment, economic, etc.) through the involvement of the</p>	<p>e): Approved, and requested the Secretary General to identify how to better engage with aviation innovators, along with States and industry, in order to benefit from a wider range of experience and expertise in addressing the safe introduction of new and evolving aviation technologies and concepts.</p> <p>f): Noted.</p> <p>g) to i): Noted.</p>	<p>e): Noted.</p> <p>f): Approved, and provided guidance to ANC panels concerning the development of Standards and Recommended Practices for the safe integration of mature technologies and concepts of global interest to facilitate global integration.</p> <p>g): Approved, and referred to the Safety Management Panel to develop guidance to support States in identifying hazards and managing safety risks related to emerging issues in order to safely implement advanced air mobility, including electric vertical take-off and landing operations, with the assistance of relevant sector-specific expert groups including Advance Air Mobility Study Group.</p> <p>h) Approved, and referred to the Safety Management Panel (the aspects related to the safety risk management) and to the Integrated Risk Management Study Group once established (the aspects related to the</p>

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<p>appropriate ICAO expert groups and to foster collaboration across the different domains; and</p> <p>i) develop guidance for managing the risks associated with hazardous lights in airport environments.</p> <p>Recommendation 2.2/2 – Addressing global navigation satellite system interference and contingency planning</p> <p>That States:</p> <p>a) ensure that effective global navigation satellite system radio frequency interference mitigation measures are implemented, based on measures developed by ICAO and industry, including the need to maintain a sufficient network of conventional navigation aids to ensure operational safety as well as sufficient airspace capacity during times of global navigation satellite system interference;</p> <p>b) through the mechanism of the planning and implementation regional groups, develop regional global navigation satellite system reporting mechanisms, to the extent feasible, to raise operational awareness of affected geographical areas as described in the <i>Global Navigation Satellite System (GNSS) Manual</i> (Doc 9849);</p> <p>c) work with industry to identify means to make aircraft systems more resilient to radio frequency interference events, and to provide guidance on detecting global navigation satellite system jamming or spoofing and maintaining safe and efficient aircraft operation in case of global navigation satellite system anomalies; and</p> <p>d) review aircraft minimum equipage lists to ensure compatibility with States’ implemented minimum operational networks.</p>	<p>a) to d): Approved, and requested the Secretary General to take appropriate actions and bring to the attention of States.</p>	<p>different types of risks encountered across the various domains).</p> <p>i): Approved, and referred to the Aerodrome Design and Operations Panel to develop guidance for managing the risks associated with hazardous lights in airport environments.</p> <p>a) to d): Noted.</p>

RECOMMENDATIONS APPROVED BY AN-CONF/14	FOLLOW-UP ACTION	
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)
<p>that ICAO:</p> <p>e) continue to assess the impact of global navigation satellite system interference on aviation safety and continuity of civil aviation operations and define adequate mitigation measures, while reminding States of their obligations;</p> <p>f) develop a standardized implementation package to assist and guide States in implementing effective global navigation satellite system radio frequency interference mitigation measures, including optimization and rationalization of conventional navigation aids, commensurate with their local conditions, to ensure continuity in the provision of air navigation services;</p> <p>g) develop guidance on global navigation satellite system interference information exchange and civil-military coordination in relation to harmful interference to global navigation satellite system(s) originated or detected by military authorities; and</p> <p>h) develop recommendations for globally harmonized minimum aircraft equipage lists to ensure that provided navigation infrastructure can be used by airspace users in line with available air traffic services.</p>	<p>e): Approved, and requested the Secretary General to take appropriate actions to remind States of their obligations.</p> <p>f): Approved, and requested the Secretary General to develop a standardized implementation package to assist and guide States in implementing effective global navigation satellite system radio frequency interference mitigation measures, including optimization and rationalization of conventional navigation aids, commensurate with their local conditions, to ensure continuity in the provision of air navigation services.</p> <p>g): Noted.</p> <p>h): Noted.</p>	<p>e): Approved, and referred to the Navigation Systems Panel to continue to assess the impact of global navigation satellite system interference on aviation safety and continuity of civil aviation operations and define adequate mitigation measures.</p> <p>f): Noted.</p> <p>g): Approved, and referred to the Navigation Systems Panel to develop guidance on global navigation satellite system (GNSS) interference information exchange and to the Air Traffic Management Operations Panel to develop guidance on civil-military coordination in relation to harmful interference to global navigation satellite system(s) originated or detected by military authorities.</p> <p>h): Approved, and referred to the Flight Operations Panel to develop recommendations for globally harmonized minimum aircraft equipage lists to ensure that provided navigation infrastructure can</p>

