



| ICAO

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ASSEMBLY
FORTIETH SESSION

Montréal, 24 September – 4 October 2019

TECHNICAL
COMMISSION

REPORT

*Approved by the Technical Commission of the Assembly
and published by authority of the Secretary General*



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ASSEMBLY — 40TH SESSION
MONTREAL, 24 SEPTEMBER TO 4 OCTOBER 2019
REPORT OF THE TECHNICAL COMMISSION

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REPORT OF THE TECHNICAL COMMISSION TO THE ASSEMBLY

General

1. The Technical Commission held five meetings between 26 September and 1 October 2019.
2. Mr. Simon Allotey (Ghana) was elected Chairman at the Second Plenary Meeting of the Assembly. The Commission, at its first meeting, elected as First Vice-Chairman Mr. Haydar Yalçin (Turkey) on a nomination by Costa Rica and seconded by Panama. Also based on a nomination by Costa Rica, seconded by Panama, the Commission elected Mr. Hajime Yoshimura (Japan) as Second Vice-Chairman.
3. Representatives from some 182 Contracting States and 25 Observer Delegations attended one or more meetings of the Commission.
4. The Secretary of the Commission was Mr. S. P. Creamer, Director of the Air Navigation Bureau. Messrs. D. Guindon, Deputy Director of Monitoring and Oversight, R. MacFarlane, Deputy Director of Air Navigation Capacity and Efficiency, and C. Radu, Deputy Director of Aviation Safety served as Deputy Secretaries. The Commission was assisted by Mr. M. de Leon, Mrs. D. Cooper and Ms. A. Guiang and also by:

Ms. L. Cary, Chief, Remotely Piloted Aircraft Systems (RPAS)
Mr. M. Costa, Chief, Accident Investigation Section (AIG)
Mr. C. Dalton, Chief, Airspace Management and Optimization Section (AMO)
Mr. S. Da Silva, Chief, Global Interoperable Systems Section (GIS)
Mr. Y. Fattah, Programme Manager, Multidisciplinary Priorities (MP)
Dr. J. Jordaan, Chief, Aviation Medicine Section (MED)
Mr. M. Marin, Chief, Operational Safety Section (OPS)
Mr. M. Merens, Chief, Integrated Aviation Analysis Section (IAA) and Acting Chief,
Programmes Coordination and Implementation Section (PCI)
Mr. T. Mistos, Chief, Oversight Support Unit (OSU)
Dr. K. Rooney, Chief, Cargo Safety Section (CSS)
Mr. Y. Wang, Chief, Airport Operations and Infrastructure Section (AOI)

and other members of the Secretariat.

Agenda and working arrangements

5. The following agenda items were considered by the Commission:
 - Agenda Item 27: Annual Reports of the Council to the Assembly for 2016, 2017 and 2018
 - Agenda Item 28: Aviation Safety and Air Navigation Policy
 - Agenda Item 29: Aviation Safety and Air Navigation Regional Implementation Coordination Mechanisms
 - Agenda Item 30: Other issues to be considered by the Technical Commission

6. The documents and working papers associated with the work of the Commission are listed by agenda item in the appendix to this report.

7. The action taken by the Commission in respect of each item is reported on separately in the paragraphs which follow. The material is arranged according to the numerical sequence of the agenda items considered by the Commission.

Agenda Item 27: Annual Reports of the Council to the Assembly for 2016, 2017 and 2018

27.1 The Technical Commission reviewed those parts of the Annual Reports of the Council to the Assembly for 2016, 2017 and 2018, and supplementary report covering the first six months of 2019, falling within its field of competence. (The Annual Reports are available online at <http://www.icao.int/meetings/a40/pages/documentation-reference-documents.aspx>).

27.2 The Commission noted, without comment, the work accomplished in the air navigation field during the past three years, as indicated under the Aviation Safety and Air Navigation Capacity and Efficiency Strategic Objectives, and expressed its gratitude.

Agenda Item 28: Aviation Safety and Air Navigation Policy

Global Aviation Safety Plan

28.1 The Commission reviewed A40-WP/51, presented by the Council, which put forward the 2020-2022 edition (third edition) of the *Global Aviation Safety Plan* (GASP, Doc 10004) for endorsement by the Assembly. The revised GASP sets forth the global strategic direction for safety and provides the framework in which regional, subregional and national implementation plans are to be developed and implemented, thus ensuring harmonization and coordination of efforts aimed at improving international civil aviation safety. The Commission recommended that the Assembly endorse the 2020-2022 edition of the GASP.

28.2 The Commission reviewed A40-WP/195, presented by Bolivia (Plurinational State of) and supported by the countries of the South American (SAM) Region and the Member States¹ of the Latin American Civil Aviation Commission (LACAC), A40-WP/325, presented by Brazil and supported by the countries of the SAM Region and the Member States² of LACAC, and A40-WP/401, presented by Peru and sponsored by the countries of the SAM Region and the Member States³ of LACAC, regarding the 2020-2022 edition of the GASP. The Commission agreed on the need for ICAO to continue its implementation support, under the established global aviation safety programme, including tools, guidance and capacity building workshops to assist States and stakeholders to meet the GASP goals. The Commission also agreed on the need to increase collaborative endeavours through voluntary mechanisms and for States and industry entities to actively participate in their respective regional aviation safety groups (RASGs). The Commission further agreed on the need for ICAO, through the appropriate group of experts, to consider the inclusion of a common section on the importance of building States' civil aviation management capacities in forthcoming editions of the GASP. The Commission expressed support for the

¹ Belize, Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Nicaragua, Panama, Paraguay, Peru, Uruguay and Venezuela (Bolivarian Republic of).

² Belize, Bolivia (Plurinational State of), Chile, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Nicaragua, Panama, Paraguay, Peru, Uruguay and Venezuela (Bolivarian Republic of).

³ Belize, Bolivia (Plurinational State of), Brazil, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Nicaragua, Panama, Paraguay, Uruguay and Venezuela (Bolivarian Republic of).

SAM Region Safety Plan (SAMSP), which facilitates the implementation of the goals and targets in the 2020-2022 edition of the GASP.

28.3 Information papers were provided by Argentina (A40-WP/522) and the Flight Safety Foundation (FSF) (A40-WP/460).

Global Air Navigation Plan

28.4 The Commission reviewed A40-WP/24, presented by the Council, which called for the endorsement of the sixth edition of the *Global Air Navigation Plan* (GANP, Doc 9750), available via the GANP Portal (<https://www4.icao.int/ganpportal>), as the strategic direction for global air navigation and included an amendment to Resolution A39-12: ICAO global planning for safety and air navigation. A40-WP/24 was supported by A40-WP/215, presented by Singapore and co-sponsored by Fiji, Japan, Marshall Islands, Nauru, Palau, Thailand, Trinidad and Tobago, the United Kingdom and the Civil Air Navigation Services Organisation (CANSO), which highlighted the importance of aligning global, regional and national air navigation plans and that, like the Global Plan, regional air navigation plans should be developed in electronic format. The Commission recommended that the Assembly endorse the sixth edition of the GANP, including its maintenance process and recommended that ICAO apply version control to further updates.

28.5 The Commission discussed A40-WP/230, presented by Australia, which recognized the GANP as the locus for global air navigation policies, priorities and strategies. To highlight and make easily accessible these policies, priorities and strategies, the Commission agreed that ICAO should consider improving the executive summary for the next edition of the GANP for use by all States and key decision-makers. The Commission was informed that ICAO had formed a group of experts to develop and maintain future editions of the GANP in response to Recommendations 1.1/1, 1.2/1 and 4.3/1 from the Thirteenth Air Navigation Conference (AN-Conf/13).

28.6 The Commission supported A40-WP/84, presented by Finland on behalf of the European Union (EU) and its Member States⁴, the other Member States of the European Civil Aviation Conference⁵ (ECAC), by the European Organisation for the Safety of Air Navigation (EUROCONTROL) and co-sponsored by Canada, Singapore and the Republic of Korea, which reinforced the sixth edition of the GANP, in conjunction with the new edition of the GASP, as the strategic framework to drive the digitalization and transformation of air navigation. The Commission agreed that ICAO should make use of partnerships with largescale air traffic management (ATM) modernization programmes for the development of aviation system block upgrade (ASBU) elements and related ICAO provisions. The Commission also agreed that air navigation modernization increasingly requires operational services with a global scope. To facilitate the delivery of these global services in a cost-effective and robust manner, and to prevent their unnecessary proliferation, the Commission recommended that ICAO consider the development of key principles for the setting up and maintenance of them. The Commission agreed that, instead of defining an ASBU minimum path, ICAO should implement interregional harmonization mechanisms to ensure a balanced development of global air navigation in line with the No Country Left Behind initiative. The Commission noted the importance of ensuring consistency and complementarity between the ICAO Global Plans and other relevant policies and strategies.

⁴ Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and United Kingdom.

⁵ Albania, Armenia, Azerbaijan, Bosnia and Herzegovina, Georgia, Iceland, Monaco, Montenegro, North Macedonia, Norway, Republic of Moldova, San Marino, Serbia, Switzerland, Turkey and Ukraine.

28.7 The Commission reviewed A40-WP/150, presented by the United Arab Emirates, which encouraged the adoption of a globally harmonized standardization process for the modernization of air navigation systems through the ASBU framework. To meet the requirements of the rapid pace of technological developments, as well as State and industry operating models, the Commission recommended that ICAO, keeping in mind the principles enshrined in the Chicago Convention, review and enhance its Standard-making processes to operate in a more agile manner, applying a cross-domain approach and promoting integrated risk management to address new initiatives and emerging issues in a timely manner. The Commission also recommended that ICAO consider the development of guidelines for technical standards versioning in support of technical standards management to secure harmonized implementation of innovative solutions.

28.8 The Commission reviewed A40-WP/158, presented by the African Civil Aviation Commission (AFCAC) on behalf of its 54 Member States⁶, on system-wide information management (SWIM) and the need to incorporate requirements for global interoperability in the regional air navigation plans. The Commission noted the interoperability challenges that were viewed as main inhibitors for the exchange of information in a SWIM-enabled environment. The Commission agreed on the need for additional ICAO guidance material to support interoperability through the definition and incorporation of the requirements of the SWIM global interoperability framework layers in regional air navigation plans. The Commission also agreed that in a SWIM governance framework, coordination between involved stakeholders should be included in an effort to prevent potential security breaches and cyberattacks. In addition, the Commission noted the Africa-Indian Ocean (AFI) Region initiative to establish regional aeronautical information databases.

28.9 The Commission noted the basic building block (BBB) framework and agreed that, as highlighted in A40-WP/84, it constitutes the baseline for the modernization of any air navigation system. The Commission was informed that the BBB is considered an independent framework and not an ASBU block as it represents a baseline rather than an evolutionary step, and that implementation obligations, as well as reporting and compliance of the BBBs, do not entail additional implementation obligations or specific reporting mechanisms for States.

28.10 The Commission reviewed A40-WP/156, presented by the AFCAC on behalf of its 54 Member States⁶, on the application of the BBB framework for aeronautical information management (AIM) and the harmonization of the aeronautical information eXchange model (AIXM) and its evolutions. The Commission agreed that ICAO should continue to promote quality-assured aeronautical information as part of the BBB framework and to support the harmonization of information exchange models and their future versions. The Commission was informed that in response to AN-Conf/13 Recommendation 3.1/1, approved by Council, these proposals were already ongoing as part of the ICAO air navigation work programme.

28.11 The Commission emphasized the importance of adopting a globally harmonized performance management process, based on collaborative decision-making, for air navigation modernization and acknowledged the six-step performance management process detailed in the sixth edition of the GANP. In this regard, the Commission supported A40-WP/212, presented by Singapore and co-sponsored by Japan, Thailand, the United States and CANSO, which highlighted the importance and benefits of a collaborative performance-based approach. The Commission agreed that ICAO should develop guidance material to facilitate the implementation, mainly by air navigation service providers

⁶ Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cabo Verde, Cameroon, Central African Republic, Chad, Comoros, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Djibouti, Egypt, Equatorial Guinea, Eritrea, Eswatini, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Libya, Madagascar, Malawi, Mali, Mauritania, Mauritius, Morocco, Mozambique, Namibia, Niger, Nigeria, Rwanda, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, South Sudan, Sudan, Togo, Tunisia, Uganda, United Republic of Tanzania, Zambia, Zimbabwe.

(ANSPs), of the 19 key performance indicators (KPIs) included in the GANP as well as to encourage engagement by all stakeholders. The Commission also agreed that ICAO should continue developing the performance framework by defining KPIs in all 11 ICAO key performance areas (KPA).

28.12 The Commission reviewed A40-WP/168, presented by Saudi Arabia, which highlighted the need for a holistic guide mechanism to assist different aviation stakeholders to choose the appropriate ASBU elements to maximize, in a timely manner, safety, operational and financial benefits and recommended that ICAO develop a tool to assist States and regions in identifying appropriate ASBU elements. The Commission was informed that a performance-driven strategic planning tool (AN-SPA), which allowed the identification of appropriate ASBU elements for different operating environments, was publicly available on the GANP Portal and ready for validation. States, together with other aviation stakeholders, were encouraged to implement a performance management process and use the tool to assess their needs as well as to provide feedback to ICAO for validation and improvement purposes. The Commission recognized that AN-SPA would have to be further enhanced to meet specific requirements in terms of automation and data analysis. The Commission was also informed that following AN-Conf/13 Recommendation 1.2/1, ICAO enabled a capability on the GANP Portal for States to share relevant implementation information by ASBU element. States were encouraged to share their experience on the implementation of ASBU elements, including the criteria used to select specific operational improvements.

28.13 The Commission acknowledged the importance of aligning global, regional and national efforts regarding air navigation modernization. The Commission agreed that Member States, planning and implementation regional groups (PIRGs) and all members of the aviation community should be urged to continue improving the air navigation system in line with the GANP so that it could adapt to global, regional and local opportunities and challenges in a timely and orderly manner. In particular, the Commission agreed that Member States should be urged to plan, develop and conduct activities, via a collaborative decision-making process, to raise awareness of key ATM concepts. The Commission also agreed that ICAO, Member States and PIRGs should be urged to align regional and national plans with the GANP, with the ICAO regional offices and respective PIRGs facilitating and coordinating activities to achieve regional harmonization and alignment.

28.14 The Commission reviewed A40-WP/450, presented by Colombia and sponsored by the Member States⁷ of LACAC, which analysed the linkage of the national air navigation plan, the maintenance management system (MMS) and the safety management system (SMS) to achieve a high-performance, scalable and integrated air navigation system. The Commission agreed that the seamless interaction of these three instruments would allow appropriate, timely and cost-effective decisions on the essential services and operational improvements outlined in the BBB and ASBU frameworks, respectively, and therefore recommended that ICAO develop guidance material on interlinkages among national air navigation plans, MMS and SMS as part of the interconnection of GANP and GASP.

28.15 The Commission reviewed A40-WP/203, presented by CANSO, on concepts to improve safety, predictability and operational efficiency, taking a holistic approach to new technology and the integration of ATM modernization initiatives into existing systems, while building cyber-resilience and ensuring robust performance measurement. The Commission agreed that, as outlined in the GANP, States should be urged to take a collaborative and concerted effort to: provide for air navigation; promote the enhancement of ATM infrastructure; and ensure interoperability and harmonization of ATM systems to avoid airspace fragmentation.

⁷ Belize, Bolivia (Plurinational State of), Brazil, Chile, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru and Venezuela (Bolivarian Republic of).

28.16 The Commission discussed A40-WP/191, presented by the International Air Transport Association (IATA), which highlighted shortcomings in ATM infrastructure and identified three key areas as critical for any infrastructure improvement. The Commission agreed that States should be urged to implement, following a proper operational assessment and prioritization applying a performance-based approach, the necessary infrastructure components to support the existing and projected volumes of traffic in alignment with the GANP. To meet this expected growth in demand, the Commission agreed that States should also be urged to engage in partnership with all aviation stakeholders to identify and address infrastructure challenges in a timely manner.

28.17 An information paper provided by the Republic of Korea (A40-WP/378) was noted.

28.18 In light of the discussion, the Commission agreed to submit, for adoption by the Plenary, the following resolution to supersede Assembly Resolution A39-12:

Resolution 28/1: 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 has established Strategic Objectives, including objectives for safety and for capacity and efficiency;

Recognizing the importance of global frameworks to support the Strategic Objectives 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 third edition of the Global Aviation Safety Plan (GASP) and of the sixth edition of the Global Air Navigation Plan (GANP);

The Assembly:

1. *Endorses* the third edition of the Global Aviation Safety Plan (GASP) and the sixth 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 of the Organization, while ensuring necessary stability;
3. *Resolves* that these global plans shall be implemented and kept current in close cooperation 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, 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
10. *Declares* that this resolution supersedes Resolution A39-12 on ICAO global planning for safety and air navigation.

APPENDIX A

Global Aviation Safety Plan (GASP)

Reaffirming that the primary objective of the Organization continues to be the improvement of safety and an associated reduction in the number of accidents and related fatalities within the international civil aviation system;

Recognizing that safety is a responsibility involving ICAO, Member States and all other stakeholders;

Recognizing the safety benefits that can be drawn from partnerships between States and industry;

Recognizing that the High-level Safety Conference (2010) reaffirmed the need for the ICAO safety framework to continuously evolve to ensure its sustained effectiveness and efficiency in the changing regulatory, economic and technical environment;

Noting that the expected increase in international civil aviation traffic will result in an increasing number of aircraft accidents unless the accident rate is reduced;

Recognizing the need to maintain the public's confidence in air transport by providing access to relevant safety information;

Recognizing that a proactive approach in which a strategy is established to set priorities, targets and indicators to manage safety risks is of paramount importance to the achievement of further improvements in aviation safety;

Recognizing that regional aviation safety groups have been implemented by ICAO, taking into account the needs of the various regions and building on the already existing structures and forms of cooperation;

Noting the intent to apply the safety management principles in the GASP to enhance safety by focusing action where it is most needed;

Noting the development of the global aviation safety roadmap, as an action plan to assist the aviation community in implementing the safety initiatives presented in the GASP, through a structured, common frame of reference for all relevant stakeholders; and

Noting the need to assist Member States in implementing safety management principles and mitigate risks on identified operational issues;

The Assembly:

1. *Stresses* the need for continuous improvement of aviation safety through a reduction in the number of accidents and related fatalities in air transport operations in all parts of the world, particularly in States where safety records are significantly worse than the worldwide average;
2. *Stresses* that limited resources of the international aviation community should be used strategically to support States or regions whose safety oversight maturity is not at an acceptable level;
3. *Urges* Member States to implement national aviation safety plans consistent with the GASP to continually reduce fatalities and the risk of fatalities;
4. *Urges* Member States, regional safety oversight organizations (RSOs), regional aviation safety groups (RASGs) and international organizations concerned to work with all stakeholders to implement regional aviation safety plans consistent with the GASP to continually reduce fatalities and the risk of fatalities;
5. *Urges* States to fully exercise safety oversight of their operators in full compliance with applicable Standards and Recommended Practices (SRPs), and assure themselves that every foreign operators flying into their territory receives adequate oversight from its own State and take appropriate action when necessary to preserve safety; and
6. *Encourages* ICAO to continue the development of the global aviation safety roadmap, as required.

