



**SUPPLEMENT TO THE
2021 ANNUAL REPORT OF THE COUNCIL
TO THE ASSEMBLY**

Contents

ICAO’s Support to the Recovery of Aviation from the COVID-19 Pandemic	1
Council Aviation Recovery Task Force (CART) outcomes	1
ICAO implementation support actions	1
Emerging and Cross-cutting Aviation Issues	2
Public health safety and related facilitation measures	2
Crisis response planning and preparedness	2
Increased use of unmanned aircraft systems (UAS)	3
Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)	3
Feasibility of a long-term aspirational goal for international aviation CO ₂ emissions reduction	3
Cybersecurity and Trust Framework	4
Innovation	4
Progress on ICAO’s Strategic Objectives and Global Plans	6
Safety	6
Global Aviation Safety Plan	6
Health and aviation medicine	6
Accident investigation	6
Regional safety and accident investigation organizations	6
Air Navigation Capacity and Efficiency	6
Global Air Navigation Plan	6
NOTAM Campaign	7
Security and Facilitation	7
Implementation of United Nations Security Council Resolutions	7
Global Aviation Security Plan, security policy and related guidance	7
Air transport facilitation policy and related guidance	8
Traveller Identification Programme (TRIP) Strategy	9
ICAO Public Key Directory (PKD)	9
COVID-19 and facilitation	9
Economic Development of Air Transport	10
Policy and regulation	10
Airports and air navigation services	10
Aviation data and economic analysis	11
Joint financing agreements	11

Cooperation with other international bodies	12
Environmental Protection	12
COVID-19 and environmental protection	12
Noise and local air quality	12
CO ₂ emissions reductions	12
State Action Plans	12
Engagement and outreach	13
ICAO environmental tools	13
Implementation Support, ICAO Auditing Programmes and <i>No Country Left Behind</i> Initiatives.....	14
ICAO Audit Programmes.....	14
Universal Safety Oversight Audit Programme Continuous Monitoring Approach (USOAP-CMA)	14
Universal Security Audit Programme Continuous Monitoring Approach (USAP-CMA)	14
Regional Achievements	14
Regional Office achievements.....	14
Planning and Implementation Regional Groups (PIRGs) and Regional Aviation Safety Groups (RASGs) achievements	15
Human Resources Development	16
Global Aviation Training section	16
Other training activities	18
Technical Cooperation and Assistance.....	18
Technical Cooperation Programme.....	18
Global Partnerships for Sustainable Development	21
Resource mobilization of voluntary funds	21
United Nations 2030 Agenda for Sustainable Development.....	21
Advocacy and public outreach	21
Supporting Strategies	22
Operational response to COVID-19	22
Corporate performance and risk management	22
Risk management.....	22
Business planning	23
Legal and External Relations Services	23
Treaty Developments	23
General Work Programme of the Legal Committee	23
Settlement of Differences	25

Working methods of the Council and Standing Committees	26
Consultations regarding the EUR/NAT Regional Office	26
Coordination with Ottawa and Quebec regarding COVID-19 information.....	26
Changes to the system of administration of justice	27
ICAO Legal Seminar, Seoul, Republic of Korea	27
Human resources management and gender equity	27
Ethics.....	28
Transparency	29
Language services and multilingualism	29
Information security and ICT management	30
Finances.....	30
Revenue-generating activities	30
REVIEW OF ACTION TAKEN UP TO 30 JUNE 2022 ON RESOLUTIONS OF THE 40th SESSION OF THE ASSEMBLY	31

ICAO's Support to the Recovery of Aviation from the COVID-19 Pandemic

Council Aviation Recovery Task Force (CART) outcomes

ICAO continues to monitor and assess the traffic recovery from the COVID-19 pandemic and the associated economic impact. Air travel recovery picked up since February 2022 owing to the relaxation of restrictions against Omicron variants along with the pent-up travel demand. ICAO's latest analysis reveals clear signs of a strong global recovery in air traffic, characterized by increasing airline confidence and a range of regional air connectivity and air travel facilitation improvements. The number of air passengers for the first half of 2022 increased by around 70 per cent compared to the same period in 2021, with noticeable improvements in international travel. As conditions for travel demand remain supportive overall, passenger traffic in 2022 as a whole is expected to recover to around 80 per cent of the pre-pandemic levels.

When the Targeted Exemptions (TE) system was launched in April 2021, it was established that the system would remain in operation for at least one year and States would be given at least three months' advance notice before the system was to be turned off. Dashboards monitor how the system is used. As at 30 June, there were a total of 13 active TEs. The last one is due to expire on 23 March 2023. The TE system is expected to remain operational at least until that date.

ICAO implementation support actions

Newly approved Implementation Packages (iPacks) developed during the reporting period include:

- Developing a National Aviation Safety Plan (NASP) (Safety)
- Preparing for ICAO USOAP CMA Activities (Safety)
- Implementing a Visible Digital Seal for Non-Constrained Environments (VDS-NC) for Travel-Related Health Proofs (Security and Facilitation)

COVID-19 Response and Recovery Implementation Centre (CRRIC)

While States are adapting their measures to adapt to the change of the pandemic situation, they continue to use the COVID-19 Response and Recovery Implementation Center (CRICC) to consult applications providing information on State risk levels as well as public health corridors (PHCs). In particular, those applications are part of the PHC iPACK and are deployed to the States under these projects.

Emerging and Cross-cutting Aviation Issues

Public health safety and related facilitation measures

The ICAO Regional Offices held regional meetings of the Collaborative Arrangement for the Prevention and Management of Public Health Events in Civil Aviation (CAPSCA) in February 2022 in the Western and Central African (WACAF) and Eastern and South African (ESAF) Regions in preparation for the [CAPSCA Global Symposium](#). On 14 February 2022, the COVID-19 Aviation Scientific Assessment Group (CASAG) published a scientific report entitled Omicron Variant Knowns, Unknowns and Recommendations. This report was included in State letter AN 5/28-22/42, published in April 2022, which provided States with guidance on maintaining flights during the COVID-19 pandemic transition period, recommendations to mitigate the spread of COVID-19, as well as principles and examples of factors to consider when lifting measures during the COVID-19 transition period.

The CAPSCA Global Symposium (announced in State letter AN 5/28-21/83) took place online from 29 to 31 March 2022 and was well attended by States and industry organizations. The Symposium was held under the theme *Impact of Public Health Events in Aviation – Lessons Learnt for a Resilient Future* and focused on understanding States' needs and strengthening the CAPSCA programme for the future. At the meeting, participants agreed on the CAPSCA Symposium Statement, supporting implementation of the Symposium's conclusions and the development of an aviation health plan, and requesting CAPSCA to continue to build closer collaboration with all relevant organizations to assist States through technical support.

Implementation assistance through ICAO's Implementation Package (iPack) on establishing a public health corridor continued, and ten iPacks were sponsored. The first public health corridor, between Angola and Mozambique, was successfully established in March 2022, while the other nine are in different stages of development.

Crisis response planning and preparedness

On 12 and 13 May 2022, ICAO hosted two sessions of the Humanitarian Assistance and Disaster Reduction in Aviation (HADRA) expert group during the 2022 Humanitarian Networks and Partnerships Week (HNPW), organized by the United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA). The objective of the sessions was to convene aviation and humanitarian stakeholders in order to share the latest available guidance and initiatives to facilitate their coordination in the aftermath of a disaster.

In line with a decision made by the European and North Atlantic (EUR/NAT) Directors General of Civil Aviation, work has begun to improve the regional crisis management framework based on lessons learned from public health, space weather, nuclear, volcanic ash and conflict zone events.

The Asia and Pacific (APAC) Regional Office continued to support multiple major regional air traffic management contingency events, including contingency operations in the Kabul (Afghanistan) flight information region (FIR) following the withdrawal of all air traffic services in August 2021. In January 2022, the APAC Regional Office responded to the Tonga volcanic eruption and tsunami event, making several attempts to communicate with Tongan aeronautical authorities and initiating direct coordination with neighbouring States and United Nations humanitarian relief agencies. The APAC Office also actively supported Myanmar and its neighbours and airspace users in preparation for the withdrawal, on 25 May 2022, of communications services provided by SITA due to sanctions placed on Myanmar by various governments.

Increased use of unmanned aircraft systems (UAS)

During the first half of 2022, ICAO's iPack entitled "Establishing a Regulatory Framework for Unmanned Aircraft Systems (UAS)" was deployed. Furthermore, the virtual classroom course Unmanned Aviation Fundamentals was taught several times, and the fourth edition of *Unmanned Aircraft Systems Traffic Management (UTM) – A Common Framework with Core Principles for Global Harmonization* was made available at <https://www.icao.int/safety/ua>.

Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)

The list of States volunteering to participate in CORSIA each year from 2021 onwards was updated in 2022, bringing the total to 107.

In March 2022, the ICAO Council considered updated inputs by the Committee on Aviation Environmental Protection (CAEP) for the 2022 CORSIA periodic review, which included: further assessment of the impacts of the COVID-19 pandemic on CORSIA and its baseline emissions; further assessment of the costs of CORSIA implementation on States and aeroplane operators; and a review of the analysis of possible market distortion in the context of CORSIA design elements. The CAEP analyses and related key takeaway messages can be accessed on the ICAO website.

At its Twelfth Meeting (CAEP/12), CAEP agreed on recommendations for amendments to Annex 16 — *Environmental Protection*, Volume IV — *Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)*, and its associated *Environmental Technical Manual (Doc 9501)*, Volume IV — *Procedures for demonstrating compliance with the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA)*.

Phase III of the ACT-CORSIA buddy partnerships continued in 2022 with the involvement of 134 supporting and receiving States. It focused on training on CORSIA CO₂ emissions reporting requirements, namely: the provision of total 2021 emissions for each aeroplane operator; the provision of aggregated figures for State pairs subject to (and not subject to) offsetting requirements; and the submission of information to claim emissions reductions from CORSIA eligible fuels.

Feasibility of a long-term aspirational goal for international aviation CO₂ emissions reduction

The Committee on Aviation Environmental Protection (CAEP) conducted a technical analysis through a collaborative, inclusive and transparent process. At its Twelfth Meeting in February 2022, CAEP unanimously approved a technical report on the feasibility of a series of scenarios for a long-term aspirational goal for international aviation CO₂ emissions reduction (LTAG), emphasizing the potential for significant CO₂ reductions through in-sector measures including innovative aircraft technologies, operations and fuels.

CAEP recommended that the LTAG report serve as the basis for further consideration of the feasibility of an LTAG and be made public, free of charge, to ensure that all States and stakeholders could consider its findings. Upon decision of the Council in March 2022, the LTAG report was published on the ICAO public website as input for further use and consideration by all Member States and stakeholders during the LTAG Global Aviation Dialogues (GLADs), which were held in March and April 2022 as a series of five regional online events.

The questions and answers brought forward by the GLADs participants with respect to the LTAG report, together with the views expressed on the building blocks for LTAG considerations, were compiled and made

available on the GLADs website. Overall, the GLADs helped to gain deeper insight into the LTAG report and relevant building blocks, and would help to support well-informed deliberations at the ICAO High-level Meeting on the feasibility of a long-term aspirational goal for international aviation CO₂ emissions reductions (20 to 22 July 2022).

Cybersecurity and Trust Framework

Following the ICAO Council's approval of a new mechanism for addressing cybersecurity in ICAO, the Cybersecurity Panel (CYSECP) was established and held its first meeting from 16 to 20 May 2022. The Panel will continue the work of the Secretariat Study Group on Cybersecurity (SSGC), which was dissolved in May 2022 after approximately five years of working to support the aviation sector in addressing cybersecurity and cyber resilience.