RECOMMENDATIONS APPROVED BY AN-CONF/14	FOLLOW-UP ACTION	
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)
<p>Recommendation 2.3/1 – Draft 2026-2028 edition of the Global Aviation Safety Plan (GASP, Doc 10004)</p> <p>That States:</p> <p>a) agree to include the proposed goals and targets in the draft 2026-2028 edition of the <i>Global Aviation Safety Plan</i>;</p> <p>b) agree, in principle, with the changes proposed, including the selection of global high-risk categories of occurrences, for the draft 2026-2028 edition of the <i>Global Aviation Safety Plan</i>;</p> <p>that ICAO:</p> <p>c) take into consideration input from the Conference, as well as the responses from the online questionnaire on the Global Aviation Safety Plan update for the revision of the 2026-2028 edition of the <i>Global Aviation Safety Plan</i>, and its subsequent endorsement at the 42nd Session of the Assembly.</p>	<p>a) and b): Approved, and requested the Secretary General to take appropriate actions and bring to the attention of States.</p> <p>c): Noted.</p>	<p>be used by airspace users in line with available air traffic services.</p> <p>a) and b): Noted.</p> <p>c): Approved, and requested the Secretary General to take into consideration input from the Conference, as well as the responses from the online questionnaire on the Global Aviation Safety Plan update for the revision of the 2026-2028 edition of the <i>Global Aviation Safety Plan</i>, and its subsequent endorsement at the 42nd Session of the Assembly.</p>

RECOMMENDATIONS APPROVED BY AN-CONF/14	FOLLOW-UP ACTION	
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)
<p>Recommendation 2.3/2 – Turbulence encounters as a global operational safety risk</p> <p>That States:</p> <p>a) share experiences and best practices related to turbulence encounters; and</p> <p>b) establish mechanisms to improve the availability of air-reports, including special air reports, especially those made routinely and containing quantitative turbulence information;</p> <p>that ICAO:</p> <p>c) identify means for collecting and sharing turbulence-related data among Member States and industry to actively monitor global turbulence risk;</p> <p>d) consider the need for additional provisions to improve the collecting and sharing of turbulence-related data among States and industry; and</p> <p>e) in collaboration with the scientific and meteorological communities, investigate ways to enhance clear-air turbulence forecasting models and narrow down areas of probability.</p>	<p>a) and b): Approved, and requested the Secretary General to take appropriate actions and bring to the attention of States.</p> <p>c) to e): Noted.</p>	<p>a) and b): Noted.</p> <p>c): Approved, and referred to the Meteorology Panel to identify means for collecting and sharing turbulence-related data among Member States and industry to actively monitor global turbulence risk; consider the need for additional provisions to improve the collecting and sharing of turbulence-related data among States and industry.</p> <p>d): Approved, and referred to the Meteorology Panel to consider the need for additional provisions to improve the collecting and sharing of turbulence-related data among States and industry.</p> <p>e): Approved, and referred to the Meteorology Panel to, in collaboration with the scientific and meteorological communities, investigate ways to enhance clear-air turbulence forecasting models and narrow down areas of probability.</p>