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;

Having adopted Resolution A40-4, 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;

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. *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. *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. *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 its provisions;
6. *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. *Instructs* the Council to publish the results of the analysis on the regional performance dashboards and in an annual global air navigation report 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. *Urges* States that are developing new air navigation plans, for their own air navigation modernization, to coordinate with ICAO and align their plans so as to ensure regional and global compatibility and harmonization; and
9. *Instructs* the Council to continue developing the GANP, keeping it current with evolving technology and operational requirements.

Safety Management Policy

28.19 The Commission reviewed A40-WP/52, presented by the Council, proposing updates to Assembly Resolutions A38-3 and A38-4 related to the protection of safety information. The Commission recalled that those Assembly Resolutions instructed the Council, inter alia, to take such steps as may be necessary to ensure meaningful progress toward the development of new and/or enhanced provisions for the protection of safety information in Annex 13 — *Aircraft Accident and Incident Investigation*, Annex 19 — *Safety Management*, other Annexes as appropriate, and related guidance material. Accordingly, in 2016 the Council adopted new amendments to Annexes 13, 19 and Annex 6 — *Operation of Aircraft*. The Commission agreed that the proposed updates to the Assembly Resolutions reflect those Annex amendments and are aligned with relevant ICAO guidance material.

28.20 In light of the above, the Commission agreed to submit, for adoption by the Plenary, the following resolutions to supersede Assembly Resolutions A38-3 and A38-4.

Resolution 28/2: Protection of accident and incident investigation records

Whereas the primary objective of the Organization continues to be that of ensuring the safety of international civil aviation worldwide;

Whereas it is essential that cognizance be taken that it is not the purpose of the investigation of accidents and incidents to apportion blame or liability;

Recognizing that it is essential that all relevant information be made available to the accident investigation authorities to facilitate the establishment of the causes and/or contributing factors of accidents and incidents in order to enable preventative action to be taken;

Recognizing that the prevention of accidents is essential to safeguard the continued confidence in air transport;

Recognizing that public attention will continue to focus on States' investigative actions, including calls for access to accident and incident records;

Recognizing that the protection of certain accident and incident records from purposes other than accident or incident investigation is essential to ensure the continued availability of all relevant information to accident investigation authorities in future investigations;

Recognizing that the use of information, derived from accident investigations, for disciplinary, civil, administrative and criminal proceedings is generally not a means to maintain or improve aviation safety;

Recognizing that the measures taken so far to ensure the protection of certain accident and incident records may not be sufficient, and noting the issuance by ICAO of new and enhanced provisions for the protection of accident and incident investigation records in Annex 13 — *Aircraft Accident and Incident Investigation*;

Recognizing the need to incorporate into national laws the protection of accident and incident investigation records listed in Annex 13 in order to ensure that the determination of the competent authorities designated by Member States has legal standing and to facilitate the administration of the balancing test by such authorities;

Considering that a balance needs to be struck between the need for the protection of accident and incident investigation records and the need for their disclosure or use, and that protection is not aimed at preventing the administration of justice; and

Mindful that the accident investigation authorities can only afford protection to certain investigation records that are under their custody or control;

The Assembly:

1. *Calls* on Member States to reaffirm their commitment to protect accident and incident investigation records in compliance with Annex 13;
2. *Urges* Member States to examine and if necessary adjust their laws, regulations and policies to protect accident and incident investigation records in compliance with paragraph 5.12 and Appendix 2 to Annex 13, in order to mitigate impediments to accident and incident investigations, and to ensure continued availability of all relevant information to accident investigation authorities; and

3. *Declares* that this resolution supersedes Resolution A38-3.

Resolution 28/3: Protection of safety data and safety information collected for maintaining or improving safety and of flight recorder recordings in normal operations

Whereas the primary objective of the Organization continues to be that of ensuring the safety of international civil aviation worldwide;

Recognizing the importance of the free communication of safety information amongst the stakeholders of the aviation system;

Recalling that Annex 19 — *Safety Management* accords protection to safety data and safety information collected for maintaining or improving safety and their related sources;

Recognizing that the protection of safety data, safety information and related sources is essential to ensure their continued availability since the use of safety data and safety information for purposes other than maintaining or improving safety may inhibit the future availability of such data and information, with a significant adverse effect on safety;

Considering that a balance needs to be struck between the need for the protection of safety data, safety information and related sources to maintain or improve aviation safety and the need for the proper administration of justice;

Noting that the flight recorder recordings and their transcripts were introduced to support accident and incident investigations;

Whereas Annex 6 — *Operation of Aircraft* provides for protection of flight recorder recordings or transcripts in normal operations;

Mindful of the importance of protecting the flight recorder recordings or transcripts in normal operations, outside of Annex 13-type investigations;

Concerned that safety data, safety information and flight recorder recordings or transcripts in normal operations may be used for purposes other than those for which they were collected, including disciplinary, civil, administrative and criminal proceedings;

Noting that a reporting environment where employees and operational personnel may trust that their actions or omissions that are commensurate with their training and experience will not be punished is fundamental to safety reporting; and

Recognizing that technological advances may expand the type of recordings, safety data and safety information that can be captured by safety reporting systems and flight recorders;

The Assembly:

1. *Calls* on Member States to reaffirm their commitment to protect safety data and safety information collected for maintaining or improving safety and their related sources;

2. *Urges* Member States to accord protection to the flight recorder recordings or transcripts in normal operations, outside of Annex 13-type investigations;

3. *Urges* all Member States to continue to examine their existing legislation and adjust as necessary, or enact laws, regulations and policies to protect safety data, safety information and related sources, and the flight recorder recordings or transcripts in normal operations;
4. *Directs* the Secretary General to continue to provide support to States in implementing the protective frameworks in Annexes 6 and 19; and
5. *Declares* that this resolution supersedes Resolution A38-4.

28.21 The Commission reviewed A40-WP/213, presented by Singapore, the United States and IATA, and co-sponsored by China, Fiji, Indonesia, Marshall Islands, Nauru, Palau, Papua New Guinea, Philippines, Trinidad and Tobago, the United Kingdom and FSF, which highlighted the progress of State-industry collaborations to establish regional information sharing and data analysis programmes in support of safety risk management. The Commission agreed that States and industry partners should harness and optimize resources to develop safety data collection and analytic capabilities for the fulfilment of regional and global aviation safety priorities and objectives in relation to the GASP. The Commission also recommended that States and industry partners collaborate on the exchange of best practices in safety information sharing and analysis, and share methodologies for safety risk identification, analysis and mitigation. The Commission was informed that ICAO has set up the Safety Management Implementation (SMI) website (www.icao.int/SMI) for the sharing of practical examples and tools related to safety management implementation. States and international organizations have been invited to contribute to the website. The Commission was advised that the actions proposed in A40-WP/213 are addressed at a higher level in the draft Resolution 28/1 contained in A40-WP/51.

28.22 The Commission reviewed A40-WP/361 Revision No. 1 (English, French, Russian, Arabic and Chinese only), presented by Venezuela (Bolivarian Republic of) and supported by the countries of the SAM Region and the Member States⁸ of LACAC, which highlighted challenges in State safety programme (SSP) implementation. The Commission expressed support for taking into consideration scalability in the implementation of GASP strategies.

28.23 Information papers were provided by Nepal (A40-WP/484), Republic of Korea (A40-WP/430) and the Russian Federation (A40-WP/492).

Results of the Thirteenth Air Navigation Conference

28.24 The Commission reviewed A40-WP/12, presented by the Council, which reported on the outcomes of AN-Conf/13. The Commission, in noting the outcomes of AN-Conf/13, urged States to action the recommendations addressed to them.

28.25 The Commission recognized the importance of convening divisional-type meetings, such as air navigation or high-level safety conferences, ahead of Assembly sessions as a mean to recommend additional technical work for ICAO in due time for budgetary preparation for the following triennium. The Commission supported this practice and recommended that it continue. The Commission encouraged States, international organizations and industry stakeholders to support ICAO in accomplishing non-budgeted work stemming from divisional-type meeting recommendations by providing extra-budgetary resources to the Organization. The Commission recognized that convening divisional-type meetings ahead of Assembly sessions allows the Technical Commission to focus on Global Plans and policy decisions, thereby improving the efficiency of Assemblies. Furthermore, the Commission recommended

⁸ Belize, Bolivia (Plurinational State of), Chile, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Nicaragua, Panama, Paraguay, Peru and Uruguay.

that ICAO highlight to States and international organizations the importance of attendance at divisional-type meetings in order to discuss technical matters.

28.26 The Commission reviewed A40-WP/157, presented by the AFCAC on behalf of its 54 Member States⁹, which highlighted the need to continue strengthening civil-military cooperation and promoting implementation of flexible use of airspace. The Commission was informed that in response to AN-Conf/13 Recommendation 3.4/1 and 3.4/2, approved by Council, these proposals are being addressed. Consequently, and in highlighting the importance of civil-military cooperation and collaboration, the Commission agreed that ICAO and States should continue their efforts in support of this cooperation, as well as in support of flexible use of airspace implementation.

28.27 Information papers provided by India (A40-WP/363) and Bangladesh (A40-WP/503) were noted.

Consolidated statement of continuing ICAO policies

28.28 The Commission reviewed A40-WP/3, presented by the Council in accordance with Resolution A15-9, which requires that the Assembly adopt, at each regular session for which a Technical Session is established, a consolidated statement of continuing ICAO policies and associated practices related specifically to air navigation. The Commission agreed to the changes proposed in the appendix to A40-WP/3.

28.29 In light of the discussion, the Commission agreed to submit, for adoption by the Plenary, the following resolution:

Resolution 28/4: Consolidated statement of continuing ICAO policies and associated practices related specifically to air navigation

Whereas in Resolution A15-9 the Assembly resolved to adopt in each session for which a Technical Commission is established a consolidated statement of continuing policies related specifically to air navigation up to date as at the end of that session;

Whereas a statement of continuing policies and associated practices related specifically to air navigation as they existed at the end of the 38th Session of the Assembly was adopted by the Assembly in Resolution A38-12, Appendices A to O inclusive;

Whereas the Assembly has reviewed proposals by the Council for the amendment of the statement of continuing policies and associated practices in Resolution A38-12, Appendices A to O inclusive, and has amended the statement to reflect the decisions taken during the 40th Session;

Whereas a policy or associated practice that requires continued application for a period of more than three years should be regarded as a continuing policy or associated practice; and

Whereas material which is contained in regulatory or readily available authoritative ICAO documents, such as Annexes, Global Plans, rules of procedures and directives to air navigation meetings should normally be excluded from the consolidated statements, including, in particular, the associated practices;

⁹ Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cabo Verde, Cameroon, Central African Republic, Chad, Comoros, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Djibouti, Egypt, Equatorial Guinea, Eritrea, Eswatini, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Libya, Madagascar, Malawi, Mali, Mauritania, Mauritius, Morocco, Mozambique, Namibia, Niger, Nigeria, Rwanda, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, South Sudan, Sudan, Togo, Tunisia, Uganda, United Republic of Tanzania, Zambia, Zimbabwe.

The Assembly:

1. *Resolves* that:
 - a) the appendices attached to this resolution constitute the consolidated statement of continuing air navigation policies and associated practices of ICAO as they exist at the close of the 40th Session of the Assembly; and
 - b) the practices associated with the individual policies in the appendices constitute guidance intended to facilitate and ensure implementation of the respective policies.
2. *Requests* the Council to keep the consolidated statement of continuing ICAO policies and associated practices related specifically to air navigation under review and advise the Assembly when changes are required to the statement; and
3. *Declares* that this resolution supersedes Resolutions A38-12 with its appendices and A15-9.

APPENDIX A

Air navigation meetings of worldwide scope

Whereas the holding of worldwide air navigation meetings is an important function of ICAO and entails substantial expenditures of effort and money by the Member States and ICAO; and

Whereas it is necessary to ensure that maximum benefit is obtained from these meetings without imposing any undue burden upon the Member States or ICAO;

The Assembly resolves that:

1. meetings, convened by the Council, in which all Member States may participate on an equal basis shall be the principal means of progressing the resolution of problems of worldwide import, including the development of amendments to the Annexes, Global Plans and other basic documents in the air navigation field;
2. such meetings shall be convened only when justified by the number and importance of the problems to be dealt with and when there is the likelihood of constructive action on them; meetings convened on this basis may also be requested to conduct exploratory discussions on matters not mature for definite action;
3. the organization of such meetings shall be arranged so that they are best suited to carry out the assigned task and to provide proper coordination among the technical specialities involved; and
4. unless necessitated by extraordinary circumstances, not more than two such meetings shall be convened in a calendar year, and successive meetings dealing extensively with the same technical specialty shall be separated by at least twelve months.

Associated practices

1. Before deciding to refer a matter to a worldwide meeting, the Council should consider whether correspondence with States or use of machinery such as panels or air navigation study groups could dispose of it or facilitate subsequent action on it by a future meeting.
2. The agenda should be sufficiently explicit to define the task to be performed and to indicate the types of specialized expertise that will be needed at the meeting. In an agenda including more than one technical specialty the types of expertise called for should be kept to the minimum compatible with efficiency.
3. To facilitate the participation of all Member States, the Council should so plan the meeting programme as to keep to the minimum, consistent with efficiency, the demands upon the time of States' technical officials.
4. The planned duration of a meeting should allow adequate time for completion of the agenda, study of the report as drafted in the working languages of the meeting and approval of the report. Following the meeting, the Secretariat should make any necessary minor editorial amendments and typographical corrections to the meeting report.
5. The approved agenda and the main supporting documentation should be dispatched, normally by air, not less than ten months in advance of the convening date in the case of the agenda and not less than three months in the case of the main supporting documentation; other documentation should be dispatched as soon as possible.

APPENDIX B

Panels of the Air Navigation Commission (ANC)

Whereas panels of the Air Navigation Commission have proved a valuable medium for advancing the solution of specialized technical problems; and

Whereas it is necessary to ensure that maximum benefit is obtained from Air Navigation Commission panels without imposing any undue burden upon the Member States or ICAO;

The Assembly resolves that:

1. the Air Navigation Commission shall establish panels if necessary to advance the solution of specialized technical problems which cannot be solved adequately or expeditiously by the Air Navigation Commission through other established facilities;
2. the Air Navigation Commission shall ensure that the terms of reference and the work programmes of panels shall support the ICAO Strategic Objectives, be clear and concise with timelines and shall be adhered to;
3. the Air Navigation Commission shall review periodically the progress of panels and shall terminate panels as soon as the activities assigned to them have been accomplished. A panel shall be allowed to continue in existence only if its continuation is considered justified by the Air Navigation Commission; and

4. panel activity shall support a performance-based approach to SARPs development to the extent possible.

Associated practice

Reports should be clearly presented as the advice of a group of experts to the Air Navigation Commission so that they cannot be construed as representing the views of Member States.

APPENDIX C

Certificates of airworthiness, certificates of competency and licences of flight crews

Whereas Article 33 of the Convention does not explicitly define the purposes for which recognition is to be accorded to certificates and licences;

Whereas several interpretations exist as to whether or not there is any obligation on Member States to recognize certificates and licences issued or rendered valid by other Member States pending the coming into force of SARPs applicable to the aircraft or flight crew involved; and

Whereas with respect to certain categories of aircraft or flight crew licences, it may be many years before SARPs come into force or it may be found most practicable not to adopt SARPs for some categories or flight crew licences;

The Assembly resolves that:

1. certificates of airworthiness and certificates of competency and licences of the flight crew of an aircraft issued or rendered valid by the Member State in which the aircraft is registered shall be recognized as valid by other Member States for the purpose of flight over their territories, including landings and take-offs, subject to the provisions of Articles 32 (b) and 33 of the Convention; and
2. pending the coming into force of international Standards respecting particular categories of aircraft or flight crew, and certificates issued or rendered valid, under national regulations, by the Member State in which the aircraft is registered shall be recognized by other Member States for the purpose of flight over their territories, including landings and take-offs.

APPENDIX D

Qualified and Competent Aviation Personnel

Whereas the satisfactory implementation of SARPs and PANS is contingent upon having qualified and competent personnel;

Whereas difficulties are being experienced by Member States in these matters due to a lack of qualified personnel to support the existing and future air transportation system;

Whereas special effort is required to support Member States in meeting their human resource needs; and

Whereas learning activities conducted by ICAO are an effective means of promoting a common understanding and the uniform application of SARPs and PANS;

The Assembly resolves that:

1. ICAO shall assist Member States in achieving and maintaining competency of aviation personnel through the ICAO Aviation Training Programme;
2. the ICAO Aviation Training Programme shall be governed by the following principles:
 - a) qualification of aviation professionals is the responsibility of Member States;
 - b) the highest priority is placed on learning activities that support the implementation of SARPs;
 - c) cooperation with Member States and industry is essential to develop and implement learning activities to support the implementation of SARPs; and
 - d) priority shall be placed on cultivating the next generation of aviation professionals.
3. ICAO advises operators of training facilities but does not participate in the operation of such facilities; and
4. Member States assist each other to optimize access to learning activities for their aviation professionals.

Associated practices

1. The Council should assist Member States to harmonize aviation professionals' levels of competency. These efforts should be based on:
 - a) data analysis to determine priorities and needs;
 - b) identified training needs for the implementation of ICAO provisions; and
 - c) a competency-based approach.

APPENDIX E

Formulation and Implementation of Regional Plans including Regional Supplementary Procedures

Whereas the Council establishes Regional Plans setting forth the facilities, services and Regional Supplementary Procedures to be provided or employed by Member States pursuant to Article 28 of the Convention;

Whereas the Regional Plans require amendment from time to time to reflect the changing needs of international civil aviation;

Whereas ICAO has established an approach to planning of facilities and services that centres on the Global ATM Operational Concept and the Global Air Navigation Plan; and

Whereas any serious deficiencies in the implementation of Regional Plans may affect the safety, regularity and efficiency of international air operations and, therefore, should be eliminated as quickly as practicable;

The Assembly resolves that:

1. Regional Plans shall be revised when it becomes apparent that they are no longer consistent with current and foreseen requirements of international civil aviation;
2. when the nature of a required change permits, the associated amendment of the Regional Plan shall be undertaken by correspondence between ICAO and Member States and International Organizations concerned; and
3. when amendment proposals are associated with the services and facilities provided by States and such amendment proposals:
 - a) do not represent changes to the requirements set by the Council in the Regional Plans;
 - b) do not conflict with established ICAO policy; and
 - c) do not involve issues which cannot be resolved at the regional level;

the Council may delegate authority for processing and promulgating such amendments to the regional level.