Between January and May 2022, the SSGC concluded its work on legal aspects related to the analysis of the adequacy of international air law instruments to address cyber-attacks against civil aviation. That work was presented to the ICAO Legal Committee in March 2022 for its consideration and decision on next steps in relation to that file. In addition, the SSGC had initiated work on a glossary of cybersecurity terminology for civil aviation, which was transferred to the CYSECP to continue that task.

On the subject of training, the fourth session of ICAO's aviation cybersecurity course Foundations of Aviation Cybersecurity Leadership and Technical Management, developed in partnership with Embry-Riddle Aeronautical University, was delivered in-person in May 2022. The Managing Security Risk in ATM course, developed in partnership with EUROCONTROL, is scheduled for delivery in November 2022. ICAO is currently working on a third course focusing on cybersecurity oversight in aviation in partnership with the United Kingdom Civil Aviation Authority.

In regard to the Trust Framework, ICAO continued to advance its work on operational information security provisions as well as on proposals for the Trust Framework's governance. The Council analysed the initial proposal on governance and decided that it was premature to take a decision until further information was available on the impact on States and international organizations and the requirements to participate in a trust framework for international civil aviation (C-DEC 225/8 refers).

In the meantime, technical work on the Trust Framework continues to be under way with a focus on enabling trusted, safe and resilient ground-ground, air-ground and air-air exchange of information among aviation stakeholders, and on defining a governance model that can meet the expectations of the international aviation community.

Innovation

Following the identification of priority themes by the ICAO-Industry Consultative Forum (ICF) and their endorsement by the ICAO Council, the second meeting of the ICF was held on 21 March 2022. The meeting was dedicated to sustainable aviation fuels (SAFs) and lower carbon aviation fuels (LCAFs) and to highlighting their key role in the sector's emissions reductions efforts. Speakers shared key lessons learned from SAF and LCAF developments, which would be crucial for the effective scale-up of SAFs and LCAFs and expectations regarding their evolution moving forward.

In April 2022, ICAO's Secretary General adopted the ICAO Secretariat Strategy on Innovation with a view to scoping and defining the areas of accountability of the Secretariat with regard to cross-organizational innovation initiatives. In particular, ICAO aims to:

- a) raise awareness of innovation among States, industry partners and the aviation community at large and promote its potential benefits;
- b) encourage and support the timely deployment of sustainable innovative technologies, processes and capacity-building activities based on operational needs;
- c) provide a framework that allows the industry to engage with ICAO at the appropriate level, and, where appropriate within the existing frameworks, that enables ICAO to develop well-informed policies and carry out innovative implementation support initiatives; and
- d) provide a framework that enables ICAO to engage academia in the development of innovative studies, training and projects through the support of States and industry.

Progress on ICAO's Strategic Objectives and Global Plans

Safety

Global Aviation Safety Plan

In January 2022, a draft 2023–2025 edition of the Global Aviation Safety Plan (GASP), which had been prepared by the GASP Study Group (GASP-SG), was provided by the Secretariat to the Air Navigation Commission (ANC)'s Ad Hoc Working Group (AHWG) on the 41st Assembly (AHWG/A41) and Commission Group 5 (CG-5). The AHWG/A41 and CG-5 held a joint meeting to review the draft GASP in March 2022 and made recommendations to the Secretariat. In April 2022, the ANC reviewed a draft Assembly working paper entitled A Comprehensive Strategy for Aviation Safety: Endorsement of the Updated Global Aviation Safety Plan, which contained a revised 2023–2025 edition of the GASP and proposals to address the recommendations issued by the AHWG/A41 and CG-5. The ANC agreed on recommending the proposed update to the 2023–2025 edition of the GASP for approval by the Council.

Health and aviation medicine

The Aviation Medicine Working Group (AVMED) and Mental Health Working Group (MHWG) of the Medical Provisions Study Group (MPSG) reviewed COVID-19 guidance in view of scientific developments, and ICAO published an updated Electronic Bulletin (EB 2022/8) entitled Post-COVID-19 Infection Protocol for Medical Certification on 7 February 2022. Further work to explore options for telemedicine in aviation medical certification and a review of the ICAO Mental Health Framework are ongoing.

Accident investigation

In 2022, the Accident Investigation Panel (AIGP), in collaboration with the European Civil Aviation Conference (ECAC) Air Accident and Incident Investigation Group of Experts (ACC), provided guidance on the investigation of accidents during pandemic conditions. During an investigation of an accident in China involving a Boeing 737, China's Air Accident Investigation Authority benefitted from this guidance in arranging for the participation of the United States National Transportation Safety Board (NTSB) and other entities.

Regional safety and accident investigation organizations

The ICAO Regional Accident and Incident Investigation Organizations Cooperative Platform (RAIO CP) welcomed a newly created accident and incident investigation regional cooperation mechanism (ARCM), the Middle East North Africa Aircraft ARCM (MENA ARCM), to the RAIO CP Quarterly Meeting on 19 May 2022.

Air Navigation Capacity and Efficiency

Global Air Navigation Plan

Following the 2021 High-level Conference on COVID-19 (HLCC 2021), the Secretariat, in collaboration with the Global Air Navigation Plan (GANP) Study Group (GANP-SG), its working groups, the Aviation System Block Upgrades Panel Project Team (ASBU PPT) and the GANP Performance Expert Group (GANP-PEG), prepared a minor update to the GANP (Doc 9750) to be presented for endorsement at the 41st Session of the ICAO Assembly as part of the GANP's management process.

NOTAM campaign

A series of recommendations to continue to reduce the number of notices to airmen (NOTAMs) in the global air transport system were developed in 2022, for transmission to States.

Security and Facilitation

Implementation of United Nations Security Council Resolutions

In February 2022, ICAO and the United Nations Office of Counter-Terrorism (UNOCT) signed an agreement to further advance cooperation in counter-terrorism to strengthen the security of international air transport, trade and border management, building on ICAO's key role in supporting the implementation of the United Nations Global Counter-Terrorism Strategy (see United Nations General Assembly Resolution 75/291 (A/RES/75/291)) and Security Council resolutions on counter-terrorism, aviation security, facilitation (identity and border control management), unmanned aircraft systems and cybersecurity.

Following the successful launch and pilot implementation in Botswana of the UNOCT Programme on Threat Assessment Models for Aviation Security, ICAO worked with the governments of Nigeria and the Philippines to support the Programme's further deployment in Africa and Southeast Asia.

As part of its collaboration with UNOCT, ICAO gave a presentation on the Autonomous and Remotely Operated Systems (AROS) Programme and ICAO's role and activities relating to unmanned aircraft systems (UAS) during a side event of the High-level International Conference on Regional Cooperation among Central Asian States within the Framework of the Joint Plan of Action (JPoA) for the Implementation of the United Nations Global Counter-Terrorism Strategy (UNGCTS) in Tashkent.

As a member of the United Nations Global Counter-Terrorism Coordination Compact, ICAO actively collaborated with working groups on border management and law enforcement relating to counter-terrorism, emerging threats and critical infrastructure protection, and participated as a speaker in various thematic webinars organized by working groups on UAS, cybersecurity issues and biometrics. In addition, ICAO recently participated in the launch of technical guidelines for Member States to facilitate the implementation of United Nations Security Council Resolution 2370 (2017), relevant international standards and good practices on preventing terrorists from acquiring weapons.

ICAO, as a partner under the United Nations Countering Terrorist Travel Programme, together with UNOCT, the Counter-Terrorism Committee Executive Directorate (CTED), the United Nations Office on Drugs and Crime (UNODC) and the United Nations Office of Information and Communications Technology (OICT), continues to provide support to States in building their capacities to prevent, detect, investigate and prosecute terrorist offences and other serious crimes. Under the Programme, ICAO is particularly focused on ensuring the proper collection and analysis of both Advance Passenger Information (API) and Passenger Name Record (PNR) information as important components of efforts to counter terrorist travel. Fifty-one States have participated in the Programme as at June 2022.

Global Aviation Security Plan, security policy and related guidance

During the fifth meeting of its 225th Session, the ICAO Council adopted Amendment 18 to Annex 17 — *Security*. The amendment's effective and applicability dates are 18 July 2022 and 18 November 2022, respectively.

New and updated guidance material was endorsed at the Thirty-third Meeting of the Aviation Security Panel (AVSECP/33) in May 2022 and subsequently approved for distribution. The guidance material addresses areas

such as: the reporting of aviation security incidents; the development and processing of aircraft operator security programmes and supplementary station procedures; and items or equipment affected by security screening technologies. The upcoming thirteenth edition of the ICAO *Aviation Security Manual* (Doc 8973 — Restricted) will incorporate new and updated best practices in these areas.

The Secretariat, in collaboration with the Working Group on Threat and Risk (WGTR) of the Aviation Security Panel, started working on an updated third edition of ICAO's *Aviation Security Global Risk Context Statement* (Doc 10108 — Restricted) considering potential security threats to civil aviation and the global risk picture. The updated version of Doc 10108 will be published in all six ICAO languages.

A better understanding of the implementation challenges of the Global Aviation Security Plan (GASeP) has been possible thanks to an internal evaluation carried out by ICAO's Office of Internal Oversight (OIO) of the GASeP in 2021 and lessons learned over the past five years regarding the GASeP's implementation. At the Thirty-third Meeting of the Aviation Security Panel (AVSECP/33), it was agreed that key findings and recommendations should be taken into account when preparing the next revision of the GASeP.

Air transport facilitation policy and related guidance

Owing to the complex and multifaceted nature of air transport facilitation, certain stakeholders at the national and international levels have not received relevant training, which has often resulted in difficulties to coordinate and implement facilitation measures. To address this issue and to assist States in building capacities and enhance implementation of Annex 9 — *Facilitation* provisions, ICAO has continued to develop training courses including the ICAO Traveller Identification Programme (TRIP) Strategy course, which is designed to facilitate the implementation, and give a comprehensive overview, of the ICAO TRIP Strategy. The ICAO TRIP Strategy is aimed at establishing the goal and objectives of traveller identification management, leading and reinforcing a global approach and providing direction for action by ICAO, States and the many international, regional and industry partners involved in identification management. The objective of the course is to consolidate the knowledge of managers in charge of implementing the five TRIP elements with a view to improving competencies in identification management and ensuring interoperability and internal cooperation. The five-day course is available in an online and classroom format in English and was officially launched in the second quarter of 2022.

Additionally, the Assistance to Aircraft Accident Victims and their Families course is being developed to provide representatives from Civil Aviation Authorities (CAAs), government officials, and aircraft and airport operators with the necessary competencies to develop or refine appropriate family assistance legislation, regulations, policies and plans in accordance with the *ICAO Policy on Assistance to Aircraft Accident Victims and their Families* (Doc 9998) and ICAO's *Manual on Assistance to Aircraft Accident Victims and their Families* (Doc 9973). This three-day course supports the upgrade, in Annex 9, of a Recommended Practice on establishing legislation, regulations and/or policies in support of assistance to aircraft accident victims and their families to an international Standard, and the introduction of a new Recommended Practice in Annex 9 addressed to aircraft and airport operators, on the development of appropriate plans to provide timely and effective assistance to aircraft accident victims and their families. The course is available in an online and classroom format in English.