RECOMMENDATIONS APPROVED BY AN-CONF/14	FOLLOW-UP ACTION	
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)
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; and 3.3: Eighth Edition of the Global Air Navigation Plan (GANP)		
<p>Recommendation 3.1/1 – Project 30/10 – Optimized implementation of longitudinal separation minima</p> <p>That States:</p> <p>a) within the processes of the planning and implementation regional groups, actively collaborate with neighbouring States to implement Project 30/10 – implementation of longitudinal separations of 55.5 km (30 NM) or less in oceanic and remote airspace, and 19 km (10 NM) or less elsewhere;</p> <p>that ICAO:</p> <p>b) through the planning and implementation regional groups, develop regional action plans for the implementation of Project 30/10;</p> <p>c) monitor and support inter-regional collaboration for a harmonized implementation of Project 30/10; and</p> <p>d) consider other minimum service level procedures, via a framework, for implementation in oceanic and remote airspace.</p>	<p>a): Approved, and requested the Secretary General to take appropriate actions and bring to the attention of States.</p> <p>b): Approved, and requested the Secretary General, through the planning and implementation regional groups, to develop regional action plans for the implementation of Project 30/10.</p> <p>c): Approved, and requested the Secretary General to monitor and support inter-regional collaboration for a harmonized implementation of Project 30/10.</p> <p>d): Approved, and requested the Secretary General to consider other minimum service level procedures, via a framework, for implementation in oceanic and remote airspace.</p>	<p>a): Noted.</p> <p>b) to d): Noted.</p>

RECOMMENDATIONS APPROVED BY AN-CONF/14	FOLLOW-UP ACTION	
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)
<p>Recommendation 3.1/2 – Study into the feasibility of establishing an ICAO air navigation efficiency programme</p> <p>That ICAO undertake a study into the feasibility of establishing an ICAO air navigation efficiency audit programme, or other suitable initiative, involving States and international organizations throughout the study.</p>	Noted.	Approved, and requested the Secretary General to undertake a study into the feasibility of establishing an ICAO air navigation efficiency audit programme, or other suitable initiative, involving States and international organizations throughout the study.
<p>Recommendation 3.1/3 – Enabling successful deployment of trajectory-based operations</p> <p>That States:</p> <p>a) and regions expedite the implementation of trajectory-based operations enablers that are considered mature and relevant; and</p> <p>b) support ICAO in expediting its work programme on trajectory-based operations and its enablers, including the development of a plan and timeline for their implementations;</p> <p>that ICAO:</p> <p>c) develop and maintain an ICAO work programme addressing the full scope of trajectory-based operations;</p> <p>d) develop ICAO provisions and guidance for automated air-ground trajectory synchronization; and</p>	<p>a) and b): Approved, and requested the Secretary General to take appropriate actions and bring to the attention of States.</p> <p>c) to e): Noted.</p>	<p>a) and b): Noted.</p> <p>c) to e): Approved, and referred to the Air Traffic Management Requirements and Performance Panel to update the work programme to address the full scope of trajectory-based operations (TBO); develop ICAO provisions and guidance for automated air-ground trajectory synchronization; and investigate the need for the evolution of service priority policy in support of TBO implementation.</p>

RECOMMENDATIONS APPROVED BY AN-CONF/14	FOLLOW-UP ACTION	
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)
<p>e) investigate the need for the evolution of service priority policy in support of trajectory-based operations implementation.</p> <p>Recommendation 3.1/4 – Free route airspace</p> <p>That States:</p> <p>a) actively collaborate with neighbouring States to implement free route airspace;</p> <p>that ICAO:</p> <p>b) develop provisions and guidance material to support harmonized implementation of free route airspace, including implementation across airspace boundaries and regions.</p> <p>Recommendation 3.1/5 – Delegation of responsibility for provision of air traffic services</p> <p>That ICAO develop a framework to support States considering delegation of responsibility for provision of air traffic services.</p>	<p>a): Approved, and request the Secretary General to take appropriate actions and bring to the attention of States.</p> <p>b): Noted.</p> <p>Noted.</p>	<p>a): Noted.</p> <p>b): Approved, and referred to the Air Traffic Management Operations Panel to develop provisions and guidance material to support harmonized implementation of free route airspace, including implementation across airspace boundaries and regions.</p> <p>Approved, and referred to the Air Traffic Management Operations Panel to develop a framework to support States considering delegation of responsibility for provision of air traffic services.</p>