4. Regional Air Navigation (RAN) meetings, although important instruments in the determination of the facilities and services, shall be convened only to address issues which cannot be adequately addressed through the planning and implementation regional groups (PIRGs);
5. priority shall be given in the implementation programmes of Member States to the provision, and continuing operation of those facilities and services, the lack of which would likely have an adverse effect on international air operations;
6. the identification and investigation of and action by ICAO on significant deficiencies in the implementation of Regional Plans shall be carried out in the minimum practicable time; and
7. Planning and implementation regional groups (PIRGs), using a project management approach, shall identify problems and shortcomings in Regional Plans and in the implementation thereof, along with suggested remedial measures.

Associated practices

1. The Council should ensure that the structure and format of Regional Plans is aligned with the Global Air Navigation Plan and is in support of a performance-based approach to planning.
2. In assessing the urgency of any revision of the Regional Plans the Council should take into account the time needed by Member States to arrange for the provision of any necessary additional facilities and services.

3. The Council should ensure that implementation dates in Regional Plans involving the procurement of new types of equipment are realistically related to the ready availability of suitable equipment.

4. The Council should ensure that web-based regional plans are developed, with supporting planning tools, in order to improve efficiency and expedite the amendment cycle.

5. The Council should use the planning and implementation regional groups (PIRGs) it has established throughout the regions to assist in keeping up to date the Regional Plans and any complementary documents.

APPENDIX F

Regional air navigation (RAN) meetings

Whereas RAN meetings are important instruments in the determination of the facilities and services the Member States are expected to provide pursuant to Article 28 of the Convention;

Whereas these meetings entail substantial expenditures of effort and money by Member States and ICAO;

Whereas it is necessary to ensure that maximum benefit is obtained from these meetings without imposing any undue burden on Member States or ICAO; and

Considering that regional air navigation planning is normally accomplished by Planning and Implementation Regional Groups (PIRGs);

The Assembly resolves that:

1. RAN meetings shall be convened only to address issues which cannot be adequately addressed through PIRGs;

2. the convening of such meetings and their agenda shall be based on the existence or expectation of specific shortcomings in the Regional Plans of the respective areas;

3. the geographical area to be considered, account being taken of the existing and planned international air transport and international general aviation operations, the technical fields to be dealt with and the languages to be used shall be decided for each such meeting;

4. the organization best suited to deal with the agenda and to ensure effective coordination among the components of the meeting shall be used for each such meeting; and

5. meetings of limited technical and/or geographical scope shall be convened when specific problems, particularly those requiring urgent solution, need to be dealt with or when convening them will reduce the frequency with which full scale RAN meetings must be held.

Associated practices

1. The Council should endeavour to hold RAN meetings at sites within the areas concerned and should encourage the Member States within those areas to serve as host, either individually or jointly.
2. The approved agenda and the main supporting documentation should be made available, by electronic means, not less than ten months in advance of the convening date in the case of the agenda and not less than three months in the case of the main supporting documentation.
3. The Council should ensure that adequate guidance is made available to RAN meetings on operational and technical matters relevant to their agenda.
4. Each participating Member State should inform itself, in advance of a meeting, on the plans of its air transport operators and its international general aviation for future operations and, similarly, on the expected traffic by other aircraft on its registry and on the overall requirements of these various categories of aviation for facilities and services.
5. The Council, taking into account the requirement to improve still further existing safety levels, should foster the establishment, for and by RAN meetings, of up-to-date planning criteria which would aim to ensure that Regional Plans satisfy the operational requirements and are economically justified.
6. The Council should develop and maintain specific and detailed directives for consideration of implementation matters at RAN meetings.

APPENDIX G

Delimitation of air traffic services (ATS) airspaces

Whereas Annex 11 — *Air Traffic Services* to the Convention requires a Member State to determine those portions of airspace over its territory within which air traffic services will be provided and, thereafter, to arrange for such services to be established and provided;

Whereas Annex 11 to the Convention also makes provision for a Member State to delegate its responsibility for providing air traffic services over its territory to another State by mutual agreement;

Whereas cooperative efforts between Member States could lead to more efficient air traffic management;

Whereas both the delegating and the providing State can reserve the right to terminate any such agreement at any time; and

Whereas Annex 11 to the Convention prescribes that those portions of the airspace over the high seas where air traffic services will be provided shall be determined on the basis of regional air navigation agreements, which are agreements approved by the Council usually on the advice of regional air navigation meetings;

The Assembly resolves, with reference to regional air navigation plans, that:

1. the limits of ATS airspaces, whether over States' territories or over the high seas, shall be established on the basis of technical and operational considerations with the aim of ensuring safety and optimizing efficiency and economy for both providers and users of the services;
2. established ATS airspaces should not be segmented for reasons other than technical, operational, safety and efficiency considerations;
3. if any ATS airspaces need to extend over the territories of two or more States, or parts thereof, agreement thereon should be negotiated between the States concerned, taking into account the need for cost-effective introduction and operation of CNS/ATM systems, and more efficient airspace management, in particular, in the upper airspace;
4. the providing State in implementing air traffic services within airspace over the territory of the delegating State shall do so in accordance with the requirements of the delegating State, which shall establish and maintain in operation such facilities and services for the use of the providing State as are mutually agreed to be necessary;
5. any delegation of responsibility by one State to another or any assignment of responsibility over the high seas shall be limited to technical and operational functions pertaining to the safety and regularity of the air traffic operating in the airspace concerned;

and, furthermore, *declares* that:

6. any Member State which delegates to another State the responsibility for providing air traffic services within airspace over its territory does so without derogation of its sovereignty; and
7. the approval by the Council of regional air navigation agreements relating to the provision by a State of air traffic services within airspace over the high seas does not imply recognition of sovereignty of that State over the airspace concerned.

Associated practices

1. Member States should seek the most efficient and economic delineation of ATS airspaces, the optimum location of points for transfer of responsibility and the most efficient coordination procedures in cooperation with the other States concerned and with ICAO.
2. Member States should consider, as necessary, establishing jointly a single air traffic services provider to be responsible for the provision of air traffic services within ATS airspace extending over the territories of two or more States or over the high seas.
3. The Council should encourage States providing air traffic services over the high seas to enter, as far as is practicable, into agreements with appropriate States providing air traffic services in adjacent airspaces, so that, in the event the required air traffic services over the high seas cannot be provided, contingency plans, which may require temporary modifications of ATS airspace limits, will be available to be put into effect with the approval of the ICAO Council until the original services are restored.

APPENDIX H

Provision of search and rescue services

Whereas in accordance with Article 25 of the Convention each Member State undertakes to provide such measures of assistance to aircraft in distress in its territory as it may find practicable and to collaborate in coordinated measures which may be recommended from time to time pursuant to the Convention;

Whereas Annex 12 — *Search and Rescue* to the Convention contains specifications relating to the establishment and provision of search and rescue services within the territories of Member States as well as within areas over the high seas;

Whereas Annex 12 to the Convention specifies that those portions of the high seas where search and rescue services will be provided shall be determined on the basis of regional air navigation agreements, which are agreements approved by the Council usually on the advice of regional air navigation meetings;

Whereas Annex 12 to the Convention recommends that search and rescue regions should, insofar as practicable, be coincident with corresponding flight information regions and, with respect to those areas over the high seas, maritime search and rescue regions;

Whereas Article 69 of the Convention specifies that, if the Council is of the opinion that the air navigation services of a Member State are not reasonably adequate for the safe operation of international air services, present or contemplated, the Council shall consult with the State directly concerned, and other States affected, with a view to finding means by which the situation may be remedied, and may make recommendations for that purpose; and

Whereas the air navigation services referred to in Article 69 of the Convention include, inter alia, search and rescue services;

The Assembly resolves that:

1. search and rescue regions, whether over States' territories or, in accordance with regional air navigation agreement, over an area greater than a State's sovereign airspace or over the high seas, shall be delimited on the basis of technical and operational considerations, including the desirability of coincident flight information regions, search and rescue regions, and, with respect to areas over the high seas, maritime search and rescue regions, with the aim of ensuring safety, and optimizing efficiency with the least overall cost;
2. States shall ensure the closest practicable cooperation between maritime and aeronautical search and rescue services where they serve the same area and, where practical, establish joint rescue coordination centres to coordinate aeronautical and maritime search and rescue operations;
3. if any search and rescue regions need to extend over the territories of two or more States, or parts thereof, agreement thereon should be negotiated between the States concerned;
4. the providing State in implementing search and rescue services over the territory of the delegating State shall do so in accordance with the requirements of the delegating State, which shall establish and maintain in operation such facilities and services for the use of the providing State as are mutually agreed to be necessary;
5. any delegation of responsibility by one State to another or any assignment of responsibility over the high seas shall be limited to technical and operational functions pertaining to the provision of search and rescue services in the area concerned;

6. remedies to any inadequacies in the provision of efficient search and rescue services, including over the high seas, should be sought through negotiations with States which may be able to give operational or financial assistance in search and rescue operations, with a view to concluding agreements to that effect;

and, furthermore, *declares* that:

7. any Member State which delegates to another State the responsibility for providing search and rescue services within its territory does so without derogation of its sovereignty; and

8. the approval by Council of regional air navigation agreements relating to the provision by a State of search and rescue services within areas over the high seas does not imply recognition of sovereignty of that State over the area concerned.

Associated practices

1. Member States should, in cooperation with other States and ICAO, seek the most efficient delineation of search and rescue regions and consider, as necessary, pooling available resources or establishing jointly a single search and rescue organization to be responsible for the provision of search and rescue services within areas extending over the territories of two or more States or over the high seas.

2. The Council should encourage States whose air coverage of the search and rescue regions for which they are responsible cannot be ensured because of a lack of adequate facilities, to request assistance from other States to remedy the situation and to negotiate agreements with appropriate States regarding the assistance to be provided during search and rescue operations.

APPENDIX I

Coordination and cooperation of civil and military air traffic

Whereas the airspace is a resource common to both civil and military aviation, and given that many air navigation facilities and services are provided and used by both civil and military aviation;

Whereas the Preamble of the *Convention on International Civil Aviation* stipulates that signatories thereto had “agreed on certain principles and arrangements in order that international civil aviation may be developed in a safe and orderly manner and that international air transport services may be established on the basis of equality of opportunity and operated soundly and economically”;

Whereas Article 3 a) of the Convention states that “This Convention shall be applicable only to civil aircraft, and shall not be applicable to state aircraft” and Article 3 d) requires that “contracting States undertake, when issuing regulations for their state aircraft, that they will have due regard for the safety of navigation of civil aircraft”;

Recognizing that growing civil air traffic and mission-oriented military air traffic would benefit greatly from a more flexible use of airspace used for military purposes and that satisfactory solutions to the problem of cooperative access to airspace have not evolved in all areas;

Whereas the flexible use of airspace by both civil and military air traffic may be regarded as the ultimate goal, improvement in civil/military coordination and cooperation offers an immediate approach towards more effective airspace management; and

Recalling that the ICAO Global ATM Operational Concept states that all airspace should be a usable resource, any restriction on the use of any particular volume of airspace should be considered transitory, and all airspace should be managed flexibly;

The Assembly resolves that:

1. the common use by civil and military aviation of airspace and of certain facilities and services shall be arranged so as to ensure the safety, regularity and efficiency of civil aviation as well as to ensure the requirements of military air traffic are met;
2. the regulations and procedures established by Member States to govern the operation of their state aircraft over the high seas shall ensure that these operations do not compromise the safety, regularity and efficiency of international civil air traffic and that, to the extent practicable, these operations comply with the rules of the air in Annex 2 — *Rules of the Air*;
3. the Secretary General shall provide guidance on best practices for civil/military coordination and cooperation;
4. Member States may include, when appropriate, representatives of military authorities in their delegations to ICAO meetings; and
5. ICAO serves as an international forum that plays a role in facilitating improved civil/military cooperation, collaboration and the sharing of best practices, and to provide the necessary follow-up activities that build on the success of the Global Air Traffic Management Forum on Civil/Military Cooperation (2009) with the support of civil/military partners.

Associated practices

1. Member States should as necessary initiate or improve the coordination and cooperation between their civil and military air traffic services to implement the policy in Resolving Clause 1 above.
2. When establishing the regulations and procedures mentioned in Resolving Clause 2, the State concerned should coordinate the matter with all States responsible for the provision of air traffic services over the high seas in the area in question.
3. The Council should ensure that the matter of civil and military coordination and cooperation in the use of airspace is included, when appropriate, in the agenda of divisional and regional meetings, in accordance with Resolving Clauses 3, 4 and 5 above.

APPENDIX J

The provision of adequate aerodromes

Whereas major improvements to the physical characteristics of aerodromes are required at many locations;

Whereas in certain cases these improvements will involve considerable outlay and it would be inadvisable to plan such work without taking into account future developments;

Whereas States and aerodrome authorities will continue to need to know the general trends in aerodrome requirements which succeeding generations of aircraft will most likely produce;

Whereas many serious problems can be avoided if the operating requirements of new aircraft are such as to permit them to operate economically without further demands on the physical characteristics of aerodromes;

Whereas the operation of aerodromes has many advantages, environmental considerations have imposed limitations upon the operation of aircraft at some locations. In view of the capacity problems currently experienced globally, account should be taken of the introduction into service of newer quieter aircraft;

Whereas there is a growing trend for aerodromes to be operated by autonomous entities, the obligation of States to ensure safe aerodrome facilities and services remains unaffected; and

Whereas aerodrome certification is an essential means to ensure aerodrome safety and enhance efficiency, and that the results of the ICAO Universal Safety Oversight Audit Programme (USOAP) audits suggest that the level of implementation of aerodrome certification, including safety management systems (SMS), is not yet optimal;

The Assembly resolves that:

1. the technical requirements for aerodromes shall be kept under review by ICAO;
2. there is a need for future generations of aircraft to be designed so that they are capable of being operated efficiently, and with the least possible environmental disturbance, from aerodromes used for the operation of present-day aircraft;
3. States should take necessary measures, including the allocation of adequate resources, to improve the level of implementation of aerodrome certification, including SMS at aerodromes; and
4. States should place greater emphasis on the management of aerodrome operations, with runway safety given a high priority.

Associated practices

1. In the light of the results of the continuing review mentioned in Resolving Clause 1 above, the Council, taking into account the requirement to improve still further existing safety levels and efficiency, should:
 - d) develop additional guidance material on future developments;
 - e) develop procedures for the management of aerodrome operations; and
 - f) keep Member States informed of developments.
2. The Council should continue to draw the attention of aircraft manufacturers and operators to the policy expressed in Resolving Clause 2.

APPENDIX K

Adequate conditions of employment for aviation ground personnel

Whereas conditions of employment that do not correspond to the qualifications and responsibilities of aviation ground services personnel constitute a major cause of difficulty in recruiting suitably qualified personnel and retaining them after completion of the training; and

Whereas this difficulty is impeding the satisfactory implementation of Regional Plans, SARPs and PANS;

The Assembly resolves that States should take the necessary steps to ensure that conditions of employment for personnel in the aviation ground services should be commensurate with the qualifications required and the responsibility carried by them.

APPENDIX L

Participation by States in the technical work of ICAO

Whereas the technical contributions of Member States are essential to attain satisfactory progress in the technical work of ICAO;

Whereas difficulties are from time to time experienced in obtaining prompt and adequate contributions from Member States to the technical work of ICAO; and

Whereas it is necessary to ensure that maximum benefit is obtained from this participation without imposing an undue burden on Member States and ICAO;

The Assembly resolves that there is a need for effective technical contributions from Member States to the technical work of ICAO.

Associated practices

1. The Council should encourage effective participation by Member States in the technical work of ICAO, paying due regard to the need to minimize the cost to ICAO and Member States of such participation.
2. Insofar as each may find it practicable, Member States should:
 - a) assist, by correspondence, in advancing ICAO technical projects;
 - b) attend ICAO meetings and participate actively in pre-meeting preparations, particularly by presenting advance documentation containing either specific proposals relative to items of the agenda or their views on documentation submitted to them;
 - c) participate in ICAO panel activities and ensure that their nominees are suitably qualified and are able to contribute effectively to the panel work;
 - d) undertake specialized studies as requested by ICAO; and
 - e) assist ICAO in its technical work through any other means the Council may devise.

APPENDIX M

The Headquarters' and Regional Offices' technical Secretariat

Whereas there is a continuing need to provide effective assistance to Member States in the implementation of Regional Plans, SARPs, PANS and SUPPS;

Whereas it is important that the technical Secretariat of Headquarters and the Regional Offices is effectively used to provide assistance to Member States in their implementation problems; and

Whereas it is important that, for the proper execution of their tasks, the members of the technical Secretariat of Headquarters and the Regional Offices are enabled to maintain their technical proficiency and are kept adequately informed of the latest developments in their particular fields;

The Assembly resolves that:

1. the resources of the Headquarters' and Regional Offices' technical Secretariat shall be effectively deployed to provide optimum assistance to Member States with their problems relating to continuous monitoring activities, the implementation of Regional Plans, SARPs, PANS and SUPPs; and
2. the members of the Headquarters' and Regional Offices' technical Secretariat shall be enabled to maintain their technical proficiency and to keep adequately informed on the latest technical developments.

Associated practices

1. The members of the Headquarters' and Regional Offices' technical Secretariat should be enabled to carry out frequent visits of adequate duration when such visits are necessary or are requested by Member States to assist them with their implementation problems.
2. To the maximum practicable extent, temporary assignment of specialized personnel from one Regional Office to another and from Headquarters to the Regional Offices should take place when temporary reinforcement in the Regional Offices is required.
3. The members of the Headquarters' and Regional Offices' technical Secretariat should be enabled to keep adequately up to date in their particular fields by, inter alia, attendance at selected technical meetings, visits to research and development organizations, witnessing trial applications, and evaluation of new equipment and techniques. However, such visits should not be allowed to take priority over the primary function of the Secretariat to serve ICAO and its several deliberative bodies. Furthermore, the travelling on such visits should be integrated as far as possible with travel necessary for the performance of other ICAO duties.