The ICAO Working Group on Human Trafficking developed a Comprehensive Strategy for Combatting Human Trafficking in the Aviation Sector. It is intended to equip States, CAAs, organizations, aircraft operators and airports with guidance and recommendations to inform their development of comprehensive counter-trafficking strategies in line with ICAO Assembly Resolution A40-16 (Consolidated statement of continuing ICAO policies related to facilitation).

Traveller Identification Programme (TRIP) Strategy

In line with a ministerial declaration stressing the importance of common standards, interoperability and mutual recommendation of digital applications and Recommendation 8/1 adopted at the 2021 High-level Conference on COVID-19, and to support States in promoting and adopting a policy of mutual recognition of health proofs to facilitate the reopening of borders, a guide on handling Visible Digital Seals for non-constrained environments (VDS-NC) for travel-related health proofs and EU Digital COVID-19 Certificates was approved by ICAO's Technical Advisory Group on the Traveller Identification Programme (TAG/TRIP) on 15 April 2022. The guide explores the specific compatibility between the two schemes.

ICAO continues to be a key contributor to ongoing multilateral discussions on the interoperability of health proofs, particularly those coordinated by the World Health Organization (WHO). A new version of the specification for the Visible Digital Seal for non-constrained environments (VDS-NC version 1.3) has been published, improving automated usage possibilities as part of these international efforts.

In addition, ICAO is developing guidance material on how States can create and use vaccine certificates for travel in line with the VDS-NC specifications, as well as a dedicated VDS-NC Implementation Package (iPack). The objective of the VDS-NC iPack is to support the implementation of VDS-NC specifications for both the issuance and inspection of health proofs, either under the existing electronic Machine Readable Travel Document (eMRTD) Public Key Infrastructure (PKI) or any newly established health PKI, as decided by States.

ICAO Public Key Directory (PKD)

As at January 2022, 82 passport-issuing entities were participating in the ICAO PKD. In line with ICAO Assembly Resolution A40-16, efforts to promote participation in the PKD have continued, including the provision of increased services at a lower cost and active outreach to States managing ePassport projects. Work is also under way to support States in using the system: in early 2022, for example, a coach worked with Mongolian authorities to this end, carrying out an on-site visit in June 2022.

In January 2022, the first ICAO Health Master List was published to support the international availability of public key certificates associated with proofs for COVID-19 vaccination and testing, and therefore facilitate the international validation of health proofs during travel. The platform was developed based on an innovative model for service delivery introduced in collaboration with the PKD community and fully approved by the PKD Board, and, as a global public good, is available free of charge.

In April 2022, four private sector companies joined a pilot project on the private sector's use of PKD data, joining 11 other companies. Feedback from all 15 companies will inform future work with regard to the private sector's use of the PKD, which may support efforts to achieve more seamless and contactless travel.

The ICAO Council was briefed on these initiatives on 26 January 2022. Further details are provided in an Assembly working paper on developments pertaining to the ICAO PKD, a draft of which was tabled in Council working paper C-WP/15321 at the second meeting of the Air Transport Committee during the 225th Session of the Council, which took place on 4 February 2022. The working paper was endorsed, with minor modifications, for submission to the Assembly.

COVID-19 and facilitation

ICAO continues to provide support to Member States to build capacities and ensure appropriate implementation of facilitation measures to most effectively manage air travel during the COVID-19 pandemic. An Implementation Package (iPack) on strengthening national Air Transportation Facilitation Committees is available in Arabic, English, French and Spanish, and is currently being deployed in eight Member States across all ICAO Regions.

In addition, an iPack on implementing a Visible Digital Seal for non-constrained environments (VDS-NC) for travel-related health proofs has been developed and is currently being deployed across all ICAO Regions to assist Member States in supporting global interoperability for the issuance, exchange and verification of various health proofs, which, in some instances, are required for international travel.

Economic Development of Air Transport

Policy and regulation

The Sixteenth Meeting of the Air Transport Regulation Panel was held from 11 to 14 April 2022 in an online format. The Panel considered the following:

- a) the development of an international agreement on the liberalization of air carrier ownership and control;
- b) the benefits and challenges of liberalization and barriers to opening market access for air cargo operations;
- c) the economic aspect of international operations of unmanned aircraft; and
- d) guidelines on States' financial and economic support and aids to industry service providers in case of industry slumps.

The Panel conducted thorough discussions on these matters, and its conclusions and recommendations were captured in a Panel report. In the report, the Panel recommended that work on the development of a draft Convention on Foreign Investment in Airlines should be continued through a working group in order to resolve the remaining issues of concern, with a view to making further progress in the task. It also recommended the creation of two working groups on the liberalization of air cargo services and the economic aspect of international operations of unmanned systems. Finally, the Panel recommended that ICAO's guidance on States' financial and economic support and aids to industry services in case of industry slumps should be kept current and that States should be encouraged to use the guidance and adhere to the key principles contained therein. In addition, it recommended that the Secretariat should expedite actions to set up a compendium on States' economic and financial measures to address the impact of the COVID-19 pandemic in view of its usefulness as a platform for sharing information and best practices among States. The Panel's recommendations are expected to be submitted to the Air Transport Committee for consideration and approval during the 226th session of the Council.

In February 2022, ICAO and the United Nations Economic Commission for Europe (UNECE) published new digital air cargo technical specifications guidance to help accelerate the transition towards safer and more resilient supply chains while making important contributions to COVID-19 response and recovery efforts. The digital innovations will enable the air transport sector to transition away from the long-standing paper-based documents used to facilitate the movement of global air freight, promoting a contactless air cargo environment and greater cross-border trade resilience in the face of future pandemic threats and the rapidly evolving supply chain.

Airports and air navigation services

A stand-alone guidance manual on economic analyses for aviation infrastructure projects was finalized in 2022 and will be published in all of ICAO's six official languages. The objective of the manual is to provide practical guidance on conducting analyses to States, airport managing and operating entities, air navigation services providers and designated charging and regulatory authorities, to support investment decisions in aviation infrastructure.

Furthermore, an assessment was carried out on the need to update, as appropriate, ICAO's *Manual on Air Navigation Services Economics* (Doc 9161), for example with respect to air navigation services charges and the use of technologies to encourage improved environmental performance.

In coordination with the Meteorology Panel (METP), work is under way to develop fair, transparent and equitable options for an appropriate global cost recovery mechanism for the provision of space weather information services, in line with ICAO policies and guidance.

In addition, a general review of ICAO's policies on charges contained in *ICAO's Policies on Charges for Airports and Air Navigation Services* (Doc 9082) is being conducted to ensure that the document is up to date and takes into consideration, inter alia, the long-term impact of the COVID-19 pandemic.

Aviation data and economic analysis

As the custodial agency of Sustainable Development Goal indicator 9.1.2 (Passenger and freight volumes, by mode of transport), ICAO provided the United Nations with air transport data, which are currently available on a United Nations platform¹ for monitoring progress towards achieving the Sustainable Development Goals.

In its efforts to facilitate Member States' use of big data, the Secretariat developed a series of interactive dashboards, which will be made available to Member States, to visualize traffic, as well as a draft guidance document on the use of big data.

Eleventh Session of the Statistics Division (STA/11)

The Eleventh Session of the Statistics Division (STA/11) was held online from 4 to 8 April 2022. It was attended by 171 Member State delegates, alternates and advisers, and 14 observers from nine international organizations. The Division's deliberations covered various subjects of latest interest to ICAO and Member States, including: ICAO air transport reporting forms; big data analytics, including in collaboration with the United Nations and other international organizations; long-term traffic forecasts; the Aviation Satellite Account methodological framework; and the ongoing development of a global aviation competitiveness index. The Division adopted five recommendations related to these areas.

Aviation Competitiveness Working Group

At the STA/11, participants reviewed, approved and encouraged the work of the Aviation Competitiveness Working Group (ACWG), which is tasked with developing methodologies and data sources for establishing a global aviation competitiveness index. The purpose of the index is to measure States' abilities to create and maintain value from their civil aviation sector.

Joint financing agreements

ICAO continued to undertake its responsibilities for the administration of the Danish and Icelandic Joint Financing Agreements, to which 24 and 25 States, respectively, are contracting parties. These Agreements cover the provision, in Greenland and Iceland, of air traffic control, communications and meteorological services to international civil aviation over the North Atlantic. The administration of the Agreements is being carried out by the Joint Financing Section, which operates within the Economic Development branch of the Air Transport Bureau. The Section is also responsible for the administration of the Arrangement on the Joint

¹ <https://unstats.un.org/sdgs/dataportal/database>

Financing of a North Atlantic Height Monitoring System and the Satellite Distribution System for Information Relating to Air Navigation.

Cooperation with other international bodies

ICAO is conducting a joint project with the Universal Postal Union (UPU) using commodity, trade and e-commerce transactional data to identify and quantify logistical constraints on e-commerce activity. This [project](#) is being carried out under the auspices of the Aviation Data and Analysis Panel and was recently presented during the Eleventh Session of the Statistics Division (STA/11).

Environmental Protection

COVID-19 and environmental protection

As requested at the 40th Session of the ICAO Assembly, the Committee on Aviation Environmental Protection (CAEP), at its Twelfth Meeting, updated aircraft noise, engine emissions and greenhouse gas trends. CAEP's environmental trends assessment incorporated new passenger, freighter and business jet fleet forecasts, which were developed in collaboration with the Aviation Data and Analysis Panel (ADAP) and reflected impacts from the COVID-19 pandemic.

Noise and local air quality

At its Twelfth Meeting, CAEP agreed on proposed amendments to Annex 16 — *Environmental Protection*, Volume I — *Aircraft Noise*, including amendments for compliance with the Air Navigation Commission's "Standard for Standards", and new guidance material for the measurement of helicopter hover noise. CAEP also recommended the publication of a report on noise technology research for fixed wing aircraft and agreed on future work on noise certification approaches for emerging technology aircraft.

CAEP continued its work related to supersonic transport aircraft and an exploratory study to better understand the environmental impacts resulting from the introduction of such aircraft. At its Twelfth Meeting, CAEP recommended the development of landing and take-off noise Standards and Recommended Practices (SARPs) for supersonic aeroplanes during the following cycle, as well as an update of all the elements of Annex 16, Volume II — *Aircraft Engine Emissions* and the *Environmental Technical Manual* (Doc 9501), Volume II — *Procedures for the Emissions Certification of Aircraft Engines*, including the regulatory limits for modern supersonic engines (without afterburning technology), based on emissions data availability.

CO₂ emissions reductions

At its Twelfth Meeting, CAEP recommended that the Council amend Annex 16, Volume III — *Aeroplane CO₂ Emissions*, and Doc 9501, Volume II, to include, inter alia, improvements to definitions, clarification on the reference geometric factor (RGF) parameter, and information on reporting data to the certifying authority.

State Action Plans

ICAO continued to work with Member States to support the development and updating of State Action Plans. By June 2022, 128 Member States, representing approximately 98 per cent of international aviation traffic, had voluntarily submitted action plans to ICAO. These successful results demonstrate the high interest and engagement of Member States in this initiative, as well as the positive impact of ICAO's assistance and capacity-building activities. State Action Plans have continued to be an essential tool for States to communicate their national plans for climate action in the context of international aviation, and have also served as an important vehicle for ICAO to monitor progress towards the achievement of Member States' collective

global aspirational goals.

Engagement and outreach

As part of the consultative process towards a long-term global aspirational goal for international aviation CO₂ emissions reduction (LTAG) among States and other stakeholders, ICAO organized Global Aviation Dialogues (GLADs) on the feasibility of an LTAG as a series of five regional events in March and April 2022. The aim of the GLADs was to provide a platform for information sharing, raise awareness on the LTAG process and technical analyses, and facilitate the exchange of views needed for further LTAG work and decision-making.