RECOMMENDATIONS APPROVED BY AN-CONF/14	FOLLOW-UP ACTION	
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)
<p>Recommendation 3.1/6 – Addressing the safe integration of space transport operations into the airspace system</p> <p>That ICAO:</p> <p>a) work with Member States and international organizations to identify, compile and publish best practices, as necessary, related to the safe and efficient air navigation of aircraft around space transport operations; and</p> <p>b) develop guidance material for air navigation services providers related to the integration of space transport operations, including NOTAM dissemination, stakeholder communication associated with specific operations, air traffic flow management, and data-sharing for real-time updates on the status of the airspace, excluding telemetry data of launch vehicles.</p>	<p>a): Approved, and requested the Secretary General to work with Member States and international organizations to identify, compile and publish best practices, as necessary, related to the safe and efficient air navigation of aircraft around space transport operations.</p> <p>b): Noted.</p>	<p>a): Noted.</p> <p>b): Approved, and requested the Secretary General to develop, where applicable in coordination with international organizations, guidance material for air navigation services providers related to the integration of space transport operations, including NOTAM dissemination, stakeholder communication associated with specific operations, air traffic flow management, and data-sharing for real-time updates on the status of the airspace, excluding telemetry data of launch vehicles.</p>

RECOMMENDATIONS APPROVED BY AN-CONF/14	FOLLOW-UP ACTION	
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)
<p>Recommendation 3.1/7 – Higher airspace operations</p> <p>That ICAO:</p> <p>a) develop a holistic vision and global concept for higher airspace operations, including regulatory approval, coordination responsibilities and liability, for inclusion in its work programme for the next triennium; and</p> <p>b) develop, in coordination with international organizations concerned, provisions related to the safe and efficient transit of aircraft through controlled airspace and separation management in higher airspace, including air traffic management procedures contingency planning and risk assessment and monitoring methodologies, including for uncontrolled descents of higher airspace operations vehicles.</p>	<p>a) and b): Noted.</p>	<p>a) Approved, and referred to the Air Traffic Management Requirements and Performance Panel to develop a holistic vision and global concept for higher airspace operations, including regulatory approval, coordination responsibilities and liability, for inclusion in its work programme for the next triennium.</p> <p>b): Approved, and referred to the Separation and Airspace Safety Panel (SASP) to develop provisions related to the safe and efficient transit of aircraft through controlled airspace and separation management in higher airspace, including air traffic management procedures contingency planning and risk assessment and monitoring methodologies, including for uncontrolled descents of higher airspace operations vehicles, in coordination with the Air Traffic Management Requirements and Performance Panel (ATMRPP) to ensure alignment of SASP's work with the global concept to be developed by the ATMRPP (Recommendation 3.1/7 a).</p>

RECOMMENDATIONS APPROVED BY AN-CONF/14	FOLLOW-UP ACTION	
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)
<p>Recommendation 3.2/1 – Phasing out and/or optimizing the use of legacy systems</p> <p>That States:</p> <p>a) adopt a phased implementation plan for transitioning to modern communications, navigation and surveillance, and air traffic management systems while maintaining a minimum operation network for the provision of resilient air navigation services; that ICAO:</p> <p>b) develop a global framework to guide Member States in phasing out and/or optimizing the use of legacy systems, ensuring consistency and interoperability;</p> <p>c) consider including a methodology to optimize the utilization of legacy systems in the communications, navigation and surveillance technology roadmap, leveraging the communications, navigation and surveillance minimum operation network concept, in a globally harmonized manner;</p> <p>d) establish a knowledge-sharing platform for Member States to share experiences, challenges and best practices related to the transition from legacy systems to modern air traffic management technologies; and</p>	<p>a): Approved, and requested the Secretary General to take appropriate actions and bring to the attention of States.</p> <p>b) and c): Noted.</p> <p>d): Approved, and requested the Secretary General to establish a knowledge-sharing platform for Member States to share</p>	<p>a): Noted.</p> <p>b): Approved, and referred to the Air Traffic Management Requirements and Performance Panel and Navigation Systems Panel to develop a global framework to guide Member States in phasing out and/or optimizing the use of legacy systems, ensuring consistency and interoperability.</p> <p>c): Approved, and referred to the Communications Panel – Data Communications Infrastructure Working Group, Navigation Systems Panel and the Surveillance Panel, assisted by the Integrated CNS and Spectrum Task Force, to consider including a methodology to optimize the utilization of legacy systems in the communications, navigation and surveillance technology roadmap, leveraging the communications, navigation and surveillance minimum operation network concept, in a globally harmonized manner.</p> <p>d) and e): Noted.</p>