APPENDIX N

Cooperation among Member States in investigations of aircraft accidents

Whereas it is incumbent on the State in which an accident occurs to institute an inquiry into the circumstances of the accident in conformity with Article 26 of the Convention;

Whereas owing to the growing sophistication and complexity of modern aircraft, the conduct of an accident investigation may require participation by experts from many specialized technical and operational fields and access to specially equipped facilities for investigation;

Whereas many Member States do not have such specialized technical and operational expertise and appropriate facilities;

Whereas it is essential for flight safety and accident prevention that accidents be thoroughly investigated and reported and that the effectiveness of the investigations should not be unduly hampered by considerations of cost;

Whereas the costs of salvage and investigation of major aircraft accidents may place a heavy financial burden on the resources of the State where the accident occurred; and

Mindful of the publication of the ICAO *Manual on Regional Accident and Incident Investigation Organization* (Doc 9946);

The Assembly resolves to recommend that Member States cooperate in the investigation of aircraft accidents, especially accidents in which the investigation requires highly specialized experts and facilities and that to this end Member States and regional accident and incident investigation organizations (RAIOs), to the extent possible, inter alia:

- a) provide, on request by other Member States, expert assistance and facilities for the investigation of major aircraft accidents; and
- b) afford opportunity to Member States seeking investigation experience to attend investigations of aircraft accidents, in the interest of developing and furthering investigation expertise.

Associated practices

1. Member States are encouraged to support the convening of regional accident investigation workshops with a view to exchanging information on each State's investigation legislation and procedures, on the sharing of knowledge and expertise in investigation management and techniques, on the availability of experts and facilities and on practices in dealing with encountered accident investigation difficulties.

2. Member States should be encouraged to facilitate the participation of investigators of accident investigation authorities as observers in investigations in other States for training purposes and orientation visits.

3. Member States and RAIOs are encouraged to assess their needs and capabilities in the field of aircraft accident investigation and prevention with a view to developing training curricula for basic accident investigation and prevention courses. The use of regional training centres for such courses should be fully explored as well as the incorporation of the TRAINAIR PLUS methodology which provides for internationally standardized and competency-based training.

4. Member States are encouraged to refer to the model Memorandum of Understanding (MOU) developed by ICAO in 2007 for use by States to encourage mutual cooperation during the investigation of aircraft accidents and serious incidents. The model MOU is available on the ICAO public website.

5. Member States are encouraged to consider, as necessary, the ICAO *Manual on Regional Accident and Incident Investigation Organization* (Doc 9946) which provides guidance on how to establish and manage a regional accident and incident investigation system within a region or subregion.

APPENDIX O

Human performance

Whereas the aims and objectives of ICAO as laid down by the Chicago Convention provide for fostering the development of international air transport “. . . so as to . . . promote safety of flight in international air navigation”;

Whereas it is recognized that human performance, as influenced by physiological and cognitive capabilities and constraints, contributes significantly to the overall safety performance of the aviation system;

Whereas it is recognized that the safety and efficiency benefits associated with new technologies, systems and procedures can only be realized when they are designed to enhance the performance of the individuals who use them; and

Whereas it is recognized that implementation of the future aviation systems will result in changes in roles for aviation professionals requiring work across multi-disciplinary teams to support collaborative decision-making;

The Assembly resolves that:

1. Member States ensure the integration of human performance considerations in the planning, design, and implementation of new technologies, systems and processes as part of a safety management approach;
2. Member States promote and facilitate the integration of human performance elements within competency-based training programmes throughout the career of a professional; and
3. Member States include strategies which promote safe, consistent, efficient and effective operational performance of the individual and across teams of individuals to address safety priorities.

Agenda Item 29: Aviation Safety and Air Navigation Regional Implementation Coordination Mechanisms

Planning and implementation regional groups (PIRGs) and regional aviation safety groups (RASGs)

29.1 The Commission reviewed A40-WP/53 Revision No. 1, presented by the Council, which put forward a draft Assembly resolution relating to PIRGs and RASGs. The Commission noted that the Council had recently approved the updated Terms of Reference, harmonizing PIRG and RASG activities while allowing some flexibility to address the needs of each region. The Commission also noted that under the Terms of Reference, the use of regional dashboards will be explored to indicate regional progress with implementation. The Commission agreed that some PIRGs and RASGs would benefit from meeting more frequently and agreed to recommend that the meeting schedule of the PIRGs and RASGs and the annual reporting requirement to the Council be aligned. The Committee also agreed that, in

future, PIRGs and RASGs should meet and report their meeting outcomes to the Council on an annual basis. It was also acknowledged that a more structured and focused cooperation between PIRGs is required to deliver operational and technical efficiencies between ICAO regions.

29.2 The Commission reviewed A40-WP/334, presented by Colombia and sponsored by the Member States¹⁰ of LACAC, which proposed that analysis of Universal Safety Oversight Audit Programme (USOAP) audit findings be included in the updated Terms of Reference of the PIRGs and RASGs. The Commission noted that a review of the uniform methodology for the identification of deficiencies will be undertaken in close coordination with USOAP to identify a workable solution for possible incorporation into regional air navigation and/or aviation safety plans.

29.3 The Commission discussed A40-WP/276, presented by Canada and New Zealand, related to increasing efficiency of ICAO regional groups and which called for support and encouragement for the harmonized and efficient operation of regional bodies. The Commission supported activities fostering continued smooth operation of regional ICAO technical groups and encouraged initiatives in support of effective and positive performance throughout all regional bodies, thereby reducing administrative burden while increasing flexibility and productivity. The Commission acknowledged that the recently approved Terms of Reference for PIRGs and RASGs address the sharing of best practices and lessons learned to ensure that all ICAO regional entities yield the benefits of successful and efficient cooperation among regions.

29.4 The Commission reviewed A40-WP/410, presented by the Dominican Republic, on the lack of clear and comprehensive Standards for air navigation services provision and the establishment of a standard monitoring group. The Commission, noting that the ICAO Standard-making process is well established and defined by the Air Navigation Commission and the Council, was not supportive of the paper's proposed actions. The Commission recalled that interoperability between regions is addressed through the planning and implementation activities of PIRGs and RASGs and their members.

29.5 The Commission reviewed A40-WP/432, presented by Peru with the support of the countries of the SAM Region and the Member States¹¹ of LACAC, which presented information on a coordinated and integrated approach in the SAM Region on identifying regional priorities. The Commission encouraged active participation in PIRGs and RASGs and recalled that the draft resolution (presented in A40-WP/53) encourages States, regional organizations and industry as a whole to participate actively and with commitment in the work of the PIRGs, RASGs and their respective contributing bodies. It was also recalled that the Council-approved Terms of Reference provided the necessary flexibility for regional groups to address the needs of their respective regions.

29.6 The Commission reviewed A40-WP/332 and Corrigendum No. 1, presented by the Dominican Republic, related to the establishment of proactive regional indicators. The Commission was informed that work on safety performance indicators is ongoing and the Commission recognized that several ICAO initiatives are underway that address this issue. The Commission noted that States are tasked within the RASG Terms of Reference to contribute to the development and implementation of regional aviation safety plans and should report progress using safety performance indicators presented in the GASP.

¹⁰ Belize, Bolivia (Plurinational State of), Brazil, Chile, Costa Rica, Cuba, El Salvador, Guatemala, Honduras, Nicaragua, Paraguay, Peru and Venezuela (Bolivarian Republic of).

¹¹ Belize, Bolivia (Plurinational State of), Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Nicaragua, Panama, Paraguay, Uruguay and Venezuela (Bolivarian Republic of).

29.7 In light of the discussion, the Commission agreed to submit, for adoption by the Plenary, the following Assembly resolution:

Resolution 29/1: Regional implementation support mechanisms

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

Recognizing that planning and implementation regional groups (PIRGs) serve as regional cooperative forums that determine regional priorities, and develop and maintain the regional air navigation plans, and associated work programmes, based on the *Global Air Navigation Plan* (GANP, Doc 9750) and relevant ICAO provisions;

Recognizing that regional aviation safety groups (RASGs) serve as regional cooperative forums that determine regional priorities, and develop and maintain the regional aviation safety plans, and associated work programmes, based on the *Global Aviation Safety Plan* (GASP, Doc 10004) and relevant ICAO provisions, integrating global, regional, sub-regional, national and industry efforts for the continued enhancement of aviation safety worldwide;

Recognizing that regular PIRG and RASG meetings have the effect of coalescing and recording regional progress on planning and implementation;

The Assembly:

1. *Notes* the revised and harmonized Terms of Reference of the PIRGs and RASGs to further support the implementation and update of the GANP and GASP;
2. *Resolves* that ICAO shall support the PIRGs and RASGs in addressing the relevant Strategic Objectives of the Organization;
3. *Urges* Member States, regional and international organizations, service providers and industry to participate in the work of the PIRGs and RASGs, and their respective contributory bodies, to, inter alia, ensure the continuous and coherent development and implementation of regional air navigation and regional aviation safety plans;
4. *Urges* Member States to demonstrate the political will necessary for taking remedial actions to address safety concerns, and air navigation deficiencies identified through the ICAO regional planning process;
5. *Urges* Member States, regional and international organizations, service providers and industry to serve as partners in PIRGs and RASGs, and to recognize that their joint commitment is fundamental for success in improving implementation of regional plans and safety worldwide;
6. *Instructs* the Council to review the implementation challenges experienced in the regions, as reported by PIRGs and RASGs, and report to the Assembly, as necessary, on actions taken to further improve the regional planning and implementation mechanisms; and

7. *Instructs* the Council to ensure that PIRGs and RASGs report on an annual basis implementation progress as well as challenges experienced.

Regional cooperation in accident and incident investigation

29.8 The Commission reviewed A40-WP/74, presented by the Member States of the Central American Corporation for Air Navigation Services (COCESNA)¹², addressing the establishment of the Regional Aviation Accidents and incidents Investigation Group (GRIAA) in the Central American Region, which called on States to support the creation of the GRIAA and encouraged other States across their regions to establish regional accident and incident investigation organizations (RAIOs) as a means to optimize resources in accident investigations. The Commission acknowledged the well-structured, three-phase approach for the establishment of the GRIAA and recommended that States facing challenges in discharging their Annex 13 investigation responsibilities be encouraged to give due consideration to the establishment of RAIOs.

29.9 The Commission reviewed A40-WP/111, presented by Finland on behalf of the EU and its Member States¹³, the other Member States of the ECAC¹⁴; by EUROCONTROL, and co-sponsored by Australia, New Zealand and the Republic of Korea, regarding regional cooperation in accident and incident investigations. The working paper emphasized that there are various models of cooperation that do not require the establishment of an RAIO as described in Doc 9946, *Manual on Regional Accident and Incident Investigation Organization*. Examples cited include the European Network of Civil Aviation Safety Investigation Authorities (ENCASIA) and, in South America, the AIG Regional Cooperation Mechanism (ARCM). The Commission acknowledged that it is important to promote mutual support and foster regional cooperation to ensure effective and independent investigations and agreed that Doc 9946 should be reviewed and expanded to reflect other existing models of investigation cooperation mechanisms. To this end, the Commission recommended that the Council review this proposal with respect to existing priorities funded through the 2020-2022 Budget and the availability of extra-budgetary resources.

29.10 The Commission reviewed A40-WP/155, presented by the AFCAC on behalf of its 54 Member States¹⁵, which called for the establishment of additional RAIOs and noted that the one RAIO in Africa was not sufficient as it covers only 7 of the 54 States. The Commission, acknowledging the benefits of the establishment of RAIOs in States lacking sufficient resources to undertake their Annex 13 obligations, emphasized that RAIOs would enhance standardization of investigations and optimize the use of resources among African States. The Commission agreed to recommend that the Council support African States in the establishment of RAIOs within the framework of regional and Africa-wide cooperation mechanisms, and consider developing an action plan for AFCAC Member States for the establishment of RAIOs. To this end, the Commission recommended that the Council review these proposals with respect to existing priorities funded through the 2020-2022 Budget and the availability of extra-budgetary resources.

¹² Belize, Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua.

¹³ Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and United Kingdom.

¹⁴ Albania, Armenia, Azerbaijan, Bosnia and Herzegovina, Georgia, Iceland, Monaco, Montenegro, North Macedonia, Republic of Moldova, San Marino, Serbia, Switzerland, Turkey and Ukraine.

¹⁵ Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cabo Verde, Cameroon, Central African Republic, Chad, Comoros, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Djibouti, Egypt, Equatorial Guinea, Eritrea, Eswatini, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Libya, Madagascar, Malawi, Mali, Mauritania, Mauritius, Morocco, Mozambique, Namibia, Niger, Nigeria, Rwanda, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, South Sudan, Sudan, Togo, Tunisia, Uganda, United Republic of Tanzania, Zambia, Zimbabwe.

29.11 The Commission reviewed A40-WP/95, presented by the United Arab Emirates, which proposed that a roadmap for implementation of RAIOS be developed. The paper described a three-phase approach to establishment of an RAIO based on different levels of cooperation. In acknowledging the advantages of gradual RAIO implementation, the Commission agreed to recommend that Doc 9946 be reviewed and expanded to reflect the aforementioned levels of State cooperation in investigations, including additional guidance on the basic RAIO. To this end, the Commission recommended that the Council review this proposal with respect to existing priorities funded through the 2020-2022 Budget and the availability of extra-budgetary resources.

29.12 The Commission discussed A40-WP/97, presented by the United Arab Emirates, which emphasized the benefits of establishing regional accident and incident investigation working groups to address the need for effective investigation systems and shared the experience of the Middle East (MID) Region. The Commission also reviewed A40-WP/371, presented by Argentina, which proposed that the ARCM be recognized as a qualified AIG body and called on ICAO to find an appropriate tool for providing funds to cooperation mechanisms. The Commission, in noting overall support for the establishment of RAIOS, also acknowledged the advantages of establishing cooperation mechanisms within regions and the effectiveness of the ARCM. The Commission encouraged States to consider establishing such mechanisms as an alternative to RAIOS. With regard to the identification of a tool for providing and managing funds to an RAIO and regional cooperation mechanisms, the Commission was made aware that the Doc 9946 provides tailored guidance for financing regional investigation systems.

29.13 An information paper provided by the Interstate Aviation Committee (IAC) (A40-WP/91) was noted.

Regional safety oversight organizations

29.14 The Commission reviewed A40-WP/153, presented by the AFCAC on behalf of its 54 Member States¹⁶, regarding the need for support and assistance for regional safety oversight organizations (RSOOs) in the AFI Region. The Commission recognized that RSOOs play an important role in aviation safety and recommended that States be urged to support and strengthen their RSOOs by providing mechanisms for sufficient and continuous financing of these organizations and further extend their safety functions. The Commission recognized that several ICAO initiatives, such as the Global Aviation Safety Oversight System (GASOS), the RSOO Cooperative Platform (CP) and the Aviation Safety Implementation Assistance Partnership (ASIAP), were already underway that are addressing issues raised in the paper.

29.15 The Commission reviewed A40-WP/174, presented by the AFCAC on behalf of its 54 Member States¹⁶ and A40-WP/391, presented by Bolivia (Plurinational State of) and supported by the countries of the SAM Region and the Member States¹⁷ of LACAC, regarding the automatic validation of licences issued by States party to a formal agreement under a common licensing system. The Commission noted progress made in this regard by the East African States through their RSOO, EAC-CASSOA, as well as the South American States through their RSOO, Regional Safety Oversight Cooperation System (SRVSOP). The Commission agreed that the *Manual of Procedures for Establishment and Management of a State's Personnel Licensing System* (Doc 9379) should be reviewed to consider State cooperation

¹⁶ Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cabo Verde, Cameroon, Central African Republic, Chad, Comoros, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Djibouti, Egypt, Equatorial Guinea, Eritrea, Eswatini, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Libya, Madagascar, Malawi, Mali, Mauritania, Mauritius, Morocco, Mozambique, Namibia, Niger, Nigeria, Rwanda, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, South Sudan, Sudan, Togo, Tunisia, Uganda, United Republic of Tanzania, Zambia, Zimbabwe.

¹⁷ Belize, Chile, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Nicaragua, Panama, Paraguay, Peru and Venezuela (Bolivarian Republic of).

within an RSOO for the automatic validation of personnel licences. The Commission recommended that the Council review the proposal with respect to existing priorities funded through the 2020-2022 Budget and the availability of extra-budgetary resources and that ICAO continue promoting and supporting the RSOOs in the implementation of automatic licence validation mechanisms among its States which have common regulations for the granting of personnel licences. The Commission noted plans to implement similar mechanisms in other regions.

29.16 The Commission reviewed A40-WP/404, presented by Colombia and sponsored by the Member States¹⁸ of LACAC, which invited the Assembly to continue to support certification processes of approved maintenance organizations (AMOs) in a harmonized regulatory environment through the RSOOs and called for the development of guidance material. The Commission was informed that, stemming from High-level Safety Conference (2015) recommendations, a global framework and regional initiatives to reduce duplication of AMO certification and surveillance activities, along with guidance, are being developed and are reflected in the work programme of ICAO. The Commission noted the benefits to the States and industry coming from multinational mechanisms of certification of AMOs.

29.17 The Commission reviewed A40-WP/282, presented by Guyana and Suriname, which invited ICAO to collaborate with Caribbean Aviation Safety and Security Oversight System (CASSOS) to develop sustainable solutions to the shortage of qualified and experienced helicopter inspectors in operations and airworthiness in the South American Region and proposed that ICAO coordinate a regional project in this regard. The Commission was informed that the lack of qualified civil aviation safety inspectors is a global issue and that several ICAO initiatives, such as New Generation of Aviation Professionals (NGAP), RSOO CP, GASOS and the Civil Aviation Safety Inspector tool (CASI-t), are addressing the issues raised in the paper. The Commission acknowledged the complex State safety oversight obligations due to the rapid increase in aviation activities globally and recommended that the Council review the actions proposed to address the situation taking into account the aforementioned ICAO initiatives, the unique needs of each ICAO region, existing priorities funded through the 2020-2022 Budget and the availability of extra-budgetary resources.

29.18 The Commission reviewed A40-WP/166, presented by Saudi Arabia on behalf of Bahrain, Egypt, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Palestine, Somalia, Sudan, the United Arab Emirates and Yemen, presenting the initiative of the Arab Civil Aviation Organization and ICAO MID Regional Office to create the Regional Safety Oversight Organization for Middle East and North African States (MENA RSOO). The Commission noted this initiative and recommended that ICAO continue to support the establishment of the MENA RSOO.

Global Aviation Safety Oversight System (GASOS)

29.19 The Commission reviewed and supported A40-WP/13, presented by the Council, which outlined the initial phase of the GASOS and presented an Assembly Resolution for adoption. Wide support was expressed for GASOS.