Through the GLADs, participants were able to gain insight into a technical report on the feasibility of an LTAG, which had been released prior to the dialogues to serve as input. To support well-informed deliberations at the ICAO High-level Meeting on the feasibility of a long-term aspirational goal for international aviation CO₂ emissions reductions, scheduled to take place in July 2022, and the 41st Session of the Assembly, GLADs participants exchanged views on the building blocks for an LTAG, including the current scientific understanding, context and expected potential contributions of technology, operations and fuels, and the level of ambition for the LTAG. Participants also discussed possible means of implementing the LTAG, the expected support to be provided to States through action plans and road maps, and ways of monitoring progress.

In addition, ICAO continued to develop its Tracker Tools website, which contains all the latest information on aviation CO₂ emissions reduction initiatives grouped under the three streams of technology, operations and fuels, as well as information on aviation net zero initiatives.

ICAO environmental tools

The United Nations' system-wide version of the ICAO Carbon Emissions Calculator (ICEC), the official tool used to estimate the air travel-related portion of United Nations agencies' carbon inventories, was updated and released throughout the United Nations system. The ICAO Secretariat continued to manage and develop the ICEC Application Programming Interface (API) to enable the ICEC's easy integration into external websites and services.

ICAO continued to manage other environment-related tools associated with the Organization's State Action Plan initiative, including the Aviation Environmental System (AES), Environmental Benefits Tool (EBT), Marginal Abatement Cost Curve tool and ICAO Fuel Savings Estimation Tool (IFSET).

Implementation Support, ICAO Auditing Programmes and *No Country Left Behind* Initiatives

ICAO Audit Programmes

Universal Safety Oversight Audit Programme Continuous Monitoring Approach (USOAP-CMA)

In the first five months of 2022, 10 activities were carried out under the Universal Safety Oversight Audit Programme Continuous Monitoring Approach (USOAP-CMA), including six audits, one mandatory information request (MIR), two validation activities and one State safety programme implementation assessment (SSPIA). One of these activities validated the steps taken by the Eastern Caribbean Civil Aviation Authority (ECCAA), a regional authority responsible for safety oversight on behalf of the Member States of the Organisation of Eastern Caribbean States (OECS), to resolve a significant safety concern (SSC). During the first six months of 2022, one regional workshop was organized by the European and North Atlantic (EUR/NAT) Regional Office.

The ICAO Council, at the sixth meeting of its 225th Session, agreed on revisions to the recommendations of the Ad hoc USOAP-CMA Advisory Group (USOAP-AG) that resulted from consultation, as amended by the Air Navigation Commission. The Secretariat developed an action plan to implement the 42 recommendations, as agreed by the Council, and will continue to report on the progress of the USOAP-CMA's evolution and operation to the Council on an annual basis.

Universal Security Audit Programme Continuous Monitoring Approach (USAP-CMA)

Four ICAO Universal Security Audit Programme Continuous Monitoring Approach (USAP-CMA) audits were carried out in the first half of 2022, bringing the total number of documentation-based USAP-CMA audits to 46, and on-site USAP-CMA audits to 117. During this period, one regional seminar and workshop was organized in Paris, France, and a USAP-CMA auditor training course was implemented, with the support of the United Arab Emirates, to ensure that enough qualified auditors were available to support the Programme. As at 30 June 2022, 16 significant security concerns (SSeCs) remained unresolved in eight States.

Regional Achievements

Regional Office achievements

All ICAO Regional Offices continued to engage with States in their response to the evolving COVID-19 pandemic. In the Asia Pacific Region, this work was conducted through the Asia and Pacific (APAC) COVID-19 Contingency and Recovery Planning Group (ACCRPG), its three sub-groups and the COVID-19 Response and Recovery Implementation Centre (CRRIC). Activities included a review of and updates to Targeted Exemptions, updates regarding the implementation of the recommendations of the Council Aviation Recovery Task Force (CART), and updates to public health risk mitigation measures (PHRMMs) and Travel Protocol measures. The ACCRPG served as an efficient platform for sharing and facilitating good practices among States in the Asia Pacific Region with respect to their border-opening strategies.

Regional Offices also monitored and facilitated a number of Implementation Packages (iPacks), including on facilitation, aviation security, safety, aerodromes and public health corridors, for recipient States, and assigned Subject Matter Experts (SMEs). States benefitting from the iPacks included the Cook Islands, Malaysia, Papua New Guinea and Samoa, while work is under way in coordination with recipient States for the delivery of more iPacks.

Through ICAO, States in the North American, Central American and Caribbean (NACC) Region received funding for iPack implementation and targeted capacity-building assistance. Agreements were reached between ICAO and the United States of America Federal Aviation Administration (FAA), the Singapore Aviation Academy and Government of Malaysia to collaborate in the development and delivery of the Model Aviation Safety Oversight System, developed and managed by the FAA as a turn-key safety oversight system. Such approach is considered to be cost-effective and could be replicated in other regions.

The ICAO Regional Office for South America launched an implementation support project for Suriname under the new Implementation Support Policy and in cooperation with the Air Navigation Bureau and Technical Cooperation Bureau. ICAO's iPack on aviation security was implemented in Ecuador, and its iPack on public health corridors was implemented in Colombia, Peru and Uruguay.

In the Western and Central African (WACAF) Region, efforts were made to implement the CART's recommendations through regional mechanisms and events. In coordination with the Air Transport Bureau and Technical Cooperation Bureau, the Regional Office has also been working to promote iPacks and has been coordinating with States to facilitate their implementation, given their importance in supporting the recovery of air transport. As a part of this work, iPacks were delivered in Burkina Faso, Cameroon, Côte d'Ivoire, the Gambia, Ghana, Mali, Mauritania, Sierra Leone and Togo. The Seventh Africa Indian Ocean (AFI) Aviation Week, which took place in Abuja, Nigeria, from 16 to 20 May 2022, served as an opportunity to call on States to consider the deployment of iPacks.

In the area of safety, work has begun in the European and North Atlantic (EUR/NAT) Region to develop a monitoring mechanism for the implementation of Europe's regional aviation safety plan. In the area of runway safety, a seminar was held at the EUR/NAT Regional Office on 22–24 March 2022 in collaboration with the European Union Aviation Safety Agency (EASA), FAA, EUROCONTROL, EUROCAE, the International Air Transport Association (IATA), International Coordinating Council of Aerospace Industries Associations (ICCAIA), Airports Council International (ACI) and Civil Air Navigation Services Organisation (CANSO).

ICAO's Middle East (MID) Regional Office has begun coordinating with relevant States to ensure the safe, effective and timely implementation of the ICAO Council's decision concerning the establishment of the Doha flight information region (FIR)/search and rescue region (SRR), in particular the implementation of Phase One, related to the FIR/SRR's approved dimensions (see C-DEC 225/10). A coordination meeting was held online on 19 April 2022, and was attended by representatives from Bahrain, the Islamic Republic of Iran, Qatar, Saudi Arabia and the United Arab Emirates. During the Future Aviation Forum held in Riyadh, Saudi Arabia, from 9 to 11 May 2022, the President of the ICAO Council and Regional Director of the MID Regional Office met with high-level officials from Bahrain, Qatar, Saudi Arabia and the United Arab Emirates to discuss the safe, effective and timely implementation of the Council's decision concerning the establishment of a Doha FIR/SRR. It was agreed that the MID Regional Office would be leading the project and that a bilateral coordination meeting between the governments of Bahrain and Qatar would be hosted by the Regional Office from 1 to 2 June 2022 in Cairo, Egypt.

Planning and Implementation Regional Groups (PIRGs) and Regional Aviation Safety Groups (RASGs) achievements

During the first half of 2022, PIRGs and RASGs successfully held all major regular meetings, continued to carefully address regional aviation needs, and coordinated in a number of areas.

Human Resources Development

Global Aviation Training section

Assessment and recognition of training organizations

Eight TRAINAIR PLUS Programme (TPP) assessments were performed during the reporting period. The assessments provide a clear and independent overview of training organizations' operations and highlight critical areas requiring improvements. More than 100 training organizations are TPP Members.

Course development

Twenty-one ICAO-recognized training packages were either developed, revamped or updated during the reporting period.

ICAO Training Packages (ITPs)

In 2022, the Global Aviation Training Office (GAT) launched four new ITPs, entitled:

- a) Civil Aviation Master Planning (CAMP) (classroom and virtual classroom format);
- b) Traveller Identification Programme (TRIP) Strategy (classroom and virtual classroom format);
- c) Visible Digital Seals (VDS) for Travel-related Public Health Proofs (virtual classroom format); and
- d) Overview of Frequency Management (online format).

The following three online courses were revamped:

- a) USOAP-CMA Phase 2 – Aircraft Accident and Incident Investigation (AIG);
- b) USOAP-CMA Phase 2 – Air Navigation Services (ANS); and
- c) USOAP-CMA Phase 2 – Aviation Legislation and Civil Aviation Organization (LEG/ORG).

In addition, one virtual classroom course, *Gestión de los riesgos de seguridad operacional de la aviación relativos a la COVID-19 para las CAA (ASRM SP)* (COVID-19 Aviation Safety Risk Management for CAAs) was updated.

ITPs developed by TPP Members (M-ITPs)

The following four M-ITPs were developed by TPP Members in collaboration with GAT:

- a) Aerodrome Safety Management Incorporating PANS-Aerodromes (virtual classroom);
- b) *Gestión de la seguridad operacional en pistas de aeródromos* (Aerodrome Runway Safety Management);
- c) Oversight of Competency-based Training; and
- d) *Gestión Colaborativa de la Afluencia del Tránsito Aéreo (ATFM/CDM)* (Collaborative Air Traffic Flow Management).

The course content was validated by the Secretariat to ensure compliance with relevant ICAO provisions.

Standardized Training Packages (STPs)

Nine STPs were developed by TPP Members during the reference period.

Partnership Training Packages (PTPs)

The following PTPs were launched by GAT in the reporting period:

- a) the Directors General of Civil Aviation Programme on Aviation Resilience, in partnership with the Civil Aviation Authority of Singapore (CAAS) and Singapore Aviation Academy (SAA);
- b) Air Transport Economics and Business, in partnership with the University of Antwerp (Belgium);
- c) Airport Management, in partnership with the University of Antwerp;
- d) Air Transport Pricing Strategy, in partnership with the University of Antwerp;
- e) Airport Wildlife Management, in partnership with Embry-Riddle Aeronautical University (United States of America); and
- f) three modules of the Postgraduate Diploma in Air Transport Management, developed in partnership with the Universidad Nacional de San Martín (Instituto del Transporte) (San Martín National University (Transport Institute)), Argentina:
 - i. *Especialización en Gestión del Transporte Aerocomercial – Módulo 1: Políticas y Planificación del Transporte Aerocomercial;*
 - ii. *Especialización en Gestión del Transporte Aerocomercial – Módulo 2: Gestión y Desarrollo Económico del Transporte Aerocomercial;* and
 - iii. *Especialización en Gestión del Transporte Aerocomercial – Módulo 3: Dirección y Gestión de los Recursos.*

The above training activities and educational programmes developed by GAT in partnership with academic institutions have contributed to the mission of ICAO's Next Generation of Aviation Professionals (NGAP) programme.