RECOMMENDATIONS APPROVED BY AN-CONF/14	FOLLOW-UP ACTION	
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)
<p>e) provide implementation support for the transition from legacy systems to modern air traffic management technologies.</p> <p>Recommendation 3.2/2 – Transition to flight and flow – information for a collaborative environment services and cessation of ICAO 2012 flight plan by 2034</p> <p>That States:</p> <p>a) in support of the 2034 global cessation of the ICAO 2012 flight plan, commence the development of a national plan to transition to flight and flow – information for a collaborative environment services along with industry stakeholders;</p> <p>b) include plans for the implementation of both minimum and optional flight and flow – information for a collaborative environment services in the national air navigation plans;</p> <p>c) share experience and information for the implementation of flight and flow – information for a collaborative environment services;</p> <p>d) and planning and implementation regional groups, consider establishing regional focus groups for coordinating the planning and implementation of flight and flow – information for a collaborative environment services and providing necessary support throughout the transition period; and</p> <p>e) support and contribute to the work of their respective planning and implementation regional group and their sub-groups to develop a regional plan to transition to flight and flow – information for a collaborative environment services on the basis of the 2034 global cessation of the ICAO 2012 flight plan;</p>	<p>experiences, challenges and best practices related to the transition from legacy systems to modern air traffic management technologies</p> <p>e): Approved, and requested the Secretary General to provide implementation support for the transition from legacy systems to modern air traffic management technologies.</p> <p>a) to e): Approved, and requested the Secretary General to take appropriate actions and bring to the attention of States.</p>	<p>a) to e): Noted.</p>

RECOMMENDATIONS APPROVED BY AN-CONF/14	FOLLOW-UP ACTION	
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)
<p>that ICAO:</p> <p>f) amend relevant ICAO provisions and guidance material to enable the 2034 global cessation of the ICAO flight plan and associated air traffic services messages;</p> <p>g) through planning and implementation regional groups, provide guidance and support for the development of regional plans to transition to flight and flow – information for a collaborative environment to enable the 2034 global cessation of the ICAO 2012 flight plan;</p> <p>h) support inter-regional collaboration for a harmonized implementation of and transition to flight and flow – information for a collaborative environment services;</p> <p>i) monitor and support the progress of flight and flow – information for a collaborative environment services implementation and transition plan developments of States; and</p>	<p>f): Noted.</p> <p>g): Approved, and requested the Secretary General to through planning and implementation regional groups, provide guidance and support for the development of regional plans to transition to flight and flow – information for a collaborative environment to enable the 2034 global cessation of the ICAO 2012 flight plan.</p> <p>h): Approved, and requested the Secretary General to support inter-regional collaboration for a harmonized implementation of and transition to flight and flow – information for a collaborative environment services.</p> <p>i): Approved, and requested the Secretary General to monitor and support the progress of flight and flow – information for a collaborative environment services implementation and transition plan developments of States.</p>	<p>f): Approved and referred to the Air Traffic Management Requirements and Performance Panel, to amend relevant ICAO provisions and guidance material to enable the 2034 global cessation of the ICAO flight plan and associated air traffic services messages.</p> <p>g) to i): Noted.</p>

RECOMMENDATIONS APPROVED BY AN-CONF/14	FOLLOW-UP ACTION	
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)
<p>d) develop efficient communication strategies with Member States to enhance the accessibility, visibility and traceability of revisions to the entire GANP structure and context, from strategic to technical levels, and consider the development of an integrated document as part of this approach, for future updates of the GANP.</p> <p>Recommendation 3.3/2 — Update to the global technical level of the seventh edition of the Global Air Navigation Plan and its regional and national levels</p> <p>That States:</p> <p>a) agree in principle with the update of the environment key performance area, which will be reviewed by the appropriate expert groups, noting the ongoing work of the Committee on Aviation Environmental Protection on monitoring and reporting metrics for the long-term aspirational goal 2050, covering all in-sector CO2 emissions reductions;</p> <p>b) agree in principle with the resilience focus area;</p> <p>c) use, in collaboration with the regional offices, the electronic system for the management of regional air navigation plans, when available; and</p> <p>d) consider the national air navigation plan template, when available;</p>	<p>a) to d): Approved, and requested the Secretary General to take appropriate actions and bring to the attention of States.</p>	<p>d): Approved, and requested the Secretary General to develop efficient communication strategies with Member States to enhance the accessibility, visibility and traceability of revisions to the entire GANP structure and context, from strategic to technical levels, and consider the development of an integrated document as part of this approach, for future updates of the GANP.</p> <p>a) to d): Noted.</p>