29.20 The Commission discussed A40-WP/294, presented by the United States, and A40-WP/214, presented by New Zealand, which made recommendations for the improvement of GASOS which should be introduced before initiating any changes to the current scope approved by the Council. The Commission agreed that ICAO should continue its efforts to ensure that the legal and liability issues are being properly mitigated with collaborative work through the appropriate study group structured to include legal experts, and that any new issues be resolved before the introduction of additional phases.

¹⁸ Belize, Bolivia (Plurinational State of), Brazil, Chile, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Nicaragua, Panama, Paraguay, Peru and Venezuela (Bolivarian Republic of).

The Commission also agreed to recommend that ICAO should collect and analyse additional data from GASOS assessments to better inform States of the costs versus benefits. The Commission noted that as part of effective programme management, performance evaluation criteria should be developed. Additionally, ICAO should report regularly to Member States on the progress of these activities.

29.21 The Commission reviewed and supported A40-WP/255, presented by Nigeria on behalf of the Banjul Accord Group Aviation Safety Oversight Organization (BAGASOO) Member States¹⁹, which encouraged ICAO and States to continue supporting regional organizations and the GASOS programme. The Commission noted BAGASOO participation in the ICAO GASOS pilot assessments and recognized the benefits generated such assessments. The Commission encouraged States that are members of a regional organization to continue their support for the functions and activities performed by their organization for the enhancement of State safety oversight.

29.22 The Commission supported A40-WP/368 and Corrigendum No. 1 (English and Chinese only), presented by Bolivia (Plurinational State of) and supported by the countries of the SAM Region and the Member States²⁰ of LACAC, which discusses the need to create and support RSOOs such as SRVSOP. The Commission acknowledged the work that has been achieved by SRVSOP and agreed that GASOS assessments of such regional organizations strengthen the organization and benefit its Member States.

Other regional initiatives

29.23 The Commission reviewed A40-WP/154, presented by the AFCAC on behalf of its 54 Member States²¹, and noted efforts made by the AFCAC to monitor and measure the compliance level of the Abuja Safety Targets (AST) and performance indicators. It also noted challenges faced by the AFI States and the AFCAC in regard to the AST implementation and gathering required safety data. The Commission recommended that, in order to fill the non-compliance gaps, ICAO, RSOOs and other key stakeholders should support the AFCAC by sharing available safety data, as well as providing assistance where possible.

29.24 The Commission reviewed A40-WP/190, presented by the AFCAC on behalf of its 54 Member States²¹. It noted the achievements of the African Flight Procedure Programme (AFPP) in developing procedure design capability in the region and assisting with the implementation of PBN. The Commission also noted the challenges related to sustaining the achieved benefits and urged States to continue providing assistance to the AFPP to ensure continuity and sustainability.

29.25 The Commission reviewed A40-WP/180, presented by the AFCAC on behalf of its 54 Member States²¹. It provided an overview of the actions undertaken with respect to the African ANSP Peer Review Programme. The Commission acknowledged the benefits of a peer review process in improving the provision of regional air navigation services and encouraged ICAO's support to regional initiatives, cooperation among States, collaboration with the industry, and initiatives to improve the efficiency and effectiveness of regional processes.

¹⁹ Cabo Verde, Gambia, Ghana, Guinea, Liberia, Nigeria, Sierra Leone.

²⁰ Belize, Chile, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Nicaragua, Panama, Paraguay, Peru, Uruguay and Venezuela (Bolivarian Republic of).

²¹ Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cabo Verde, Cameroon, Central African Republic, Chad, Comoros, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Djibouti, Egypt, Equatorial Guinea, Eritrea, Eswatini, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Libya, Madagascar, Malawi, Mali, Mauritania, Mauritius, Morocco, Mozambique, Namibia, Niger, Nigeria, Rwanda, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, South Sudan, Sudan, Togo, Tunisia, Uganda, United Republic of Tanzania, Zambia, Zimbabwe.

29.26 Information papers were provided by: the Member States of COCESNA²² (A40-WP/71 and A40-WP/73 Revision No. 1); the AFCAC on behalf of its 54 Member States²¹ (A40-WP/205); and IAC (A40-WP/87 and A40-WP/89 and Corrigendum No. 1).

29.27 Based on the discussion, the Commission agreed to submit, for adoption by the Plenary the following resolution to supersede Assembly Resolution A39-14:

Resolution 29/2: Regional cooperation and assistance to resolve safety deficiencies, establishing priorities and setting measurable targets

Whereas a primary objective of the Organization continues to be that of ensuring the safety of international civil aviation worldwide;

Whereas ensuring the safety of international civil aviation is also the responsibility of Member States both collectively and individually;

Whereas in accordance with Article 37 of the *Convention on International Civil Aviation* each Member State undertakes to collaborate in securing the highest practicable degree of uniformity in regulation, standards, procedures and organization in relation to aircraft, personnel, airports, airways and auxiliary services in all matters in which uniformity will facilitate and improve air navigation;

Whereas the improvement of the safety of international civil aviation on a worldwide basis requires the active collaboration of all stakeholders;

Whereas the Convention and its Annexes provide the legal and operational framework for Member States to build a civil aviation safety system based on mutual trust and recognition, requiring that all Member States implement the SARPs as far as practicable and adequately perform safety oversight;

Whereas the results of the audits and ICAO Coordinated Validation Missions (ICVMs) conducted under the Universal Safety Oversight Audit Programme Continuous Monitoring Approach (USOAP-CMA) indicate that several Member States have not yet been able to establish a satisfactory national safety oversight system and some Member States have been identified as having significant safety concerns (SSCs);

Whereas ICAO plays a leadership role in facilitating the implementation of SARPs and the rectification of safety-related deficiencies by coordinating support and harnessing resources among aviation safety partners;

Recognizing that the ICAO Plans of Action developed for individual Member States serve as platforms to provide, in coordination with other stakeholders, direct assistance and guidance to those States in resolving their SSCs as well as addressing low effective implementation (EI) of critical elements;

Whereas ICAO has a Policy on Regional Cooperation which is committed to render assistance, advice and any other form of support, to the extent possible, in the technical and policy aspects of international civil aviation to Member States in carrying out their responsibilities pertaining to the *Convention on International Civil Aviation* and ICAO Strategic Objectives, inter alia by promoting regional cooperation through close partnerships with regional organizations and regional civil aviation bodies;

²² Belize, Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua.

Recognizing that not all Member States have the requisite human, technical and financial resources to adequately perform safety oversight;

Recognizing that the establishment of subregional and regional aviation safety and safety oversight bodies, including regional safety oversight organizations (RSOOs), has great potential to assist States in complying with their obligations under the Chicago Convention through economies of scale and harmonization on a larger scale resulting from the collaboration among Member States in establishing and operating a common safety oversight system;

Recalling that Member States are responsible for implementing ICAO Standards and may, in this respect, decide on a voluntary basis to delegate certain functions to RSOOs, and that, when applicable, the word “States” should be read to include RSOOs;

Recalling that the Thirteenth Air Navigation Conference (AN-Conf/13) (2018) recommended that ICAO continue developing GASOS to strengthen RSOOs and to improve their effectiveness and efficiency in supporting States, while addressing the liability, governance and cost-benefit analysis issues and other concerns raised by the Conference;

Acknowledging the recognition given in Annex 19 to RSOOs and their role in discharging delegated State safety management functions on behalf of States;

Recognizing that groups of Member States may decide to establish regional aviation systems, the legal basis of which may be an international Treaty and would encompass common rules and oversight applicable in the participating States;

Recognizing that the assistance available to Member States experiencing difficulties in correcting deficiencies identified through the safety oversight audits, particularly with priority given to those States with SSCs, would be greatly enhanced by coordination amongst all Member States, ICAO and other concerned parties in civil aviation operations; and

Recognizing that established regional aviation safety groups (RASGs) have the objective of establishing objectives, priorities and indicators and the setting of measurable targets to address safety-related deficiencies in each region while ensuring consistency of action and coordination of efforts;

The Assembly:

1. *Directs* the Council, in partnership with all aviation safety partners, to implement a comprehensive assistance programme that will help Member States to correct deficiencies identified through USOAP-CMA, with priority given to the resolution of SSCs;
2. *Directs* the Council to promote the concepts of regional cooperation, including the strengthening of RSOOs and RASGs, as well as the establishment of objectives, priorities and indicators and the setting of measurable targets to address SSCs and safety-related deficiencies;
3. *Directs* the Council to take the appropriate actions to ensure that the specificities of a regional aviation system established by a group of Member States are recognized and integrated in the ICAO framework;
4. *Directs* the Council to support the implementation and further development of the Global Aviation Safety Oversight System (GASOS) regarding the necessary measures to strengthen, assess and support RSOOs or RAIOS to assist their Member States in accomplishing certain safety oversight,

accident and incident investigation and safety management functions and activities, while ensuring those States maintain their obligations and responsibilities under the Chicago Convention;

5. *Directs* the Council to continue to partner with Member States, industry and other aviation safety partners for coordinating and facilitating the provision of financial and technical assistance to States and subregional and regional safety and safety oversight bodies, including RSOOs and RASGs, in order to enhance safety and strengthen safety oversight capabilities;

6. *Directs* the Council to continue the analysis of relevant safety-critical information for determining effective means of providing assistance to States and subregional and regional safety and safety oversight bodies, including RSOOs and RASGs;

7. *Directs* the Secretary General to continue to foster coordination and cooperation between ICAO, RASGs, RSOOs and other organizations with aviation safety-related activities in order to reduce the burden on States caused by repetitive audits or inspections and to decrease the duplication of monitoring activities;

8. *Urges* Member States to give the highest priority to the resolution of SSCs in order to ensure that there are no immediate safety risks to international civil aviation and that the minimum requirements established by the Standards set forth in the ICAO Annexes are met;

9. *Urges* Member States to utilize the Flight Procedures Programme, where available, for PBN implementation and, additionally, to provide assistance (financial or otherwise) to ensure continuity and sustainability;

10. *Urges* Member States to develop and further strengthen regional and subregional cooperation in order to promote the highest degree of aviation safety;

11. *Calls* upon all Member States and relevant aviation safety partners, wherever possible, to assist requesting States with financial and technical resources to ensure the immediate resolution of identified SSCs and the longer-term sustainability of the State safety oversight system;

12. *Encourages* Member States to establish partnerships with other States, industry, financial institutions and other aviation safety partners to strengthen safety oversight capabilities, in order to better discharge State responsibilities and foster a safer international civil aviation system;

13. *Encourages* Member States to foster the creation of regional or subregional partnerships to collaborate in the development of solutions to common problems to build State safety oversight capability, and to participate in, or provide tangible support for, the strengthening and furtherance of subregional and regional aviation safety and safety oversight bodies, including RSOOs;

14. *Requests* the Secretary General to play a leading role in coordinating efforts to assist States to resolve SSCs through the development of ICAO Plans of Action and/or specific project proposals and to assist States to obtain the necessary financial resources to fund such assistance projects;

15. *Requests* the Council to report to the next ordinary session of the Assembly on the overall implementation of the comprehensive assistance programme; and

16. *Declares* that this resolution supersedes Resolution A39-14.

Agenda Item 30: Other issues to be considered by the Technical Commission

Remotely piloted aircraft systems (RPAS) and air traffic management (ATM)

30.1 The Commission reviewed A40-WP/86, presented by Finland on behalf of the EU and its Member States²³, the other Member States of the ECAC²⁴, and by EUROCONTROL, which called for ICAO action in the areas of unmanned aircraft systems (UAS) traffic management (UTM) and higher airspace operations. The working paper invited the Assembly to encourage ICAO to continue its role as an international forum for cooperation, collaboration and the sharing of best practices on these issues. The working paper also requested that ICAO facilitate the dialogue between new entrants, States and relevant stakeholders, called upon States to establish regulations and procedures to integrate new entrants, and urged the Organization to review ICAO provisions with a view to addressing the needs of UTM and higher airspace operations.

30.2 In light of the support expressed for the working paper during the discussion, the Commission agreed to submit for adoption by the Plenary the following resolution.

Resolution 30/1: New entrants

Whereas the Preamble of the Convention on International Civil Aviation stipulates that signatories thereto had “agreed on certain principles and arrangements in order that international civil aviation may be developed in a safe and orderly manner and that international air transport services may be established on the basis of equality of opportunity and operated soundly and economically”;

Whereas Annex 11 to the Convention requires a Member State to determine those portions of airspace over its territory within which air traffic services will be provided and, thereafter, to arrange for such services to be established and provided;

Recognizing that, for the purposes of this Resolution, the term “New Entrants” refers to higher airspace and unmanned aircraft system (UAS) traffic management (UTM) operations;

Recognizing that there is an increasing need to facilitate, within a global, harmonized framework, operations by New Entrants and that there is a large disparity in performance in the types of vehicle expected to comprise this new airspace user group;

Recognizing that ICAO provisions may need to be amended or expanded in order to support operations by New Entrants;

Recognizing that significant progress has been made concerning the facilitation of operations by New Entrants through regional and State initiatives; and

Recalling that the ICAO Global ATM Operational Concept states that all airspace should be a usable resource, any restriction on the use of any particular volume of airspace should be considered transitory, and all airspace should be managed flexibly;

²³ Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and United Kingdom.

²⁴ Albania, Armenia, Azerbaijan, Bosnia and Herzegovina, Georgia, Iceland, Monaco, Montenegro, North Macedonia, Norway, Republic of Moldova, San Marino, Serbia, Switzerland, Turkey and Ukraine.

The Assembly:

1. *Directs* ICAO to review Standards and Recommended Practices (SARPs) relating to, inter alia, the rules of the air, air traffic services, certification, licencing, liability and the environment, for amendment or expansion as necessary, to facilitate the operation of New Entrants within a global, harmonized framework, taking into account regional frameworks and practices;
2. *Calls on* Member States to arrange their regulations and procedures governing the operation of New Entrants as well as the common use by all airspace users of certain facilities and services so as to facilitate the integration of these operations, while not compromising safety and security, duly addressing environmental implications, and, where necessary, ensuring that these new operations comply with the rules of the air in Annex 2 — *Rules of the Air*;
3. *Calls on* Member States to ensure that the common use by all users of airspace and certain facilities and services does not disproportionately affect the regularity, environmental protection and efficiency of civil and military operations; and
4. *Recognizes* ICAO's role as an international forum to facilitate improved cooperation, collaboration and the sharing of best practices in support of regional initiatives, and to undertake the necessary follow-up activities that build on those initiatives by encouraging increased dialogue between States, New Entrants, existing aviation stakeholders and the space community.

30.3 The Commission reviewed A40-WP/302, presented by China, which provided information regarding a pilot project for distributed UAS operation certificate (DOC) and the associated certification strategy, and encouraged the sharing of information between States on related developments. The Commission acknowledged that the topic deserved consideration as one means of facilitating UAS integration, and recommended that relevant expert groups be briefed on the outcomes of the pilot project and that the ICAO Council consider conducting a preliminary feasibility analysis.

30.4 The Commission reviewed A40-WP/281, presented by Indonesia, which contained Indonesia's regulations and processes for the operation of UAS and called for detailed procedures and guidance for the conduct of related oversight activities.

30.5 The Commission reviewed A40-WP/353, presented by Saudi Arabia, which requested the Organization to undertake additional activities for the development of the regulatory framework for UTM.

30.6 The Commission reviewed A40-WP/478, presented by the Russian Federation, which called for the development of international guidance material regarding the use of UAS, including remotely piloted aircraft systems (RPAS), to conduct flight tests and checks of ground-based radio navigation flight support systems and airport lighting systems.

30.7 With regard to the broad support expressed for A40-WP/281, A40-WP/353 and A40-WP/478, and noting that such activities are unfunded and may not be undertaken without additional resources, the Commission recommended that the Council review the proposals with respect to existing priorities funded through the 2020-2022 Budget and the availability of extra-budgetary resources.

30.8 The Commission reviewed A40-WP/209, presented by the International Coordinating Council of Aerospace Industries Associations (ICCAIA), Airports Council International (ACI), International Federation of Air Line Pilots' Associations (IFALPA) and International Federation of Air Traffic Controllers' Associations (IFATCA). The Commission supported the working paper, recognizing the value of ICAO's activities towards the development of a common framework for UTM and

recommended that ICAO be urged to accelerate and expand its work on the development of a full regulatory framework for UAS and UTM.

30.9 The Commission reviewed A40-WP/196, presented by ACI, CANSO, IFATCA, IFALPA and IATA. The Commission supported the working paper, recognizing the safety risks associated with the unauthorized presence of unmanned aircraft (UA) in close vicinity to commercial aircraft and aerodromes, and noted the offer from industry to assist in drafting suitable guidance material. The Commission also recognized ICAO's existing activities towards the development of provisions and guidance material. With respect to the wider issue of exploring options for direct industry input into the deliberations of ICAO, the Commission noted that the Executive Committee was considering such matters under Agenda Item 26.

30.10 Information papers were provided by Brazil (A40-WP/198), India (A40-WP/366), Indonesia (A40-WP/280), Oman (A40-WP/537), Peru and supported by the countries of the SAM Region and the Member States²⁵ of LACAC (A40-WP/429), Rwanda (A40-WP/518), Saudi Arabia (A40-WP/223), the United States (A40-WP/216) and Singapore (A40-WP/457).

30.11 The Commission reviewed A40-WP/356, presented by Cuba, supported by Belize, Bolivia (Plurinational State of), Brazil, Colombia, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, and Venezuela (Bolivarian Republic of), which proposed that ICAO create an on-line database of technical parameters for various aircraft types, for use by ANSPs for automated processing of flight plan data, and include this information in *Aircraft Type Designators* (Doc 8643). The Commission recommended that the ICAO Council consider the incorporation of the technical parameters concerned, subject to existing priorities funded through the 2020-2022 Budget and the availability of extra-budgetary resources.

30.12 The Commission reviewed A40-WP/418, presented by the Dominican Republic, which detailed their experience of reducing errors in flight planning by applying a flight plan management and evaluation procedure prior to submission to the ATS unit concerned. The Commission noted the positive results achieved and encouraged other States to consider what measures might be adopted to reduce flight planning errors amongst their own flight operations, including the expedited implementation of FF-ICE.