Guidelines for aviation training

GAT released the first edition of the *Training Instructors Guide* (Doc 10097) in coordination with the Air Navigation Bureau in November 2021. This document provides aviation instructors with the guidance they need to achieve the performance criteria contained in the ICAO Adapted Instructor Competency Model and to effectively deliver competency-based training courses.

Participation of trainees in ICAO courses

As at the end of April 2022, 91 515 participants had attended ICAO training courses.

Post-training evaluation

As at 30 April 2022, 63 training sessions had been evaluated through the post-training evaluation (PTE)

methodology, designed to measure the impact of training on job performance.

Training partnerships

In 2022, ICAO entered into a new training partnership with the Flight Safety Foundation for the development and delivery of safety-related training courses and Implementation Packages (iPacks), as well as other collaboration opportunities, such as capacity-building projects and programmes, in various fields. Under the partnership, the Flight Safety Foundation is recognized as a TRAINAIR PLUS Corporate Partner.

Resource Mobilization Training Project

In 2022, GAT finalized and validated the Civil Aviation Master Planning (CAMP) course, which will be delivered over two regular sessions. The course was developed with the support of the South-South Cooperation Assistance Fund (SSCAF).

Other training activities

Eight ICAO-sponsored aviation security training events were scheduled or conducted by 30 June 2022. Thirty-five ICAO-sponsored training events are scheduled for delivery by the end of 2022 through the ICAO Aviation Security Training Centre (ASTC) network, which is currently made up of 36 members. ICAO and Concordia University in Montréal, Canada, also continue to work in partnership to roll out the Aviation Security Professional Management Course, which began in the first half of 2022.

Technical Cooperation and Assistance

Technical Cooperation Programme

As at 30 June 2022, the total Technical Cooperation Programme implemented by ICAO was estimated at USD 20.8 million. Under various arrangements, the Technical Cooperation Bureau is currently executing a total of 73 projects (64 technical cooperation projects and nine technical assistance projects) and 90 Implementation Packages (iPacks) in 134 countries. It is estimated that a total Programme of USD 75.1 million will be implemented in 2022.

The Technical Cooperation Programme by region (in millions of U.S. dollars)

Region	As at 30 June 2021	As at 30 June 2022
Africa	1.4	1.1
Americas	11.4	14.1
Asia and the Pacific	0.9	1.3
Europe	0.4	0.3
Middle East	2.7	4.0
Total	16.8	20.8

Newly approved projects and revisions

Large-scale technical cooperation projects and large-scale revisions to ongoing projects that have been approved during the first six months of 2022 include:

- Argentina – Strengthening of Air Navigation Services and Updating of the CNS Systems (ARG16801)
- Cyprus – Strengthening of the Department of Civil Aviation of Cyprus (CYP17801)
- Mexico – TRAINAIR PLUS Programme for Aeropuertos y Servicios Auxiliares (ASA) (MEX07801)
- Panama – Strengthening of the Tocumen International Airport of Panama (PAN03902)
- Regional project – Communications, navigation and surveillance (CNS) digital network – Management of the South American Digital Network (REDDIG) and administration of the satellite segment (RLA03901)

Newly approved Implementation Packages (iPacks)

New Implementation Packages (iPacks) developed in this period include:

- iPack on Implementing a Visible Digital Seal for Non-Constrained Environments (VDS-NC) for Travel-Related Health Proofs (Security and Facilitation)
- iPack on Improving the Quality of NOTAM for Safe Flight Operations (Capacity and Efficiency)
- iPack on Supporting Civil Aviation Entities in Conducting a Training Needs Analysis (all Strategic Objectives)
- iPack on Establishing and Maintaining a Cargo Safety Programme (Safety)

Donor funds

Donor contributions were received for the following technical cooperation project:

- Regional Project – Development of Operational Safety and Continuing Airworthiness in the Commonwealth of Independent States (COSCAP-CIS) (RER01901) – Grant by AIRBUS in the amount of USD 100 000.

ICAO voluntary funds

Technical assistance projects that received contributions from the ICAO voluntary funds during the same period include:

- Sao Tome and Principe – Assistance to the National Institute of Civil Aviation (INAC) of Sao Tome and Principe with the improvement of the State's civil aviation safety oversight system (STP22801) – Safety Fund (SAFE) in the amount of USD 345 500.

iPack deployments in nine States benefitted from contributions to ICAO voluntary funds from the following donors:

- Australia – USD 19 990
- Malaysia – USD 50 000
- United States (through the AVSEC/FAL Fund) – USD 100 000

ICAO Regular Programme

Regular Programme contributions for iPacks development were received from the Air Transport Bureau (ATB) in the amount of CAD 70 000.

The deployment of 29 iPacks in 35 States benefitted from Regular Programme funds provided by the Air

Navigation Bureau (ANB) in the amount of CAD 636 548, while eight iPacks were deployed in eight States with contributions from ATB amounting to CAD 245 000, for a total of CAD 881 548 in the first six months of 2022.

Recruitment of experts

The total number of international field experts and consultants recruited as at 30 June 2022 was 256, in addition to 641 national project personnel, for a total of 897 serving officials, including 53 international field experts and consultants who were already in the field as of 1 January 2022 serving in ongoing projects.

Civil aviation training

In this period, 313 fellowships were awarded for a total duration of 56.06 work/months, including 261 awards within the framework of memoranda of understanding signed by ICAO with Indonesia, the Republic of Korea and Singapore for the provision of training to be funded by these countries and administered by ICAO.

In addition, in-country training programmes undertaken by instructors under technical cooperation projects trained 1 350 civil aviation administration personnel, and 83 staff received training by suppliers through the procurement component of technical cooperation projects.

Equipment and subcontracts

One hundred and ten purchase orders and subcontracts were issued, and total field procurement implementation amounted to USD 11.4 million.

The Administrative and Operational Services Cost (AOSC) budget

As at 30 June 2022, the estimated Administrative and Operational Services Cost (AOSC) Fund income amounted to USD 2.1 million and expenditures to USD 4.8 million, for an estimated excess of expenditure over income of USD 2.7 million.

Global Partnerships for Sustainable Development

Resource mobilization of voluntary funds

In 2022, resource mobilization through voluntary contributions mainly supported the rollout of Implementation Packages (iPacks), efforts to strengthen gender equality, assistance to the Asia Pacific Region (specifically Pacific small island developing States) and the costing of unfunded activities under the ICAO Business Plan 2023–2025. This resulted in a number of States pledging contributions to support the Plus Component of the Business Plan 2023–2025 Regular Budget, data analysis for gender equality, greater access for women to ICAO training, the recruitment of the Pacific small island developing States liaison officer, as well as overall efforts in support of the *No Country Left Behind* initiative. ICAO also started to develop a resource mobilization strategy setting out a clear road map of the Organization’s vision, roles and responsibilities in mobilizing voluntary contributions in line with the Business Plan 2023–2025.

United Nations 2030 Agenda for Sustainable Development

As in previous years, in 2022, ICAO provided input to the thematic reviews of the high-level political forum on sustainable development (HLPF), to be held from 5 to 15 July 2022 under the auspices of the United Nations Economic and Social Council (ECOSOC) and under the theme *Building back better from the coronavirus disease (COVID-19) while advancing the full implementation of the 2030 Agenda for Sustainable Development*. In addition, ICAO contributed to the 2022 report of the United Nations Secretary-General on the implementation of the Vienna Programme of Action for Landlocked Developing Countries for the Decade 2014–2024.

In 2022, ICAO continued its efforts to forge new collaborative relationships and strengthen existing partnerships. As part of these efforts, ICAO signed a memorandum of understanding with the International Forum for Aviation Research (IFAR) to foster innovation in aviation and a memorandum of understanding with the Government of the United Arab Emirates formalizing a new partnership on institutional development and the exchange of experiences.

In the same vein, strategic meetings with key partners took place, including the annual meeting between ICAO and the World Economic Forum and the sixth meeting of the European Union/ICAO Joint Committee, held pursuant to a memorandum of cooperation between ICAO and the European Union. Meetings with a number of high-level officials from the United Nations system were also held in 2022.

Advocacy and public outreach

In 2022, ICAO continued to carry out advocacy and outreach activities to promote aviation, the Organization’s activities and global sustainable development. To this end, ICAO’s Secretary General delivered opening remarks and participated in a roundtable session with industry stakeholders at the Asia and Pacific (APAC) Session for Pacific Small Island Developing States (PSIDS), held on 7 April 2022.

Key public outreach activities also included a number of thematic campaigns carried out in cooperation with various stakeholders, including the “Reconnecting the World” communications partnership with the World Tourism Organization (UNWTO) focusing on the Sustainable Development Goals, and preparations with local and international stakeholders ahead of the 41st Session of the ICAO Assembly.

ICAO’s Communications Unit provided daily support to media, academics and other members of the public, and social media engagement remained consistent with growth targets.

Supporting Strategies

Operational response to COVID-19

Throughout the COVID-19 pandemic, ICAO remained committed to prioritizing the safety and health of all Secretariat and delegation staff members. Following the easing of local health measures, the Business Continuity Plan for ICAO Headquarters was deactivated on 19 April 2022. Staff members returned to the office following a regular work or hybrid schedule, with teleworking permitted for up to three calendar days per week. Regional Offices continued to implement a gradual return to premises based on local directives and the United Nations' business continuity plan status applicable to respective duty stations.

Meetings of the Council, its Standing Committees and the Air Navigation Commission continued to be supported by the Secretariat, receiving full interpretation services. Further efforts were also made to test a "hybrid/hub" solution, which made it possible to arrange secure hybrid meetings for the 225th and 226th Sessions of the Council.

Corporate performance and risk management

Risk Management

To help enhance accountability at ICAO, a new annual progress report on enterprise risk management (ERM) was presented to the Council in February 2022. The report provided an update on the implementation of ERM at ICAO based on best practices in risk management in the United Nations system. The report also provided an update on the Corporate Risk Register, which provides the status of ICAO's corporate risks.

In the first quarter of 2022, a newly revised Management Assurance Statement and Declaration (MASD) questionnaire was created based on ICAO's ERM Framework, internal control library and internal and external audit risk findings. Going forward, the new MASD will significantly enhance the Secretariat's accountability, resulting in an overall improvement of the integrity of ICAO's statements on internal control, provided in the Organization's annual financial statements.

ICAO is on track in implementing two United Nations risk management approaches to support the development of its ERM key performance indicators. As part of the first approach, ICAO is introducing 10 risk management benchmarks proposed by the United Nations Joint Inspection Unit, to be met by the end of 2022. Under the second approach, a five-tier risk maturity model endorsed by the United Nations High-level Committee on Management (HLCM) is being used to measure the maturity of ICAO's ERM. ICAO is currently at Level 2 ("developing"), and its goal for the end of 2022 is to reach Level 3 ("established").

ICAO continues to work closely with the Evaluation and Audit Advisory Committee (EAAC) to implement these two best practice approaches to manage risks and achieve ICAO's ERM goals. Risk management has also been supported by ICAO's Corporate Risk Register. To date, ICAO has reduced its corporate risks by 64 per cent (eliminating 9 out of 14 risks) and closed two risks. All corporate risks continue to be monitored on a regular basis to ensure that mitigation actions are implemented.

In June 2022, risks related to the 41st Session of the ICAO Assembly were monitored, and an ERM dashboard for quarterly reporting was developed to engage the Secretariat's Senior Management Group (SMG) in the active review of risks and implementation of regular mitigative actions. From June into the third quarter of 2022, ERM has been integrated into ICAO's business processes and activities, including through the creation of a training programme on risk management for staff members. Through the programme, ICAO aims to build a

risk management culture and prioritize ERM in its activities.