RECOMMENDATIONS APPROVED BY AN-CONF/14	FOLLOW-UP ACTION	
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)
<p>that ICAO:</p> <p>e) update the performance assessment of the Aviation System Block Upgrade framework, with the new objectives on the environment key performance area and resilience focus area;</p> <p>f) continue the update of the Aviation System Block Upgrade framework and reflect the two additional challenges and opportunities proposed, recognizing the priority areas of the 41st Session of the Assembly, for the eighth edition of the Global Air Navigation Plan, to be presented for endorsement by 42nd Session of the Assembly;</p> <p>g) develop and disseminate a roll-out plan for the electronic system for the management of the regional air navigation plans, including clear revision procedures and presentation methods, in coordination with all relevant stakeholders, and provide the national air navigation plan template; and</p> <p>h) take into consideration input from the Conference and continue to work with States, international organizations and other stakeholders on the development of the eighth edition of the Global Air Navigation Plan for subsequent endorsement at the 42nd Session of the Assembly.</p>	<p>e), f) and h): Noted.</p> <p>g): Noted.</p>	<p>e), f) and h): Approved, and requested the Secretary General to take into consideration input from the Conference and continue to work with States, international organizations and other stakeholders on the development of the eighth edition of the <i>Global Air Navigation Plan</i> for subsequent endorsement at the 42nd Session of the Assembly.</p> <p>g): Approved, and requested the Secretary General to develop and disseminate a roll-out plan for the electronic system for the management of the regional air navigation plans, including clear revision procedures and presentation methods, in coordination with all relevant stakeholders, and provide the national air navigation plan template.</p>

RECOMMENDATIONS APPROVED BY AN-CONF/14	FOLLOW-UP ACTION	
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)
Agenda Item 4: Hyper-connectivity of air navigation system – 4.1: Connected aircraft concept and associated challenges; and 4.2: Cybersecurity and information system resilience		
<p>Recommendation 4.1/1 – Validation, standardization and implementation of the connected aircraft concept and air-ground connectivity strategy</p> <p>That States:</p> <p>a) together with industry stakeholders, evaluate the technical and operational aspects to further mature and validate the draft connected aircraft concept, including further assessing the hyper-connected air traffic management solution, and provide ICAO with the results; and</p> <p>that ICAO:</p> <p>b) further examine:</p> <p>1) the need for and implications of leveraging commercial off-the-shelf non-safety aircraft connectivity solutions as a means to supplement current and future air-ground safety critical communications for air traffic management;</p>	<p>a): Approved, and requested the Secretary General to take appropriate actions and bring to the attention of States.</p> <p>b): Noted.</p>	<p>a): Noted.</p> <p>b): Approved, and referred to the Air Traffic Management Requirements Panel, Communications Panel – Data Communications Infrastructure Working Group, Frequency Spectrum Management Panel and Trust Framework Panel, to further examine:</p> <p>1) the need for and implications of leveraging commercial off-the-shelf non-safety aircraft connectivity solutions as a means to supplement current and future air-ground safety critical communications for air traffic management;</p>