30.13 Information papers were provided by: China (A40-WP/308 Revision No. 1 and Revision No. 2 (Chinese only), A40-WP/309 Revision No. 1, A40-WP/311 Revision No. 1, A40-WP/312 Revision No. 1, A40-WP/313 Revision No. 1, A40-WP/314 Revision No. 1 and A40-WP/523); India (A40-WP/222, A40-WP/364 and A40-WP/367); Japan (A40-WP/481); Russian Federation (A40-WP/422), South Africa (A40-WP/116); the United Arab Emirates (A40-WP/151 and A40-WP/152); the United States (A40-WP/217); Venezuela (Bolivarian Republic of) (A40-WP/431); and the Member States of COCESNA²⁶ (A40-WP/68, A40-WP/75, and A40-WP/76).

Airport Operations and Infrastructure

30.14 The Commission considered A40-WP/82, A40-WP/352 and A40-WP/188, addressing communications, navigation, and surveillance (CNS) issues, with particular regard to global navigation satellite system (GNSS). A40-WP/82, presented by Finland on behalf of the EU and its Member States²⁷,

²⁵ Belize, Bolivia (Plurinational State of), Chile, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Nicaragua, Panama, Uruguay and Venezuela (Bolivarian Republic of).

²⁶ Belize, Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua.

²⁷ Austria, Belgium, Bulgaria, Croatia, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and United Kingdom.

the other Member States of the ECAC²⁸; and by EUROCONTROL, addressed the evolution of CNS systems and the associated threats and vulnerabilities, with particular regard to satellite-based CNS systems. It proposed a series of actions aimed at increasing the resilience of such systems to interference through a holistic approach at the global level. A40-WP/352, presented by Saudi Arabia, identified the need to strengthen the protection of GNSS signals from harmful interference and degradation of performance through regulatory and technical measures. A40-WP/188, presented by IFATCA, IFALPA and IATA, called for measures to manage and reduce the impact from harmful interference to GNSS on the safety and efficiency of aircraft and ATM operations.

30.15 The Commission noted the essential commonality of purpose among the three papers, which proposed actions by States and ICAO to strengthen CNS systems resilience and mitigate harmful interference to GNSS, in coordination with industry. The Commission agreed with the proposals and recommended that the Council act with urgency on measures aimed at elimination of harmful interference to GNSS. It was noted that the actions for ICAO were within the scope of the existing work programme.

30.16 The Commission reviewed A40-WP/208, presented by the United Arab Emirates, which emphasized that civil aviation was becoming increasingly dependent on mobile satellite systems and proposed that ICAO examine an international solution to the regulation of mobile satellite services providers offering services related to the safety of civil aviation. Noting that such activities were unfunded and may not be undertaken without additional resources, the Commission recommended that the Council review the proposal with respect to existing priorities funded through the 2020-2022 Budget and the availability of extra-budgetary resources.

30.17 Information papers were provided by: India (A40-WP/362 and A40-WP/365); the Russian Federation (A40-WP/270 Revision No. 1); and Egypt (A40-WP/382).

30.18 The Commission reviewed A40-WP/94, presented by Indonesia and Canada, which contained a draft Assembly Resolution on the need to develop Standards and Recommended Practices (SARPs) to address the design, certification, management, safety and reporting requirements and operations of water aerodromes. The Commission, in reviewing the paper, expressed support for the intent of the Resolution, and agreed to submit for adoption by the Plenary the following resolution:

Resolution 30/2: Global provisions for design, certification and operations of water aerodromes

Recognizing that Assembly Resolution A39-25 directed the Secretary General to consider the special needs and characteristics of Least Developed Countries (LDCs), Land Locked Countries (LLDCs) and Small Island Developing States (SIDS), identified within the framework of the United Nations, in the coordination, prioritization, facilitation and implementation of assistance programmes aimed at enhancing their air transport systems;

Recognizing the need to support States with global provisions related to areas only accessible by seaplane operations in order to improve safety and encourage a strong civil aviation sector that can promote and sustain social and economic progress through responsible tourism, for example, which is a primary economic driver;

Considering the need to promulgate global provisions specifically related to the design, certification and operations of water aerodromes for seaplane operations so as to meet the needs of all Member States for safe, regular, efficient and economical air transport;

²⁸ Albania, Armenia, Azerbaijan, Bosnia and Herzegovina, Georgia, Iceland, Monaco, Montenegro, North Macedonia, Norway, Republic of Moldova, San Marino, Serbia, Switzerland, Turkey and Ukraine.

The Assembly:

Requests the Council, within the current allotted budget, and as a matter of priority, to review existing SARPs related to aerodromes and to develop specific Standards and Recommended Practices in the appropriate Annexes to the Convention in order to address the design, certification, management, safety and reporting requirements for water aerodromes operations.

30.19 The Commission, in reviewing A40-WP/262, presented by Indonesia, concerning the development of Standards for small aerodromes in mountainous areas, noted that Annex 14 — *Aerodromes*, Volume I — *Aerodrome Design and Operations* currently contained design provisions related to small aerodromes. Furthermore, the ICAO *Stolport Manual* (Doc 9150) contained guidance for the planning and establishment of such aerodromes. The Commission agreed to recommend that ICAO undertake a review of the guidance contained in Doc 9150 with a view to updating the material, taking into account existing priorities funded through the 2020-2022 Budget and the availability of extra-budgetary resources.

30.20 Information papers were provided by: Bangladesh (A40-WP/504); Brazil (A40-WP/535); China (A40-WP/298 and A40-WP/331 Revision No. 1); Egypt (A40-WP/329 and A40-WP/443); India (A40-WP/128 and A40-WP/224); Iran (A40-WP/455 and A40-WP/458); the Republic of Korea (A40-WP/514); and Saudi Arabia (A40-WP/456).

30.21 The Commission reviewed A40-WP/396, presented by the Russian Federation requesting support for the nomination of the China-Russian Federation Consortium as the fourth global space weather centre for international air navigation. The Commission noted that an official request by both States had been made to ICAO, and that the request was expected to be considered by the ICAO Council in early 2020.

30.22 The Commission reviewed A40-WP/201, presented by the World Meteorological Organization (WMO), which presented information on ongoing work activities within the aeronautical meteorology domains of ICAO and WMO in support of the GANP and its ASBU methodology. This included work related to threats posed to flight safety by adverse weather/meteorological conditions and a changing climate scenario, and highlighted concerns with regard to diminishing availability of expert/technical resources in the aeronautical meteorology domain. The Commission emphasized the importance of the availability of appropriate technical resources in aeronautical meteorology to sustain and enhance standards-making and implementation support activities as well as the working arrangements between ICAO and WMO. The Commission agreed that States should be urged to make available to ICAO appropriate expert resources in aeronautical meteorology.

30.23 Information papers were provided by: China (A40-WP/336 and A40-WP/341); South Africa (A40-WP/118); and WMO (A40-WP/202).

Flight Operations

30.24 The Commission reviewed A40-WP/108, presented by Finland on behalf the EU and its Member States²⁹, the other Member States of the ECAC³⁰, by EUROCONTROL and co-sponsored by New Zealand, on “cooperative” oversight. The Commission acknowledged the complexity of cooperative

²⁹ Austria, Belgium, Bulgaria, Croatia, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and United Kingdom.

³⁰ Albania, Armenia, Azerbaijan, Bosnia and Herzegovina, Georgia, Iceland, Monaco, Montenegro, North Macedonia, Norway, Republic of Moldova, San Marino, Serbia, Switzerland, Turkey and Ukraine.

oversight due to the growing number of cross-border operations, new business models and technological developments, and urged States to enhance cooperation to ensure effective oversight of cross-border operations. The Commission agreed that ICAO should initiate work to address the challenges these practices posed to States and report on this to the next High-level Safety Conference for further consideration. In this regard, and subject to existing priorities funded through the 2020-2022 Budget and the availability of extra-budgetary resources, the Commission recommended that ICAO:

- a) develop a common understanding of cooperative oversight as an enabler of integrated cross-border oversight, especially in the context of new technological innovations and cross-border operating models, that should also address the sharing or reallocation of responsibilities among States involved;
- b) facilitate the implementation of risk-based oversight as a pillar of safety risk management through the development of a toolkit on cooperative oversight; and
- c) direct the relevant expert groups to review the SARPs that relate to the roles and responsibilities of the State of the Operator and the State of Registry to determine if there are barriers to cooperative oversight, and to address those identified barriers, taking into consideration operations with or without an Article 83 *bis* agreement.

30.25 The Commission reviewed A40-WP/117, presented by the United Arab Emirates, related to the surveillance of operations by foreign operators. The Commission recognized the divergent foreign operator approval practices in different States and agreed that ICAO should encourage States to standardize the processes in line with the requirements of Annex 6, Part I — *International Commercial Air Transport — Aeroplanes* and the guidance in the *Manual of Procedures for Operations Inspection, Certification and Continued Surveillance* (Doc 8335). The Commission noted the work undertaken by ICAO, with the support of European Union Aviation Safety Agency (EASA) and IATA, to develop the Foreign Operator Application Tool (FOAT) which would contribute to the standardization and harmonization of foreign operator applications, and invited interested States to partake in the project.

30.26 The Commission reviewed A40-WP/124, presented by the United Arab Emirates, regarding a proposal to review and further develop guidance material with a view to harmonizing the personnel licence validation or conversion processes. The Commission recommended that the Council review the proposals with respect to existing priorities funded through the 2020-2022 Budget and the availability of extra-budgetary resources.

30.27 The Commission reviewed A40-WP/121, presented by the United Arab Emirates, related to the importation, design and certification of aircraft and A40-WP/200, presented by the United States, inviting the Assembly to recognize the importance of ensuring that the information contained in the online airworthiness information network (OAIN) is current and accurate. The Commission acknowledged the ongoing work at ICAO to ensure that information on the OAIN is kept current and recommended that a Protocol Question be developed to ensure the timely update of States' airworthiness information. The Commission noted the ongoing work to facilitate the importation, design and certification of aircraft and agreed that work should continue. The Commission recommended that the appropriate group of experts review the proposed action to facilitate harmonization of State of Design certification procedures and specifications, subject to existing priorities funded through the 2020-2022 Budget and the availability of extra-budgetary resources.

30.28 The Commission reviewed A40-WP/232, presented by Australia and co-sponsored by Maldives, New Zealand and South Africa regarding the need to improve the global implementation of Annex 6 provisions related to aircraft tracking and Annex 12 — *Search and Rescue*, and A40-WP/360,

submitted by the Russian Federation, expressing concern with the fast approaching applicability date for the Standards on location of an aircraft in distress in Annex 6, Part I. The Commission noted that work was underway on developing complementary global aeronautical distress and safety system (GADSS)-related Procedures for Air Navigation Services (PANS) and ICAO was currently developing support tools, including a location of an aircraft in distress repository, to support the 2021 applicability date of the Annex 6 Standards. The Commission noted the concern expressed by the aerospace manufacturers with that date. While there was support to retain the applicability date for those Standards, the Commission recommended that ICAO be requested to conduct a survey to determine State and industry readiness to meet the applicability date so as to identify any potential issues with the implementation timelines.

30.29 The Commission reviewed A40-WP/307 and A40-WP/358, presented by the Russian Federation, proposing the formation of a panel of experts to develop an ICAO radiotelephony phraseology proficiency assessment scale and to resume work on determining written and spoken English proficiency requirements for flight crews and technical personnel. The Commission noted the global effective implementation of language proficiency requirements, which was above 85 per cent, as well as the activities of ICAO to further support States in the development of quality language proficiency tests. The Commission also noted that the need to communicate on common, concrete and work-related topics with accuracy and clarity was applicable to both phraseologies and plain language, and that further review was needed on how best to address written English proficiency requirements. The Commission recommended that the Council review the proposals taking into consideration activities being conducted in the Regional Offices, and with respect to existing priorities funded through the 2020-2022 Budget and the availability of extra-budgetary resources.

30.30 The Commission reviewed A40-WP/257, presented by Canada, which outlined their strategy to reduce laser attacks on aircraft by a combination of prohibition, strengthened enforcement and increased education. The Commission noted the success of this strategy and supported efforts to share best practices and information on the effectiveness of such strategies with other Member States. The Commission also noted RASG-MID Safety Advisory – 12 (RSA/12) on this subject.

30.31 The Commission reviewed A40-WP/303, presented by China, which proposed a review of the inflight shutdown rates (IFSD) used for extended diversion time operations (EDTO). The Commission supported the proposal to have a group of experts with industry participation initiate a review of the IFSD and determine what, if any, actions would subsequently be required. Any outcomes of such a review would need to be based on available supporting data and would need to take into consideration current practices so as to avoid unintended consequences. In this respect, the Commission recommended that the Council be requested to review the proposed action with respect to existing priorities funded through the 2020-2022 Budget and the availability of extra-budgetary resources.

30.32 The Commission reviewed A40-WP/271, presented by ICCAIA, IATA, International Business Aviation Council (IBAC) and IFALPA, which highlighted the higher accident rate for turboprop regional operations compared to jet operations and called for ICAO to prioritize work related to turboprop safety. The Commission supported the proposal to conduct further analysis of available data to target future work in areas having the greatest impact on flight safety, and welcomed the support of industry to conduct this work. The Commission also noted the benefit to such operations from increased implementation of vertically guided approaches and recalled Assembly Resolution A37-11 which urged States to implement performance-based navigation (PBN) approaches on all instrument runway ends by 2016.

30.33 Information papers were provided by: Brazil (A40-WP/538); China (A40-WP/263 and A40-WP/299); Finland on behalf of the EU and its Member States³¹, the other Member States of the ECAC³², and by EUROCONTROL (A40-WP/83); Indonesia (A40-WP/436); Iran (A40-WP/453 and A40-WP/454); Pakistan (A40-WP/402); the Republic of Korea (A40-WP/376, A40-WP/515 and A40-WP/516); Saudi Arabia (A40-WP/456); South Africa (A40-WP/345); ICCAIA (A40-WP/93); and IFALPA (A40-WP/426).

Competencies and Medical

30.34 The Commission reviewed A40-WP/296, presented by the United States, Canada, Peru, and Trinidad and Tobago, which highlighted the importance of ICAO, States and industry working together in the further study of automation dependency, considering manual flight control piloting skills, and the broader context of competency-based training, the earlier work of ICAO on loss of control avoidance and recovery training (LOCART) and its related implementation, and noted the strong support for establishment of a group of experts for that purpose. The Commission agreed that a review was needed to identify potential mitigations to automation dependency and how they may be addressed at the global and regional levels, and could result in SARPs amendments in both Annex 1 — *Personnel Licensing* and Annex 6. The Commission recommended that the Council be requested to review the proposed action with respect to existing priorities funded through the 2020-2022 Budget and the availability of extra-budgetary resources.

30.35 The Commission reviewed A40-WP/122, presented by Canada, Singapore and the United States and supported by FSF and IATA, on a multi-pronged approach to enhancing pilot training and competency during a period of anticipated growth and complexity. The Commission agreed that with the global growth in commercial aviation, a pragmatic, data-driven approach to pilot training was essential to the continued improvement of the industry's safety performance. The Commission recommended that ICAO, States and industry embrace competency- or evidence-based training and assessment methods, and have the flexibility to adopt them to target real-world risk and ensure a progressive and satisfactory performance standard.

30.36 The Commission reviewed A40-WP/105, presented by the International Federation of Air Safety Electronics Associations (IFATSEA), on introducing a new air traffic safety electronics personnel (ATSEP) "stream" to enable the technical and managerial capability of ATSEP to withstand cyber threats to information systems and to CNS infrastructures. The Commission noted that ICAO does not define "streams" for any job roles in the aviation community. The Commission recalled that the framework in *Procedures for Air Navigation Services — Training* (PANS-TRG, Doc 9868) and associated guidance in the *Manual on Air Traffic Safety Electronics Personnel Competency-based Training and Assessment* (Doc 10057) could be adapted by a training provider to incorporate specific training elements, such as cybersecurity, and that specific guidance on cybersecurity training could be considered for future updates to Doc 10057.

30.37 The Commission reviewed A40-WP/256, presented by Canada, which called for ICAO to address mental health and substance use disorders by promoting awareness and education, and by including it in the work plan of an appropriate expert group. A40-WP/125, presented by the United Arab Emirates, also called for ICAO to be proactive regarding education of licence holders on use of

³¹ Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and United Kingdom.

³² Albania, Armenia, Azerbaijan, Bosnia and Herzegovina, Georgia, Iceland, Monaco, Montenegro, North Macedonia, Norway, Republic of Moldova, San Marino, Serbia, Switzerland, Turkey and Ukraine.

medication and alcohol, to conduct a global survey and analysis on the capability of States to understand and overcome the problematic use of psychoactive substances use, and to develop a framework for data and medical information sharing between States. A40-WP/123, also presented by the United Arab Emirates, called for recognition of obstructive sleep apnea (OSA) as an emerging medical issue and the development of guidance material to enhance awareness, education and detection of OSA. The Commission noted that enhanced awareness and health promotion concerning obstructive sleep apnoea, mental health and substance use disorders was addressed in Annex 1 and relevant guidelines, including the *Manual of Civil Aviation Medicine* (Doc 8984) and “Fitness to fly” – a combined publication of ICAO, IATA and IFALPA. These documents were in accordance with safety management provisions contained in Annex 19. The Commission agreed that the contents of the working papers should be forwarded to the appropriate expert groups that have work streams on these subjects with due consideration of the legal framework on medical information protection. The Commission further agreed to the sharing of information and best practices between States.

30.38 Information papers were provided by: Brazil (A40-WP/540); China (A40-WP/300); Indonesia (A40-WP/553); Japan (A40-WP/445 and A40-WP/446); and the United Arab Emirates (A40-WP/169).

Safety Management

30.39 The Commission reviewed A40-WP/143, presented by Qatar, which requested ICAO to develop a safety culture survey, including the complete set of information needed for its deployment, and invite the RASGs to conduct that survey and include an analysis of the results in each RASG annual report to inform of any support required for areas requiring more attention. Some concerns were raised regarding how safety culture is understood and interpreted in many different ways as well as differences in legal frameworks around the protection of safety data and reporters, and the need to consider this before imposing a common way of assessing safety culture as a basis for a common metric. The Commission recommended that the Council review the proposals, including the concerns raised, with respect to existing priorities funded through the 2020-2022 Budget and the availability of extra-budgetary resources.

30.40 The Commission reviewed A40-WP/98, presented by the United Arab Emirates, which proposed that ICAO provisions be enhanced to reinforce the linkages between accident and incident investigation activities and the SSP and emphasized the need to improve the SSP-related USOAP protocol questions (PQs) in this regard. The Commission agreed to recommend that the contents of A40-WP/98 be brought to the attention of the appropriate expert groups.