Business Planning

The Council considered the draft Business Plan 2023–2025 and an oral report thereon by the Air Navigation Commission, as well as an oral report presented jointly by the Finance Committee and Committee on Governance. Following consideration, the Council:

- a) took note, with appreciation, of the work undertaken by the Secretariat in developing the draft ICAO Business Plan for the following triennium, as presented in C-WP/15287, acknowledging that the document should be a living document and would serve as an important management and accountability tool;
- b) expressed appreciation for the efforts of the Air Navigation Commission on the prioritization exercise undertaken, and, in that connection, recommended that the Secretariat continue with a similar exercise as a means of ensuring, as far as practicable, that all proposed activities were carried out according to clearly established and agreed upon priorities; and
- c) agreed to the recommendations and conclusions of the Air Navigation Commission, Finance Committee and Committee on Governance as reflected in each of their oral reports, and, in that connection, requested the Secretariat to continue to update the draft Business Plan for the following triennium, taking into account the comments and changes requested by the Commission and Committees, with a view to presenting that next iteration of the draft Business Plan to the Council during its 226th Session.

After the Council made its recommendations during its 225th Session, the Secretariat updated the Business Plan (as presented in C-WP/15412) to reflect the impact of the proposed Regular Budget scenario ZNG-1. The Council was invited to endorse the strategic narrative part of the Business Plan and to approve the Performance Monitoring Framework outcome indicators. ICAO's Business Plan for 2023–2025 is the Organization's first-ever business plan developed in line with a results-based management approach, which will provide a stronger basis for accountability.

Legal and External Relations Services

Treaty developments

International interests in mobile equipment (aircraft equipment)

The ninth edition of the *Regulations and Procedures for the International Registry* (Doc 9864) was published in January 2022 and came into effect on 1 June 2022. This edition contains amendments approved by the Council at the seventh meeting of its 223rd Session (June 2021), acting in its capacity as Supervisory Authority of the International Registry. As at 1 June 2022, there were 81 Parties to the 2001 Convention on International Interests in Mobile Equipment and the Protocol to the Convention on International Interests in Mobile Equipment on Matters Specific to Aircraft Equipment.

General Work Programme of the Legal Committee

38th Session of the Legal Committee

The 38th Session of the Legal Committee, chaired by Ms. Siew Huay Tan (Singapore), was held virtually from

0800 to 1100 hours Montréal time from 22 to 25 March 2022. It was attended by 286 participants from 91 Member States and six international organizations.

The Committee highlighted its 75th anniversary and the significant achievements in the development and codification of international air law by contributing to the adoption of 24 international air law instruments in the fields of aviation safety and security, air carrier liability and aircraft finance.

The Committee elected Mr. Mohammed Mansoor Ali Hamed Al-Ruqaishi (Oman) and Ms. Alice Serpa Braga Della Nina (Brazil) as the Third and Fourth Vice-Chairpersons. The election was necessary because the offices of the First and Fourth Vice-Chairpersons (Mr. Norberto Luongo (Argentina) and Mr. Bader AL Mubarak (Kuwait)) had been vacated, as a result of which the Second and Third Vice-Chairpersons (Ms. Susanna Metsälampi (Finland) and Ms. Ellen Manga (the Gambia)), in accordance with Rule 6 (b) of the Rules of Procedure, automatically became First and Second Vice-Chairpersons, respectively. Mr. Al Ruqaishi and Ms. Serpa Braga were elected by acclamation.

As a result of its considerations as well as the decisions taken, the Committee unanimously endorsed the following work programme:

- a) review of the ICAO Rules for the Settlement of Differences;
- b) international legal aspects of unmanned (pilotless) aircraft operations and integration into civil aviation;
- c) processes and procedures for States to fulfil their obligations under Article 12 of the Chicago Convention;
- d) acts or offences of concern to the international aviation community, including cyber threats, that may not be adequately covered by existing air law instruments;
- e) promotion of the ratification of international air law instruments;
- f) study of international legal issues relating to global satellite systems and services supporting international air navigation services;
- g) consideration of guidance on conflicts of interest; and
- h) implementation of Article 21 of the Chicago Convention.

Review of the ICAO Rules for the Settlement of Differences

At the 38th Session of the Legal Committee, the Chairperson of the Working Group for the Review of the ICAO Rules for the Settlement of Differences (WG-RRSD) presented a progress report on the work being carried out by the Working Group, which highlighted two categories of areas for the review of the rules, namely, those enjoying a high level of agreement in principle within the Group, and those requiring further consideration. Reflecting the status of the above-mentioned areas discussed by the WG-RRSD, the progress report also contained a set of proposed draft revisions to the Rules, which was prepared by the Rapporteur of the Group and the Secretariat. The Chairperson of the Committee concluded that interventions by delegations had supported the continuation of the work by the Group.

Legal aspects of pilotless aircraft

The progress of the work of the Secretariat Study Group on Legal Issues related to Pilotless Aircraft (SSG-LIPA) was reported to the 38th Session of the Legal Committee in March 2022. There was support expressed in the Legal Committee for the work undertaken by the SSG-LIPA and the need for a common legal framework

for unmanned (pilotless) aircraft operations among States.

Processes and procedures for States to fulfil their obligations under Article 12

A progress report on the work of the Secretariat Task Force established to study the implementation of Article 12 by Member States and to identify the means and mechanisms for States to support and enhance their implementation was presented to the 38th Session of the Legal Committee.

Cyber threats against civil aviation

The Secretariat presented a report on the work of the Research Subgroup on Legal Aspects (RSGLEG) of the Secretariat Study Group on Cybersecurity (SSGC) to the 38th Session of the Legal Committee. The Legal Committee was informed that the SSGC and its working groups, including the RSGLEG, would be dissolved following the establishment of a Cybersecurity Panel (CYSECP). The report outlined the discussions and outcomes of the draft study on the review of international air law instruments and their applicability to cyber threats against civil aviation that took place among experts in the RSGLEG and the SSGC.

The Committee noted the excellent work carried out by the RSGLEG between November 2018 and January 2022 and expressed its appreciation for the participation of experts from all fields, which underscored the cross-cutting aspect of this item. There was wide support for keeping this item on the Work Programme of the Legal Committee and the continuation of the work on the consideration of the adequacy of existing air law instruments in addressing cyber threats to civil aviation. The Committee further noted the enhancements brought by the 2010 Beijing Convention and Protocol to the prosecution of cyber-attacks and expressed the need to continue promoting their ratification by all States.

Promotion of the ratification of international air law instruments

The 38th Session of the Legal Committee was updated on the status of ratifications of international air law instruments adopted under the auspices of ICAO and the ongoing efforts to expedite such ratifications. The Committee was further informed on the convening and success of the inaugural ICAO Treaty Event at the 40th Session of the Assembly, with a second such event planned for the 41st Session in September 2022. A State letter was issued on 11 May 2022 inviting Member States to participate in this event, which will take place on 27 and 28 September (SL LE 4/75.1-22/53).

Implementation of Article 21 of the Chicago Convention

The Legal Committee, at its 37th Session, endorsed, in principle, the outcome of the Article 21 Task Force, i.e., the recommendation to include a Model Certificate of Deregistration of Aircraft in Annex 7 to the Chicago Convention. The Council, during the eighth meeting of its 225th Session on 7 March 2022, adopted Amendment 7 to Annex 7 incorporating a Certificate of Deregistration and corresponding provisions.

Settlement of Differences

Brazil and the United States (2016)

During its 225th Session, the Council was provided with a progress report on the status of the negotiations between the Parties. It was informed that the Parties had continued to make progress toward resolving the dispute, which had been temporarily stalled by the international public health crisis. In view of the establishment of the Task Force related to obligations under Article 12 of the Chicago Convention, the Parties expressed their willingness to continue their discussion to conclude negotiations as soon as possible.

Application A: Qatar and Bahrain, Egypt, Saudi Arabia and the United Arab Emirates (2017)

Application B: Qatar and Bahrain, Egypt and the United Arab Emirates (2017)

Following a request made by the Applicant on 4 January 2022, and further to a decision of the Council of 9 March 2022 (C-DEC 225/9), the Council recorded the discontinuance of the proceedings against the Kingdom of Saudi Arabia in Application (A) in accordance with Article 17 (2) of the Rules.

Australia and the Kingdom of the Netherlands and the Russian Federation (2022)

By Note Verbale dated 14 March 2022, delivered on the same date, the Delegation of Australia to the International Civil Aviation Organization (ICAO) and the Delegation of the Kingdom of the Netherlands to ICAO presented to the Organization a joint Application and its corresponding Memorial for the settlement of a disagreement. The Application was submitted under the terms of “Article 84 of the *Convention on International Civil Aviation* (‘Chicago Convention’), related Annexes, and the *Rules for the Settlement of Differences* (Doc 7782/2) (‘Rules’), and it names the Russian Federation as Respondent. The Application and its corresponding Memorial relate to the “interpretation and application of the Chicago Convention” following “the downing of Flight MH17 by a Buk-TELAR surface-to-air missile over the east of Ukraine on 17 July 2014”, which the Applicants submit is “legally attributable to the Russian Federation and constitutes a breach of Article 3bis of the Chicago Convention”. Acting under Article 28 (3) of the Rules, the President of the Council decided on 21 March 2022 to grant a 12-week time limit for the filing of a Counter-memorial by the Respondent (i.e., 13 June 2022). Upon a request by the Respondent, on 1 June 2022, the Council (C-DEC 226/5) agreed to grant the Respondent until 2 August 2022 for the filing of its Counter-memorial, that is to say, 12 weeks from 10 May 2022, being the date on which the Russian language versions of the Application and Memorial were submitted to the Russian Federation.

Working methods of the Council and Standing Committees

In contributing to the implementation of Assembly Resolution A40-20: Increasing the efficiency and effectiveness of ICAO, the Council, at its 223rd and 224th Sessions, amended the *Rules of Procedure for the Council* (Doc 7559), the *Rules of Procedure for Standing Committees of the Council* (Doc 8146), the *Directives for Panels of the Air Transport Committee and the Committee on Unlawful Interference* (Doc 9482) and Annex IV to *The ICAO Service Code* (Doc 7350) (C-DECs 223/3, 223/12 and 224/1 refer). The changes included the reconstituted Committee structure as well as necessary amendments to ensure gender-neutral language.

As at 1 June 2022, new editions of Doc 7559 (Eleventh Edition), Doc 8146 (Seventh Edition) and Doc 9482 (Third Edition) had been published in all ICAO working languages.

Consultations regarding the EUR/NAT Regional Office

Following consultations, France has indicated that it is ready to finance the renovation of the building hosting the European and North Atlantic (EUR/NAT) Regional Office, which it co-owns with the Organization. In this regard, in-person meetings were held between ICAO and France in Paris on 17 and 18 February as well as on 7 April 2022. With a view to preparing a programmatic note covering the functional and technical aspects, as well as the budget envelope, for the renovations of the premises, the Parties agreed to meet virtually.

Coordination with Ottawa and Quebec regarding COVID-19 information

In the first months of 2022, the Legal Affairs and External Relations Bureau (LEB) continued to duly disseminate COVID-19 information received from the authorities of the Host State, including official circulars and updates provided by the Office of Protocol, Global Affairs Canada, as well as by the Office of Protocol of Quebec.