RECOMMENDATIONS APPROVED BY AN-CONF/14	FOLLOW-UP ACTION	
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)
<p>2) a strategy of future aeronautical frequency spectrum usage and the possible use of commercial services in frequency bands allocated for non-safety, in close coordination with the International Telecommunication Union, including safety assessments conducted by appropriate expert group(s), in a manner which avoids unintended consequences;</p> <p>3) cybersecurity risks and mitigation measures in the context of the hyper-connected air traffic management solution.</p> <p>c) further examine other components of the connected aircraft concept, including but not limited to;</p> <p>1) interoperability and communication continuity across flight information regions;</p> <p>2) minimum airborne and ground infrastructures to operate in a multilink environment while maintaining interoperability;</p> <p>3) end-to-end performance requirements for new functions supporting air traffic services, aeronautical information service and aeronautical operational control;</p> <p>4) evolution of electronic flight bag capabilities and its impact on aircraft avionics certification and operational authorization;</p> <p>5) role of the humans in the connected aircraft concept;</p>	<p>c) to f): Noted.</p>	<p>2) a strategy of future aeronautical frequency spectrum usage and the possible use of commercial services in frequency bands allocated for non-safety, in close coordination with the International Telecommunication Union, including safety assessments conducted by appropriate expert group(s), in a manner which avoids unintended consequences; and</p> <p>3) cybersecurity risks and mitigation measures in the context of the hyper-connected air traffic management solution.</p> <p>c) to f): Approved, and referred to the Air Traffic Management Requirements and Performance Panel to further examine other components of the connected aircraft concept.</p>

RECOMMENDATIONS APPROVED BY AN-CONF/14	FOLLOW-UP ACTION	
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)
<p>6) exchange, use and integration of additional information obtained from aircraft;</p> <p>d) update the draft connected aircraft concept, the long-term future connectivity strategy and relevant threads of the Aviation System Block Upgrade framework in the Global Air Navigation Plan to guide the development of ICAO provisions and guidance material, as necessary, taking into account input from the Conference and the results of the States' evaluation;</p> <p>e) conduct a comprehensive gap analysis to identify areas requiring ICAO provisions and guidance to support the safe, globally harmonized and interoperable implementation of the connected aircraft concept, taking into account input from the Conference; and</p> <p>f) update relevant ICAO provisions and guidance material based on the updated draft connected aircraft concept and the comprehensive gap analysis above, as necessary.</p> <p>Recommendation 4.2/1 - Aviation cybersecurity</p> <p>That States:</p> <p>a) develop and implement a national plan to address cyber threats and risks to civil aviation in a holistic manner across all aviation domains, and in coordination with relevant non-aviation stakeholders using the core elements as a reference;</p> <p>b) align aviation cybersecurity activities in the regional air navigation, safety, and security and facilitation plans through the coordination processes of the planning and implementation regional groups, regional aviation safety groups and regional aviation security and facilitation groups; and</p>	<p>a) to c): Approved, and requested the Secretary General to take appropriate actions and bring to the attention of States.</p>	<p>a) to c): Noted.</p>

RECOMMENDATIONS APPROVED BY AN-CONF/14	FOLLOW-UP ACTION	
	COUNCIL	AIR NAVIGATION COMMISSION (ANC)
<p>c) report to ICAO their experience in implementing ICAO provisions and guidance material related to aviation cybersecurity, through the appropriate expert group(s) or through the processes of the planning and implementation regional groups, regional aviation safety groups and regional aviation security and facilitation groups;</p> <p>that ICAO:</p> <p>d) provide guidance on the core elements to support States and stakeholders in addressing aviation cybersecurity, and integrate all aviation cybersecurity activities holistically in a consistent and coordinated manner; and</p> <p>e) deliver timely, relevant and actionable cybersecurity guidance material to meet the needs of Member States and other aviation stakeholders</p>	<p>d): Approved, and referred to the Cybersecurity Panel to provide guidance on the core elements to support States and stakeholders in addressing aviation cybersecurity, and integrate all aviation cybersecurity activities holistically in a consistent and coordinated manner</p> <p>e): Approved, and referred to the Cybersecurity Panel to deliver timely, relevant and actionable cybersecurity guidance material to meet the needs of Member States and other aviation stakeholders.</p>	<p>d): Noted.</p> <p>e): Approved and referred to appropriate expert groups, including the Trust Framework Panel and Communications Panel-Data Communications Infrastructure Working Group, to deliver timely, relevant and actionable cybersecurity guidance material to meet the needs of Member States and other aviation stakeholders.</p>