30.41 Canada presented A40-WP/258 and revised the scope of the paper to include organizations responsible for the type design and manufacture of “aircraft” as well as engines and propellers. The paper proposed a postponement of the 7 November 2019 applicability date for Amendment 1 to Annex 19, relating to implementation of an SMS by organizations responsible for the type design and manufacture of engines and propellers. The Commission noted that once a Standard has been adopted by the Council and the effective date has passed (i.e. the date by which States can register their disapproval as per Article 90 of the Chicago Convention), the Standard becomes effective. As Amendment 1 to Annex 19 became effective on 11 July 2016, a proposal for delay of the applicability date would be subject to the established process for amendment of a Standard. The Commission also noted that the Standard for organizations responsible for the type design or manufacture of aircraft to implement an SMS became applicable on 14 November 2013; if an organization responsible for the type design or manufacture of engines or propellers does not have an SMS, the engine or propeller would necessarily be included in the scope of the SMS of the organization responsible for the type design or manufacture of the aircraft. States were reminded of their obligation under Article 38 of the Chicago

Convention to notify differences to ICAO if they find it impracticable to comply or are otherwise unable to bring their own regulations into accord with Amendment 1 to Annex 19 by the 7 November 2019 applicability date. Concerns were expressed that a delay to the amendment applicability for these organizations could negatively impact the efficacy of safety management implementation in general and that ICAO should focus on producing high quality SSP-related USOAP PQs and the initiation of USOAP SSP assessments as soon as possible. Given that only a few States indicated support for the working paper, the Commission decided not to recommend a postponement to the applicability date concerned.

30.42 Information papers were provided by: Brazil (A40-WP/539); the Dominican Republic (A40-WP/370); Japan (A40-WP/502); Nicaragua (A40-WP/70 Revision No. 1 (English only)); and Qatar (A40-WP/146).

Accident Investigation and Airspace Issues

30.43 The Commission reviewed A40-WP/398, presented by Argentina, which highlighted the importance of monitoring follow-up actions for safety recommendations. It also requested the Council to disseminate programmes and procedures for the follow-up of safety recommendations by publishing existing programmes developed in some States and requested that ICAO find a mechanism to contribute funds to support the development of such programmes in States. The Commission agreed to recommend that the proposal be referred to the Council for further consideration, acknowledging that existing programmes and procedures relating to follow-up of safety recommendations could be made available on an ICAO website for use by States lacking such programmes.

30.44 The Commission reviewed A40-WP/416, presented by Argentina, which addressed the post-fieldwork psychophysical monitoring of aircraft accident investigators when they have been exposed to various aggressive agents or hazards. The Commission noted that Circular 315 — *Hazards at Aircraft Accident Sites* contained guidance on the management of occupational health risks in aircraft accident investigation; however, it did not address psychophysical monitoring of investigators. The Commission agreed to refer the establishment of a psychophysical monitoring programme for investigators to the Council for further consideration, taking into account existing priorities funded through the Budget and the availability of extra-budgetary resources. The Commission also encouraged States that have established such programmes to provide timely information on their implementation and encouraged States to support RASGs in deliberations on the establishment of a psychophysical monitoring programme for investigators.

30.45 The Commission reviewed A40-WP/347 and Corrigendum No. 1, presented by Trinidad and Tobago with the support of Antigua and Barbuda, Dominica, Grenada, Jamaica, Saint Kitts and Nevis, Saint Lucia and Saint Vincent and the Grenadines³³, which addressed the challenges faced by some States in complying with the investigation provisions in Annex 13. The paper suggested that an expert group review the process used to audit States' compliance with the SARPs in Annex 13 and the *Manual of Aircraft Accident and Incident Investigation* (Doc 9756); recommending a restructure of Annex 13 and associated guidance to differentiate compliance requirements between less developed States and States with complex aviation industries through a different set of USOAP PQs. The Commission noted that the USOAP CMA abides by the principles of universality, and applies a systematic, consistent and objective approach when performing its activities allowing the programme to monitor all ICAO Member States in a standardized and uniform manner.

³³ And also supported by the following non-Members States of ICAO: Anguilla, British Virgin Islands, Guadeloupe and Martinique.

30.46 The Commission also recalled that the USOAP findings indicated some States had not been able to implement an effective investigation system due, in general, to a lack of human and financial resources together with lack of appropriate legislation and regulations. It was further recalled that a regional investigation system can provide economies of scale by allowing for the sharing of required resources. To this effect, ICAO published comprehensive guidance on regional investigation systems in Doc 9946 and provisions on delegation of an investigation to another State or RAIO were introduced in Annex 13 in 2010. The Commission was further reminded that Assembly Resolution A38-12: *Consolidated statement of continuing ICAO policies and associated practices related specifically to air navigation* recommended that States cooperate in the investigation of accidents, and that States and RAIOs provide assistance. In light of the aforementioned, the Commission acknowledged the challenges faced by some States in discharging their investigation obligations and called on those States to consider the establishment of other cooperation mechanisms for investigations as an alternative to RAIOs.

30.47 The Commission reviewed A40-WP/96, presented by the United Arab Emirates, which requested that ICAO establish and host a data repository of human- and organization-related factors gathered from accident and incident investigations, and from the application of risk management approaches. The aim of such a data repository would be to facilitate consultancy services to less-resourced States. The Commission noted the need to respect the protection provisions in Annex 19 and noted the existing SMI public website, the ICAO e-Library of Final Reports containing some 2000 reports and the information provided to air safety investigators by the International Society of Air Safety Investigators (ISASI) and recommended that the Council review the proposals with respect to existing priorities funded through the 2020-2022 Budget.

30.48 The Commission reviewed A40-WP/149, presented by the Air Crash Victims' Families' Federation International (ACVFFI), which proposed that an amendment to Annex 13 be developed to require translation of Final Reports into the native languages of the accident victims and their families. The Commission recalled Assembly Resolution A39-27: *Assistance to victims of aviation accidents and their families*, noting language barriers have posed some difficulties in providing timely information to the families. While recognizing the importance for families and accident victims of properly understanding the information contained in Final Reports of investigations, the Commission also acknowledged that such translation would not only result in a decrease of the resources for the investigation, but would also be a challenge for a State in charge of an investigation given the many different nationalities involved in any major accident. A proposal for States having suffered citizen fatalities to translate Final Reports into their national languages was also noted. The Commission agreed that the Council should consider the issue, taking account of the perspectives expressed during the discussion, and with respect to existing priorities funded through the 2020-2022 Budget and the availability of extra-budgetary resources.

30.49 Information papers were provided by: Argentina (A40-WP/384); Indonesia ((A40-WP/513); and the Republic of Korea (A40-WP/377).

30.50 The Commission, in reviewing A40-WP/162 presented by the Democratic People's Republic of Korea, noted the impact analysis therein of suspended commercial aviation services with a focus on SADIS, SITA and Jeppesen. In noting the efforts of the Democratic People's Republic of Korea in reinstating those services for safe operation of international civil aviation, the Commission acknowledged the importance of compliance with the applicable United Nations (UN) resolutions as well as with the Chicago Convention and its Annexes. The Commission was informed that the Council of ICAO remained continually informed on the subject, including developments, and maintained coordination with the UN, as necessary, to support safe operation of international civil aviation.

30.51 The Commission reviewed A40-WP/138, presented by Kiribati, which provided information on the Pacific Island Forum (PIF) and its small island States (SIS) considerations for upper airspace management in the South Pacific. The Commission noted the content of the paper and recognized that airspace change proposals came under the broad heading of amendments to regional air navigation plans. In this respect, the Commission recalled that these amendments, concerning the provision of air navigation facilities and services for international air navigation, were governed by formal procedures approved by the Council of ICAO, and that the initial steps remained the purview of the relevant States and, as necessary, the ICAO Regional Office concerned.

30.52 The Commission reviewed A40-WP/170, presented by Ukraine, which provided an overview of ATM aspects and safety issues in the Simferopol flight information region (FIR), where responsibility for air traffic services was delegated to Ukraine. The Commission noted the ongoing measures of Ukraine, in close cooperation with international organizations and State civil aviation authorities, to facilitate safe provision of air navigation services and to normalize air traffic flows over the High Seas within the Simferopol FIR. In noting the duplicate publication of aeronautical information in the Black Sea area, the Commission acknowledged the importance of compliance with the applicable UN resolutions as well as the Chicago Convention and its Annexes. The Commission further noted that this matter was within the purview of the European Air Navigation Planning Group (EANPG) Black Sea Task Force (BSTF). The BSTF had been established to support the ICAO initiative to progressively normalize the air traffic flow in the airspace over the Black Sea and create the necessary coordination mechanism to enable and implement operational and technical solutions mutually acceptable to all parties. The Commission supported and encouraged the BSTF to continue its efforts.

Miscellaneous

Trust framework, Remotely piloted aircraft systems (RPAS), Air traffic management (ATM)

30.53 The Commission reviewed A40-WP/295, presented by New Zealand, which discussed aviation cybersecurity frameworks in the context of existing non-sector-specific cyber-security controls used by States, and proposed that ICAO should focus on developing robust and agreed cybersecurity principles that States could reference. The Commission also reviewed A40-WP/197, presented by Brazil, highlighting the need for an aviation trust framework to ensure interoperability and avoid diverging efforts between States and regions, and A40-WP/369 presented by ICCAIA, calling for the further promotion of a globally harmonized trust framework in coordination with the ICAO cybersecurity strategy while ensuring appropriate consultation with industry expertise.

30.54 The Commission noted that the actions contained in the three papers were aligned with action taken by the ICAO Council concerning AN-Conf/13 Recommendation 5.4/1, and with Assembly Resolution A39-19. Consistent with the cybersecurity strategy, ICAO was working in a coordinated, horizontal and cross-cutting manner to address cyber threats strategically, involving States, the military community, industry as well as non-traditional aviation stakeholders such as the governing bodies of the Internet. The Commission further noted that work on the trust framework had been rapidly progressing since AN-Conf/13 and this included the development of technology agnostic methods, processes and guidance to the aviation community for reduction in the cyber-threat surface and to guarantee resilience and interoperability of the air navigation system. Strong support had been received thus far from States, industry and other stakeholders.

30.55 The Commission reviewed A40-WP/465, presented by Venezuela (Bolivarian Republic of) and supported by the countries of the SAM Region and the Member States³⁴ of LACAC, and acknowledged that ICAO's work for the development of guidance material and training activities to support implementation of RPAS-related SARPs is beneficial to States and regions. The Commission noted that the aforementioned activities were ongoing within ICAO and recommended that they be continued.

30.56 The Commission reviewed A40-WP/120, presented by ICCAIA and IFALPA which called for ICAO to establish operational procedures for a global upper airspace strategy with the intent of worldwide implementation that interfaces with all aircraft operations, including commercial space operations. The Commission noted the ongoing applicability of AN-Conf/13 Recommendation 5.1/1 — Operations above flight level 600, and agreed that any predetermination of uniform limitations, such as vertical boundaries, would be premature without further consultation.

30.57 The Commission reviewed A40-WP/419, presented by Cameroon, which highlighted the benefits inherent in regional search and rescue (SAR) arrangements in assisting States to meet their obligations under Annex 12. The Commission recalled that such agreements, to be consistent with Annex 12, needed to be appropriately coordinated with the States concerned. It was also noted that to progress such matters, any consequent amendment to the applicable eANP (electronic regional air navigation plan) remained a regional prerogative.

30.58 The Commission reviewed A40-WP/85, presented by Finland on behalf of the EU and its Member States³⁵, the other Member States of the ECAC³⁶; and by EUROCONTROL, which invited States and ICAO to implement a collaborative global network-centric planning of airspace design to advance efforts to implement air traffic flow management, and operational and technical interoperability. The Commission, recognizing the importance of interconnecting regional/sub-regional networks and ATM data exchange across regions, noted the ongoing applicability of AN-Conf/13 Recommendation 3.3/1: Network operations (NOPS). The Commission also noted that the requested actions are part of the on-going efforts of ICAO and recommended that the contents of the working paper be referred to relevant expert groups.

30.59 The Commission reviewed A40-WP/137, presented by the United Arab Emirates, which highlighted the benefits of data fusion in the production of more consistent, accurate, and useful information than that provided by any individual data source. The paper also acknowledged the need for integration with existing systems such as the Integrated Safety Trend Analysis and Reporting System (iSTARS). The Commission noted that, in relation to AN-Conf/13 Recommendation 7.1/1 that had been approved by Council, ICAO was taking action on data-driven decision making, the further development of iSTARS and the Safety Information Monitoring System (SIMS), a form of data fusion centre. These activities are ongoing and included coordination with ICAO Member States through the relevant regional groups as well as bilateral meetings.

30.60 The Commission reviewed A40-WP/417, presented by Venezuela (Bolivarian Republic of), which outlined the progress made by States in the Caribbean (CAR) and South American (SAM) Regions in implementing and interconnecting their ATS message handling system (AMHS) centres. The

³⁴ Belize, Bolivia (Plurinational State of), Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Nicaragua, Panama, Peru and Uruguay.

³⁵ Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and United Kingdom.

³⁶ Albania, Armenia, Azerbaijan, Bosnia and Herzegovina, Georgia, Iceland, Monaco, Montenegro, North Macedonia, Norway, Republic of Moldova, San Marino, Serbia, Switzerland, Turkey and Ukraine.

Commission noted the progress made in this regard and the importance of continued coordination between the States concerned, to advance this further. The Commission noted that existing provisions would support the intended uses for the AMHS system and that continued coordination at the regional level would ensure that objectives of the Regional Plan were met.

30.61 The Commission reviewed A40-WP/359, presented by Venezuela (Bolivarian Republic of), which highlighted the practical challenges for civil-military cooperation between States with adjacent FIRs in the ICAO CAR and SAM regions. The Commission, in acknowledging the importance of close civil-military coordination and collaboration between adjacent States, noted the actions proposed were reflected in AN-Conf/13 Recommendation 3.4/2 approved by the ICAO Council. The Commission urged States to continue their efforts in support of civil-military cooperation and collaboration across airspace boundaries.

30.62 The Commission reviewed A40-WP/119, presented by CANSO, ICCAIA and Singapore, which addressed the challenges faced by ANSPs in safely and efficiently delivering the necessary capacity to accommodate the forecast traffic growth and proposed a number of actions to meet the objectives within the GANP and the GASP. The Commission noted that the actions proposed were consistent with action taken by the ICAO Council in response to AN-Conf/13 Recommendation 4.3/1. Nevertheless, the contents of the paper, especially matters related to the need to consider interdependencies between KPAs, should be forwarded to the appropriate expert group for further consideration. The Commission agreed that States should be urged to enhance collaboration and partnership to address common challenges to facilitate appropriate funding for ATM systems and CNS infrastructure, as well as to ensure that the appropriate financial mechanisms were in place to enable an effective deployment of operational improvements.

Airport operations and infrastructure (AOI)

30.63 The Commission reviewed WP/393, presented by Cameroon, which highlighted the impact of illegal occupation of airports on the safe operation and expansion of airports. The paper advocated a series of actions to secure and safeguard land reserves for the future expansion as well as the continued safe operation of airports. The Commission, in noting that adequate ICAO provisions were already available or in the process of being developed, supported the need for raising awareness on this subject.

30.64 The Commission reviewed A40-WP/144, presented by Qatar, which requested ICAO to review aerodrome certification provisions to ensure certification coverage at aerodromes where operational responsibilities are shared between independent organizations. The Commission agreed with the actions proposed and was informed that the actions directed at ICAO were within the scope of the existing work programme.

30.65 The Commission reviewed A40-WP/218, presented by the United Arab Emirates, on the need to intensify support for AIM and the role the No Country Left Behind initiative could play. The Commission agreed that ICAO should continue to support and encourage the active participation of all States in the global AIM modernization and implementation efforts.

30.66 The Commission reviewed WP/264, presented by Indonesia, which proposed the use of an Integrated Web-based Aeronautical Information System Handling (I-WISH) system to support the process of collaborative decision-making (CDM). The Commission noted A40-WP/264 and agreed that its content be brought to the attention of the appropriate expert group.

30.67 The Commission reviewed A40-WP/449, presented by Venezuela (Bolivarian Republic of), on matters to be taken into consideration in the development and implementation of the ICAO meteorological information exchange model (IWXXM). In acknowledging with appreciation the offer of implementation support, and being informed that an expert group was already addressing IWXXM-related activities, the Commission agreed that the contents of the paper be brought to the attention of the appropriate expert group.

30.68 The Commission reviewed A40-WP/207, presented by ICCAIA, ACI, CANSO and IFATCA. Acknowledging the evolving requirements for secure, reliable, interoperable and ubiquitous CNS systems to support safe, efficient and cost-effective transport and the need to protect the spectrum allocated for those systems, the Commission agreed that States should actively support the ICAO position during the International Telecommunication Union (ITU) World Radiocommunication Conference 2019 (WRC-19). Subject to existing priorities funded through the 2020-2022 Budget and the availability of extra-budgetary resources, the Commission agreed that as recommended by AN-Conf/13 Recommendation 2.2/1, ICAO should launch a multidisciplinary “study to evolve the required CNS and frequency spectrum access strategy and systems roadmap in the short, medium and long term...”.

Operations (OPS)

30.69 The Commission reviewed A40-WP/179, presented by Brazil, related to a “dual” oversight concept for short-term aircraft interchange. The Commission noted that the actions in A40-WP/179 were addressed by AN-Conf/13 Recommendation 7.3/1 f) and had been approved by the Council, and it was expected that progress would be made during the 2020-2022 triennium. The Commission noted that the appropriate expert group would be made aware of the issues raised so as to bring context to their work.

30.70 The Commission reviewed A40-WP/304, presented by China, which highlighted the challenges of operating at high-elevation aerodromes. Specific challenges included unfavourable weather, limited navigational facilities and the effects of hypoxia due to oxygen scarcity. The Commission recognized the action proposed had been presented at the 39th Session of the Assembly, subsequently approved by the Council, and added to the work programme of the appropriate expert group.

30.71 The Commission reviewed A40-WP/110, presented by the Republic of Moldova, which recommended the development of SARPs requiring the installation of a centralized-locking mechanism for overhead bins on passenger aircraft for use during evacuations. It also called for recommendations and guidance for States and industry to harmonize carry-on baggage provisions and to manage carry-on baggage during evacuations to mitigate safety risks. The Commission was informed that Doc 10086, *Manual on Information and Instructions for Passenger Safety*, published in 2018, contained guidance on the issue of carry-on baggage in evacuations. The Commission, in noting a number of concerns with the paper, agreed that the content of the discussion and the working paper should be referred to the appropriate expert group.