Changes to the system of administration of justice

Pursuant to a United Nations Appeals Tribunal shift in jurisprudence, ICAO established a new Appeals Board, replacing the former Advisory Joint Appeals Board. In addition to LEB preparing necessary amendments to the Service Code and Staff Rules and contributing to the drafting of the Rules of Procedure for this new body in consultation with the Staff Association and the Appeals Board Chairs, separate LEB staff members also represent the Secretary General in proceedings before the Appeals Board and the United Nations Appeals Tribunal and perform the Registrar (administration) function for the Board. The Board held its first appeal hearing in January 2022 and has overseen alternative dispute resolution discussions in two others.

ICAO Legal Seminar, Seoul, Republic of Korea

The 2022 ICAO Legal Seminar organized by LEB and the Ministry of Land, Infrastructure and Transport of the Republic of Korea was successfully held in Seoul, Republic of Korea, from 12 to 14 April 2022. The seminar, held in hybrid format, enabled more than 900 participants from 114 States to exchange knowledge and experiences on new and emerging issues affecting civil aviation. It furthermore encouraged momentum towards the ratification and implementation of related international air law instruments by States. Topics included the recovery of international civil aviation following the COVID-19 pandemic, the application of health measures on board aircraft in relation to managing unruly and disruptive behaviour, pilotless aircraft, cyber-attacks against civil aviation, climate change, support to the families of aircraft accident victims, and the settlement of disputes between States under the Chicago Convention. Events commemorating the 70th anniversary of the adherence of the Republic of Korea to the Chicago Convention as well as the 75th anniversary of the establishment of the ICAO Legal Committee in 1947 by the First Session of the ICAO Assembly were held in the margins of the seminar.

Human resources management and gender equity

At the end of May 2022, there were 604 established posts within ICAO, 323 of which were in the Professional and higher categories and 281 of which were in the General Service category. The overall representation of women in the Secretariat in the Professional and higher categories stood at 34 per cent.

ICAO continued to focus on supporting opportunities for professional growth and development for staff. Online learning activities were expanded, providing access to training offered by the United Nations System Staff College and an online learning provider, among others. The Global Aviation Training Office (GAT) also provided ICAO staff members with complimentary access to ICAO training packages in both online and classroom formats.

During its 226th Session, the ICAO Council approved amendments to the ICAO Policy on Secondment. The review of the Policy was carried out to provide flexibility in addressing challenges faced in attracting nominations from Member States while taking into account applicable practices from elsewhere in the United Nations system.

The Deputy Director in charge of Human Resources in the Bureau of Administration and Services (ADB), Ms. Tolulope Agiri, reported for duty on 15 March 2022, which was timely considering the many reforms and initiatives taking place with respect to human resources.

Gender equity

In 2022, ICAO celebrated International Women's Day in line with UN-Women's annual theme chosen for 2022, *Gender equality today for a sustainable tomorrow*. The 2022 theme is aimed at recognizing the contribution of women and girls around the world, who are leading the charge on climate change adaptation, mitigation and

response, to build a more sustainable future for all. ICAO has continued to put climate change and aviation sustainability at the forefront of its activities, which will continue to have an impact on the aviation world and promote the achievement of Sustainable Development Goal 5 (Achieve gender equality and empower all women and girls). As part of its activities to mark International Women's Day, ICAO showcased how it is paving the road towards sustainability in the sector while encouraging women and girls to be effective, powerful leaders and change-makers for future aviation sustainability initiatives.

The Secretariat and the Council Small Group on Gender (SGG) continued to work together on an update of Assembly Resolution A39-30 for adoption at the 41st Session of the Assembly in 2022 as well as potential opportunities for identifying initiatives on specific gender-related goals or a target for the aviation sector as a whole. The objective of this work is to enhance the representation of women and girls in the aviation industry's workforce, including their participation in management and decision-making positions.

Ethics

At the third meeting of its 225th Session, the Council agreed with a proposal made by the Ethics Officer that the Annual Report of the Ethics Officer for 2021 and subsequent such reports, subject to comments and advice by the Secretary General, should be published on the ICAO public website as a means to enhance outreach and strengthen organizational transparency and public trust (C-DEC 225/3 refers). This action was promptly taken, and, in line with the principle of multilingualism at ICAO, the report is now accessible in English, Arabic, Chinese, French, Russian and Spanish on both the public ICAO website and intranet site.

Following the Council's approval of the revised ICAO Service Code on 17 June 2020, ICAO reviewed and aligned the Appendix to Staff Rule 101.1 (Standards of Conduct) with the latest version of the *Standards of Conduct for the International Civil Service* adopted by the International Civil Service Commission (ICSC) in 2013. The ICSC *Standards of Conduct for the International Civil Service*, which is used in various United Nations entities, lays out a set of standards of conduct for international civil servants, the guiding principles of which are integrity, loyalty, independence, impartiality, tolerance, understanding, freedom from discrimination, gender equality, dignity, and staff security and safety. The revised Appendix to Staff Rule 101.1 includes, inter alia, provisions on the following: a) accountability of staff for all actions carried out, as well as decisions taken, and commitments made by them in performing their functions; b) prohibition to abuse authority or use power or position in a manner that is offensive, humiliating, embarrassing or intimidating to another person; c) responsibility for the use of resources of the organization; and d) post-employment restrictions. The new text also amends provisions on conflict of interest, disclosure of information and staff management.

In February 2022, an Alternate Ombudsperson was appointed at ICAO for the first time. Such action is expected to enhance the existing informal dispute resolution system in ICAO to prevent or reduce workplace conflicts by addressing them promptly and at their source, to avoid, to the extent possible, recourse to ICAO's formal machinery for the settlement of disputes

On 3 March 2022, Appendices G, H, and I to the *Rules of Procedure for the Council* (Doc 7559) were published. The appendices were approved by the Council in order to establish the rules and procedures to address allegations of misconduct or retaliation against the President of the Council (Appendix H) and the Secretary General (Appendix G) as well as a code of conduct for the President of the Council and the Secretary General (Appendix I).

As required by the revised ICAO Framework on Ethics, the Organization entered into an agreement with an investigative entity within the United Nations system. Following consultation with the Council Small Group on Ethics, in January 2022, the Organization signed an agreement with the United Nations Office of Internal Oversight Services (OIOS) to establish a mechanism for the reporting and handling of all cases of misconduct. In addition, the Organization is in the final stage of its negotiations for an agreement with the United Nations

Ethics Office to establish a mechanism for the direct reporting and handling of complaints of retaliation that the Ethics Officer cannot handle.

Transparency

Further efforts were made to enhance access to Council information on the ICAO public website. Fifteen Council meetings and informal briefings, totalling 45 hours of discussion, were streamed on ICAO TV from January to May 2022. These included the following Council meetings:

- a) first meeting of the 225th Session of the ICAO Council (2 February 2022)
- b) second meeting of the 225th Session of the ICAO Council (7 March 2022)
- c) third meeting of the 225th Session of the ICAO Council (14 March 2022)
- d) fourth meeting of the 225th Session of the ICAO Council (14 March 2022)
- e) fifth meeting of the 225th Session of the ICAO Council (24 March 2022)
- f) sixth meeting of the 225th Session of the ICAO Council (24 March 2022)
- g) seventh meeting of the 225th Session of the ICAO Council (28 March 2022)
- h) eighth meeting of the 225th Session of the ICAO Council (28 March 2022)
- i) ninth meeting of the 225th Session of the ICAO Council (7 April 2022)
- j) tenth meeting of the 225th Session of the ICAO Council (7 April 2022)
- k) eleventh meeting of the 225th Session of the ICAO Council (7 April 2022)
- l) twelfth meeting of the 225th Session of the ICAO Council (8 April 2022)

and the following informal briefings:

- a) informal briefing on the results of the Twelfth Meeting of the Committee on Aviation Environmental Protection (CAEP) (24 February 2022)
- b) informal briefing on a feasibility study by CAEP (22 February 2022)
- c) informal briefing on ICAO Regional Office Annual Reports (21 February 2022)

Language services and multilingualism

The Council endorsed the ICAO Multilingualism Strategy, which seeks to foster a new approach to multilingualism, not only in terms of language services, but also in leveraging the full potential of the Organization to make the most of its diversity. The Strategy covers language services, human resources, strategic communication, stakeholder mobilization and the fulfilment of organizational responsibilities through coordination among the Secretariat, the Council and Member States. A draft Assembly working paper on the Strategy was approved by the Council for submission to the 41st Session of the Assembly.

The Secretariat finished the procurement process for the Language Services Management System (LSMS) project, which is a signature project under the Digital Transformation initiative. A contractual arrangement was reached between the United Nations Secretariat and ICAO for ICAO's implementation of United Nations language tools. Legacy systems will remain operational at ICAO to ensure that seamless support can be provided for the 41st Session of the Assembly.

In addition to providing language services for the Council, its Standing Committees and the Air Navigation Commission, the Secretariat is actively managing language service requirements for the 41st Assembly, including with regard to documentation, the recruitment of freelance language personnel, and information technology and operational support.

Information security and ICT management

Important progress was made with respect to the ICAO Information and Communication (ICT) Strategy. An informal presentation on the ICAO ICT Strategy was provided by the Secretariat to the Council during its 223rd Session, and status updates regarding the Strategy were also provided to the Council through several other presentations and oral reports. The latest ICT Strategy, which is a product of intensive work carried out by the Secretariat in collaboration with the United Nations International Computing Centre (UNICC) and the UNICC's consulting partner, Deloitte, takes into account various audit reports and reviews including recommendations made by the External Auditor (Swiss Federal Audit Office) and Evaluation and Audit Advisory Committee (EAAC), as well as the relevant ICAO corporate risks.

Digital transformation has been identified as a crucial component of the ICT Strategy, which is expected to place ICAO on a sustainable, modern and innovative path to fully digitalizing its operations and services. Related signature projects were presented to request additional funding in the next triennium budget. Implemented projects include: the migration of ICAO's email system to Microsoft Office 365; implementation of various modules of Inspira under the Human Capital Management Project; the Disaster Recovery Management Project; the segregation of delegation and Secretariat staff members' emails; and the Language Services Management System (LSMS). The migration of ICAO's email system to the cloud-based Microsoft Office 365 was carried out to improve email reliability, security and capacity for ICAO staff.

Aside from the ICT developments described above, the Organization reached an overall maturity level of 2.0 in information security. ICAO continued to be on track to reach the target level of 2.5 by the time its three-year Information Security Roadmap 2020–2022 would be fully implemented. The target level is based on industry standard ISO 27001:2013 and the Capability Maturity Model Integration (CMMI) maturity model. The Secretariat rolled out its Security Awareness Training Campaign for 2022 and initiated its phishing campaign, which would be deployed on a quarterly basis.

Finances

Revenue-generating activities

The ICAO eLibrary platform received more than 113 000 visitors from 1 January to 31 May 2022. Approximately 12 880 users from all ICAO regions registered with the platform during the same period. The ICAO eLibrary, which was developed to provide free public web access to ICAO publications, has to date provided access to more than 466 publications.

REVIEW OF ACTION TAKEN UP TO 30 JUNE 2022 ON RESOLUTIONS OF THE 40th SESSION OF THE ASSEMBLY

A40-1: ICAO global planning for safety and air navigation

The ICAO Assembly, at its 39th Session, agreed on the expansion of the Global Air Navigation Plan (GANP) life cycle through three-year minor and six-year major updates, as relevant, in order to provide for stability. While the sixth edition of the GANP, endorsed by the ICAO Assembly at its 40th Session, constituted a major update, a seventh edition, containing minor updates, is proposed for endorsement by the ICAO Assembly during its 41st Session. As part of the expected updates, improvements to the Aviation System Block Upgrades (ASBUs) and additions to the performance framework in the key performance area of safety are being proposed, as is mapping between basic building blocks and protocol questions in the Universal Safety Oversight Audit Programme (USOAP).