30.72 The Commission reviewed A40-WP/287, presented by the United Kingdom, New Zealand, France and Netherlands, which called on ICAO and States to continue to prioritize the mitigation of safety risks associated with non-compliant shipments of lithium batteries transported on aircraft including those not declared as dangerous goods, wrongly declared as less-hazardous dangerous goods, and those not meeting established test requirements. The Commission was informed that the subject of risks introduced by entities in the cargo supply chain was already on the work programme of the Organization. ICAO would continue to prioritize efforts to mitigate safety risks associated with the transport of lithium batteries by air, including the actions set out in the working paper.

30.73 The Commission reviewed A40-WP/173, presented by CANSO, ACI and ICCAIA, regarding the benefits achieved with the implementation of required navigation performance authorization required (RNP AR) approach (APCH) procedures. The Commission acknowledged the importance of developing RNP AR procedures, only where applicable, and recommended that States consider their use in consultation with airspace users. The Commission noted that appropriate expert groups were currently addressing the development of guidance for RNP AR under the existing work programme. The Commission noted that RNP AR procedures were intended for specific situations, such as challenging obstacle-rich environments, and agreed that the use of less limiting navigation specifications should be preferred where possible.

30.74 The Commission reviewed A40-WP/272, presented by ICCAIA, IBAC and IFALPA, which called for ICAO to prioritize work related to helicopter operations and consider the need for new provisions. The Commission supported the recommendations in the working paper, noting that helicopter operations were on the existing work programmes of several expert groups, and urged States to collect and share best practices to support such operations through the regional planning and implementation groups.

Accident Investigation (AIG), State safety programme (SSP) and safety management system (SMS)

30.75 The Commission reviewed A40-WP/69, presented by Nicaragua, and noted the efforts by Nicaragua to establish a functionally independent accident investigation authority, in compliance with Annex 13, whereby the Nicaraguan Agency for Accident and Incident Investigation (ANIA) reported directly to the Presidency of the Republic of the State of Nicaragua. In relation to the proposed action for additional guidance material to be developed on accident investigation activities, the Commission recalled that Circular 315, *Hazards at Aircraft Accident Sites* provided guidance relating to, inter alia, health risks posed by chemical and flammable substances resulting from accidents. The Commission was informed that ICAO guidance material on environmental care at an accident site is currently under development.

30.76 The Commission, in reviewing A40-WP/99, presented by the United Arab Emirates, noted that accident investigation software could be a viable solution for conducting accident investigations to effectively manage investigation resources. The Commission also noted that the United Arab Emirates Air Accident Investigation Management System (UAE AIMS) had contributed to enhancing the efficiency of numerous investigation functions, and that States should consider the benefits of introducing software into their investigation processes. The Commission agreed that States should also share their experiences with accident and incident investigation software applications.

30.77 The Commission considered A40-WP/100, presented by the United Arab Emirates, which called upon ICAO to develop an ICAO competency framework for accident investigators. The Commission recognized the important role that investigators play in the effective conduct of aircraft accident and incident investigations and noted that the task was already being progressed by the appropriate expert group.

30.78 The Commission reviewed A40-WP/147, presented by the ACVFFI, and noted the request to, inter alia, consider a Recommended Practice for airport operators to develop appropriate plans on providing timely and effective assistance to aircraft accident victims and their families within their emergency plans. The Commission noted that Annex 14, Volume I currently contained provisions related to the establishment of an emergency plan at an aerodrome and the *Airport Services Manual*, Part 7 — *Airport Emergency Planning* (Doc 9137) provided complementary guidance. In the context of family assistance provisions contained in Annex 9 — *Facilitation* and the *ICAO Policy on Assistance to Aircraft Accident Victims and their Families* (Doc 9998), which encompassed airport operators, the Commission noted that Doc 9137 was due to be updated as part of the current ICAO work programme. The

Commission agreed that the contents of A40-WP/147 should be brought to the attention of the appropriate expert groups.

30.79 The Commission reviewed A40-WP/231, presented by Australia and co-sponsored by Canada, New Zealand and Singapore, which recommended that ICAO provide assistance to States with small aviation systems, such as the Pacific Island Developing States, by providing targeted guidance and educational material as well as through enhanced regional engagement and cooperation to implement an SSP. The Commission, in supporting the proposals, noted that ICAO initiatives to address these issues were already underway.

30.80 The Commission reviewed A40-WP/145, presented by Qatar, which proposed that a new Standard be developed in Annex 19 for the management of change at the State level. The Commission recognized that several ICAO initiatives were underway to address the issues raised in the paper and agreed that the contents be forwarded to the appropriate expert groups.

30.81 The Commission reviewed A40-WP/316, presented by Venezuela (Bolivarian Republic of) and sponsored by the countries of the SAM Region and the Member States³⁷ of LACAC, which highlighted the importance of recruiting and training support staff needed to sustain the State safety oversight system as the foundation of the SSP. A40-WP/351, also presented by Venezuela (Bolivarian Republic of) and sponsored by the countries of the SAM Region and the Member States³⁸ of LACAC, and A40-WP/421, presented by Australia, New Zealand, Singapore, and the United Kingdom, and co-sponsored by Italy and North Macedonia, called upon ICAO to develop new competencies associated with the functions related to SSP implementation. The Commission acknowledged the need to identify a set of comprehensive safety management-related competencies and that they should be taken into consideration for the development and implementation of SSP. It was also noted that Doc 10070, *Manual on the Competencies of Civil Aviation Safety Inspectors*, addressed some of these competencies.

³⁷ Belize, Bolivia (Plurinational State of), Chile, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Nicaragua, Panama, Paraguay, Peru and Uruguay.

³⁸ Belize, Bolivia (Plurinational State of), Chile, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Nicaragua, Panama, Paraguay, Peru and Uruguay.

APPENDIX

LIST OF DOCUMENTS AND WORKING PAPERS ASSOCIATED WITH THE WORK OF THE TECHNICAL COMMISSION

List of documents

Document	Title
	Annual Reports of the Council to the Assembly for 2016, 2017 and 2018 and the Supplement (https://www.icao.int/Meetings/a40/Pages/documentation-reference-documents.aspx)
Doc 10115	<i>Thirteenth Air Navigation Conference</i>
Doc 10086	<i>Manual on Information and Instructions for Passenger Safety</i>
Doc 10070	<i>Manual on the Competencies of Civil Aviation Safety Inspectors</i>
Doc 10057	<i>Manual on Air Traffic Safety Electronics Personnel Competency-based Training and Assessment</i>
Doc 10004	<i>Global Aviation Safety Plan (GASP)</i>
Doc 9998	<i>ICAO Policy on Assistance to Aircraft Accident Victims and their Families</i>
Doc 9946	<i>Manual on Regional Accident and Incident Investigation Organization</i>
Doc 9868	<i>Procedures for Air Navigation Services — Training (PANS-TRG)</i>
Doc 9756	<i>Manual of Aircraft Accident and Incident Investigation</i>
Doc 9750	<i>Global Air Navigation Plan (GANP)</i>
Doc 9379	<i>Manual of Procedures for Establishment and Management of a State's Personnel Licensing System</i>
Doc 9150	<i>Stolport Manual</i>
Doc 9137	<i>Airport Services Manual</i>
Doc 8984	<i>Manual of Civil Aviation Medicine</i>
Doc 8643	<i>Aircraft Type Designators</i>
Doc 8335	<i>Manual of Procedures for Operations Inspection, Certification and Continued Surveillance</i>
Circ 315	<i>Hazards at Aircraft Accident Sites</i>

List of working papers

Item No.	Subject	No.	Working Paper Presented by	Draft text for the report	Report
27	Annual Reports of the Council to the Assembly for 2016, 2017 and 2018			A40-WP/570	A40-WP/606
28	Aviation safety and air navigation policy	A40-WP/3 A40-WP/12 A40-WP/24 A40-WP/51 A40-WP/52		A40-WP/571	A40-WP/607

Item No.	Subject	No.	Working Paper Presented by	Draft text for the report	Report
		A40-WP/84	Finland [†] and co-sponsored by Canada, Singapore and the Republic of Korea		
		A40-WP/150	United Arab Emirates		
		A40-WP/156	AFCAC [◇]		
		A40-WP/157	AFCAC [◇]		
		A40-WP/158	AFCAC [◇]		
		A40-WP/168	Saudi Arabia		
		A40-WP/191	IATA		
		A40-WP/195	Bolivia (Plurinational State of) and supported by countries of the SAM Region and LACAC Member States [‡]		
		A40-WP/203	CANSO		
		A40-WP/212	Singapore and co-sponsored by Japan, Thailand, the United States and CANSO		
		A40-WP/213	Singapore, the United States and IATA, and co-sponsored by China, Fiji, Indonesia, Marshall Islands, Nauru, Palau, Papua New Guinea, Philippines, Trinidad and Tobago, the United Kingdom and FSF		
		A40-WP/215	Singapore and co-sponsored by Fiji, Japan, Marshall Islands, Nauru, Palau, Thailand, Trinidad and Tobago, the United Kingdom and CANSO		
		A40-WP/230	Australia		

Item No.	Subject	No.	Working Paper Presented by	Draft text for the report	Report
		A40-WP/325	Brazil and supported by countries of the SAM Region and LACAC Member States [§]		
		A40-WP/361+ Revision No. 1 (E,F,R,A,C)	Venezuela (Bolivarian Republic of) and supported by countries of the SAM Region and LACAC Member States**		
		A40-WP/363*	India		
		A40-WP/378*	Republic of Korea		
		A40-WP/401	Peru and sponsored by countries of the SAM Region and LACAC Member States [∞]		
		A40-WP/430*	Republic of Korea		
		A40-WP/450	Colombia and sponsored by LACAC Member States ^{††}		
		A40-WP/460*	FSF		
		A40-WP/484*	Nepal		
		A40-WP/492*	Russian Federation		
		A40-WP/503*	Bangladesh		
		A40-WP/522*	Argentina		
29	Aviation Safety and Air Navigation Regional Implementation Coordination Mechanisms	A40-WP/13 A40-WP/53 Revision No. 1 A40-WP/71* A40-WP/73* Revision No. 1 A40-WP/74 A40-WP/87* A40-WP/89*+ Corrigendum No. 1 A40-WP/95 A40-WP/97 A40-WP/91*	COCESNA COCESNA COCESNA IAC IAC United Arab Emirates United Arab Emirates IAC	A40-WP/583	A40-WP/608

Item No.	Subject	No.	Working Paper Presented by	Draft text for the report	Report
		A40-WP/111	Finland [†] and co-sponsored by Australia, New Zealand and the Republic of Korea		
		A40-WP/153	AFCAC [◇]		
		A40-WP/154	AFCAC [◇]		
		A40-WP/155	AFCAC [◇]		
		A40-WP/166	Saudi Arabia on behalf of Bahrain, Egypt, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Palestine, Somalia, Sudan, the United Arab Emirates and Yemen		
		A40-WP/174	AFCAC [◇]		
		A40-WP/180	AFCAC [◇]		
		A40-WP/190	AFCAC [◇]		
		A40-WP/205*	AFCAC [◇]		
		A40-WP/214	New Zealand		
		A40-WP/255	Nigeria on behalf of the BAGASOO Member States ^{**}		
		A40-WP/276	Canada and New Zealand		
		A40-WP/282	Guyana and Suriname		
		A40-WP/294	United States		
		A40-WP/332+ Corrigendum No. 1	Dominican Republic		
		A40-WP/334	Colombia and sponsored by LACAC Member States ^{§§}		
		A40-WP/368+ Corrigendum No. 1 (E, C)	Bolivia (Plurinational State of) supported by the countries of the SAM Region and LACAC Member States ^{***}		
		A40-WP/371	Argentina		

Item No.	Subject	No.	Working Paper Presented by	Draft text for the report	Report
		A40-WP/391	Bolivia (Plurinational State of) and supported by countries of the SAM Region and the LACAC Member States ^{ooo}		
		A40-WP/404	Colombia and sponsored by LACAC Member States ^{†††}		
		A40-WP/410	Dominican Republic		
		A40-WP/432	Peru with the support of countries of the SAM Region and LACAC Member States ^{†††}		
30	Other issues to be considered by the Technical Commission	A40-WP/68* A40-WP/69 A40-WP/70*+ Revision No. 1 (E) A40-WP/75* A40-WP/76* A40-WP/82 A40-WP/83* A40-WP/85 A40-WP/86 A40-WP/93* A40-WP/94 A40-WP/96 A40-WP/98 A40-WP/99 A40-WP/100 A40-WP/105 A40-WP/108 A40-WP/110 A40-WP/116*	COCESNA Nicaragua Nicaragua COCESNA COCESNA Finland [†] Finland [†] Finland [†] Finland [†] Finland [†] ICCAIA Indonesia and Canada United Arab Emirates United Arab Emirates United Arab Emirates United Arab Emirates IFATSEA Finland [†] and co-sponsored by New Zealand Republic of Moldova South Africa	A40-WP/577+ Revision No. 1 (F)	A40-WP/609

Item No.	Subject	No.	Working Paper Presented by	Draft text for the report	Report
		A40-WP/117	United Arab Emirates		
		A40-WP/118*	South Africa		
		A40-WP/119	CANSO, ICCAIA and Singapore		
		A40-WP/120	ICCAIA and IFALPA		
		A40-WP/121	United Arab Emirates		
		A40-WP/122	Canada, Singapore and the United States and supported by FSF and IATA		
		A40-WP/123	United Arab Emirates		
		A40-WP/124	United Arab Emirates		
		A40-WP/125	United Arab Emirates		
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		A40-WP/146*	Qatar		
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		A40-WP/149	ACVFFI		
		A40-WP/151*	United Arab Emirates		
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		A40-WP/217*	United States		
		A40-WP/218	United Arab Emirates		
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		A40-WP/232	Australia and co-sponsored by Maldives, New Zealand and South Africa		
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		A40-WP/272	ICCAIA, IBAC and IFALPA		
		A40-WP/280*	Indonesia		
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		A40-WP/308*		China	
		Revision No. 1 + Revision No. 2 (C)			
		A40-WP/309*		China	
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		Revision No. 1			
		A40-WP/313*		China	
		Revision No. 1			
		A40-WP/314*		China	
		Revision No. 1			
		A40-WP/316		Venezuela (Bolivarian Republic of) and sponsored by countries of the SAM Region and LACAC Member States ^{§§§}	
		A40-WP/329*		Egypt	
		A40-WP/331*		China	
		Revision No. 1			
		A40-WP/336*		China	
		A40-WP/341*		China	
		A40-WP/345*		South Africa	
		A40-WP/347+		Trinidad and Tobago supported by Antigua and Barbuda, Dominica, Grenada, Jamaica, Saint Kitts and Nevis, Saint Lucia and Saint Vincent and the Grenadines	
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		A40-WP/353	Saudi Arabia		
		A40-WP/356	Cuba supported by Belize, Bolivia (Plurinational State of), Brazil, Colombia, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, and Venezuela (Bolivarian Republic of)		
		A40-WP/358	Russian Federation		
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		A40-WP/421	Australia, New Zealand, Singapore, and the United Kingdom, and co-sponsored by Italy and North Macedonia		
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		A40-WP/426*	IFALPA		
		A40-WP/429*	Peru supported by countries of the SAM Region and LACAC Member States****		
		A40-WP/431*	Venezuela (Bolivarian Republic of)		
		A40-WP/436*	Indonesia		
		A40-WP/443*	Egypt		
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		A40-WP/446*	Japan		
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		A40-WP/465	Venezuela (Bolivarian Republic of) and supported by countries of the SAM Region and the LACAC Member States ^{oooo}		
		A40-WP/478	Russian Federation		
		A40-WP/481*	Japan		
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		A40-WP/538*	Brazil		
		A40-WP/539*	Brazil		
		A40-WP/540*	Brazil		
		A40-WP/553*	Indonesia		

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* Information Paper.

† On behalf of the EU and its Member States (Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and United Kingdom), the other Member States of the ECAC (Albania, Armenia, Azerbaijan, Bosnia and Herzegovina, Georgia, Iceland, Monaco, Montenegro, North Macedonia, Norway, Republic of Moldova, San Marino, Serbia, Switzerland, Turkey and Ukraine) and by EUROCONTROL.

‡ On behalf of its Member States: Algeria, Angola, Benin, Botswana, Burkina Faso, Burundi, Cabo Verde, Cameroon, Central African Republic, Chad, Comoros, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Djibouti, Egypt, Equatorial Guinea, Eritrea, Eswatini, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Libya, Madagascar, Malawi, Mali, Mauritania, Mauritius, Morocco, Mozambique, Namibia, Niger, Nigeria, Rwanda, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, Somalia, South Africa, South Sudan, Sudan, Togo, Tunisia, Uganda, United Republic of Tanzania, Zambia, Zimbabwe.

§ Belize, Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Nicaragua, Panama, Paraguay, Peru, Uruguay and Venezuela (Bolivarian Republic of).

§ Belize, Bolivia (Plurinational State of), Chile, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Nicaragua, Panama, Paraguay, Peru, Uruguay and Venezuela (Bolivarian Republic of).

** Belize, Bolivia (Plurinational State of), Chile, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Nicaragua, Panama, Paraguay, Peru and Uruguay.

‡‡ Belize, Bolivia (Plurinational State of), Brazil, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Nicaragua, Panama, Paraguay, Uruguay and Venezuela (Bolivarian Republic of).

†† Belize, Bolivia (Plurinational State of), Brazil, Chile, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, and Venezuela (Bolivarian Republic of).

** Cabo Verde, Gambia, Ghana, Guinea, Liberia, Nigeria, Sierra Leone.

§§ Belize, Bolivia (Plurinational State of), Brazil, Chile, Costa Rica, Cuba, El Salvador, Guatemala, Honduras, Nicaragua, Paraguay, Peru and Venezuela (Bolivarian Republic of).

*** Belize, Chile, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Nicaragua, Panama, Paraguay, Peru, Uruguay and Venezuela (Bolivarian Republic of).

‡‡‡ Belize, Chile, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Nicaragua, Panama, Paraguay, Peru and Venezuela (Bolivarian Republic of).

††† Belize, Bolivia (Plurinational State of), Brazil, Chile, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Nicaragua, Panama, Paraguay, Peru and Venezuela (Bolivarian Republic of).

‡‡‡ Belize, Bolivia (Plurinational State of), Brazil, Chile, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Nicaragua, Panama, Paraguay, Uruguay and Venezuela (Bolivarian Republic of).

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**** Belize, Bolivia (Plurinational State of), Chile, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Nicaragua, Panama, Uruguay and Venezuela (Bolivarian Republic of).

‡‡‡‡ Belize, Bolivia (Plurinational State of), Chile, Colombia, Costa Rica, Ecuador, El Salvador, Guatemala, Guyana, Honduras, Nicaragua, Panama, Peru and Uruguay.

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