A40-2: Protection of accident and incident investigation records

The provisions on the protection of accident and incident investigation records are considered on a regular basis by the Accident Investigation Panel, but no further amendments to these provisions are being proposed. Some provisions on the availability of accident and incident information have been adopted, and further related amendments to Annex 13 — *Aircraft Accident and Incident Investigation* are being proposed for consideration by the Air Navigation Commission during the current session.

A40-3: Protection of safety data and safety information collected for maintaining or improving safety and of flight recorder recordings in normal operations

The Secretariat, together with the Safety Information Protection Implementation Group (SIP IG), are currently working on addressing issues raised by States with regard to the implementation of provisions in Annex 6 — *Operation of Aircraft* on the protection of flight recorder recordings or transcripts in normal operations. The preliminary review for the proposed amendment to Annex 6 is scheduled for the Air Navigation Commission in the fall Session in 2022.

A40-4: Consolidated statement of continuing ICAO policies and associated practices related specifically to air navigation

The consolidated statement of continuing ICAO policies and associated practices related specifically to air navigation is reviewed periodically. Currently, no changes to the statement are required.

A40-5: Regional implementation support mechanisms

The regional implementation support mechanisms specifically related to Planning and Implementation Regional Groups (PIRGs) and Regional Aviation Safety Groups (RASGs) are reviewed periodically. The Secretariat continues to support the regional planning processes and to report on the outcomes of Regional Planning meetings to the Air Navigation Commission and Council on a regular basis.

A40-6: Regional cooperation and assistance to resolve safety deficiencies, establishing priorities and setting measurable targets

During its 217th Session, the ICAO Council approved the Global Aviation Safety Oversight System (GASOS).

Subsequently, the Assembly, at its 40th Session, adopted Resolution A40-6 — *Regional cooperation and assistance to resolve safety deficiencies, establishing priorities and setting measurable targets*. The Secretariat continues to support regional cooperation organizations through regional safety oversight organizations (RSOOs), regional accident and incident investigation organization (RAIO) Cooperative Platforms and the GASOS Programme.

A40-7: New entrants

Preliminary discussions commenced between the Air Navigation Commission and Secretariat with regard to advanced air mobility to determine what work might be undertaken.

A40-8: Global provisions for design, certification and operations of water aerodromes

At the Fourth Meeting of the Aerodrome Design and Operations Panel (ADOP/4) (15–24 February, 2022), panellists unanimously agreed on the development of a job card for the design, certification and operations of water aerodromes, including a phased approach proposed by the Panel member nominated by Canada. With the expectation that the job card will be approved by the Air Navigation Commission (see C-MIN 223/5), preparatory work has commenced and will result, in the first phase, in the production of an ICAO Circular, to be followed later by high-level Standards and Recommended Practices (SARPs) in Annex 14 — *Aerodromes* related to the subject. A total of nine States and two international organizations have expressed interest in the job card.

A40-9: Consolidated statement of continuing ICAO policies in the air transport field

APPENDIX A – Economic regulation of international air transport

ICAO has continued to promote its core principles on consumer protection and to update its compendium summarizing the different rules adopted by States in the field of consumer protection and, in particular, air passengers' rights. This compendium is available on the ICAO website² and currently has information on 189 Member States and four regional organizations. States and concerned stakeholders are encouraged to provide feedback to ICAO regarding the database and their experiences in applying the ICAO Core Principle.

In line with Resolution A40-9, ICAO conducted a survey in December 2019 among Member States on assistance to passengers in case of massive airport or airline disruptions and on the application of ICAO core principles on consumer protection. Many States confirmed that they found the principles to be helpful, serving as a guide and inspiration in their policymaking, regulatory and operational practices, especially in developing new national consumer protection policies or reviewing and amending existing ones. The full report on the survey³ has been made public on the ICAO website.

ICAO has continued to promote and monitor the implementation of the ICAO long-term vision for air transport liberalization as adopted during the Sixth Worldwide Air Transport Conference (ATConf/6). At the Sixteenth Meeting of the Air Transport Regulation Panel (ATRP/16), held in April 2022, panellists reviewed the progress on the development of a Convention on Foreign Investment in Airlines, undertaken through two informal briefings of the Panels as well as small working groups. Future work in this area will be conducted through a working group established by the Panel to resolve the remaining issues of concern, with a view to making further progress in this task.

² ICAO Compendium on Consumer Protection: <https://www.icao.int/sustainability/Pages/ConsumerProtectionRules.aspx>

³ Survey on assistance to passengers and ICAO Core Principles on consumer protection: https://www.icao.int/sustainability/Documents/ConsumerProtection/Report_Survey-on-Assistance-to-pax.pdf

The Panel also recognized the critical role of all-cargo services during the COVID-19 pandemic and the fact that the demand for air cargo services would continue to grow in view of the increasing expansion of e-commerce business. The Panel established a working group with the objective of examining whether there was enough justification to recommend to the Air Transport Committee the development of a specific international agreement to facilitate further liberalization of air cargo services. A similar working group was also established by the Panel to conduct an in-depth assessment of whether to develop guidance on economic regulation of international operations of unmanned aircraft systems, in view of growing cross-border operations.

Regional workshops and symposia were conducted in the Africa and Middle East Regions in March 2020 and August 2021 to promote ICAO policies and guidance on economic regulation of international air transport and to enhance dialogue and exchange of information with Member States and industry in support of aviation development and recovery from the impact of the COVID-19 pandemic.

In light of the unprecedented impact of the pandemic and in accordance with [Recommendation 11 of the Report of the ICAO Council Aviation Recovery Task Force \(CART\)](#), ICAO has developed a dedicated compendium on States' best practices in emergency and contingency response planning in case of aviation system disruptions. The compendium is available on the [ICAO website](#). Through this platform, ICAO will be able to share information and best practices of States in case of disruption to the civil aviation system.

Pursuant to Assembly Resolution A40-9 requesting the Council to enhance cooperation, dialogue and exchange of information on fair competition, ICAO has extended the scope of the compendium on competition policies and practices to include general information on anticompetitive behaviours as outlined in ICAO policies and under general competition laws. Within the objective to promote compatible regulatory approaches, the compendium also addresses various forms of cooperation in the field of competition, including certain cases of bilateral cooperation and more extensive regional frameworks. The compendium now covers 189 States, or 98 per cent of the ICAO membership.

ICAO is supporting States in building (and re-building) air connectivity through the ICAO Air Services Negotiation Conference (ICAN), which provides a platform for improving the efficiency of air services negotiations and consultations. Prior to the pandemic, the Conference was held in Aqaba, Jordan, in December 2019. The subsequent event had to be postponed from December 2020 to December 2021, when it was held in a hybrid setting with a very successful participation rate of over 70 attending States, reaching thus pre-pandemic levels.

APPENDIX B – Taxation

ICAO continued to monitor developments and promote the use of the Organization's policies on taxation contained in *ICAO's Policies on Taxation in the Field of International Air Transport* (Doc 8632) by liaising with Member States and organizing conferences. An updated third edition of the Supplement to Doc 8632 was published in August 2021. The document contains a compilation of responses from Member States on their status of implementation of the consolidated resolutions on taxation.

In March 2021, capacity-building workshops on economic oversight and regulation for sustainable development of air transport in Africa, with a focus on the proliferation of taxes, were organized in collaboration with the African Civil Aviation Commission (AFCAC), and similar events will be organized for other regions.

APPENDIX C – Airports and air navigation services

Continued efforts are being made to update ICAO's policies and guidance material on charges for airports and air navigation services, with a view to contributing to increased efficiency and improved cost-effectiveness in

the provision and operation of airports and air navigation services. In particular, the *Airport Economics Manual* (Doc 9562) was revised and published in 2020, and a comprehensive review of the *Manual on Air Navigation Services Economics* (Doc 9161) is being conducted.

To assess the status of States' implementation of ICAO's policies on charges, an online survey was conducted in 2020. The results of the survey, which were published on the ICAO website, focused on four areas: awareness of ICAO's policies, national rules and legislations on charges for airports and air navigation services, implementation of ICAO's policies, and forms of economic oversight adopted by States. Follow-up work is being carried out in coordination with the ICAO Regional Offices to strategize possible actions for improvements based on the key findings of the regional status.

In addition, consistent efforts are being made to raise awareness of ICAO's policies on charges and enhance their implementation by States through joint workshops and webinars with international and regional organizations. In March 2021, capacity-building workshops on economic oversight and regulation for sustainable development of air transport in Africa were organized in collaboration with the African Civil Aviation Commission (AFCAC), and similar events will be organized for other regions.

In terms of aviation infrastructure management and financing, further guidance and tools are being developed, including the finalization of the draft stand-alone guidance on business case and cost-benefit analysis, cost-effectiveness analysis and economic impact analysis, in addition to the ongoing work on developing cost recovery mechanisms for the provision of meteorological services, space weather information services, and addressing the economic impact of unmanned aircraft systems (UAS) and the potential charging mechanisms for service provision to UAS.

APPENDIX D – Aviation data and statistics

At the Third Meeting of the Aviation Data and Analysis Panel (ADAP/3), held in June 2021, panellists reviewed the status of the ICAO Statistics Programme and, in particular, subjects relating to data quality and reporting, coverage, big data and principles of the quality assurance framework applied by ICAO to its statistics activities following the recommendations of the United Nations. The Panel also covered subjects related to post-COVID-19 traffic forecasts, forecasts of licensed aviation personnel and the global competitiveness index. The experts ensured that the ICAO Statistics Programme was in line with the needs of the Organization and helped to meet its Strategic Objectives.

Big data projects have progressed in cooperation with the United Nations, international organizations and academia. These projects include: a) the analysis of air connectivity, air transport network and airline competition through the use of Market Intelligence Data Transfer (MIDT); b) automatic dependent surveillance – broadcast (ADS-B) data integration into real-time monitoring of capacity changes, air navigation charges, fuel efficiency calculators and ASBU implementation; and c) e-commerce global business-to-consumer (B2C) measurement.

Closely cooperating with the United Nations, its agencies and other international organizations, ICAO contributed to the three volumes of the report⁴ of the United Nations Committee for the Coordination of Statistical Activities (CCSA), *How COVID-19 is changing the world: a statistical perspective*.

Close collaboration has been established with the Universal Postal Union (UPU) to leverage big data sources for effective monitoring and analysis of international logistics constraints for e-commerce.

ICAO continued to provide air transport data and metrics to the United Nations to support its Sustainable Development Goals, notably transport indicators to monitor progress towards Sustainable Development Goal

⁴ <https://unstats.un.org/unsd/ccsa/documents/covid19-report-ccsa.pdf>

9, Target 9.1 (Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all). As the custodial agency of Sustainable Development Goal indicator 9.1.2 (Passenger and freight volumes, by mode of transport),⁵ ICAO provided updated data and indicators to the United Nations in March 2020, 2021 and 2022.

Hands-on coaching sessions and seminars on aviation data and analysis were held in the Dominican Republic in November 2019, Côte d'Ivoire in February 2020, and in an online setting with the Middle East (MID) Regional Office States in September 2021.

The ICAO COVID-19 air traffic dashboards were released in May 2020 to provide interactive data information tools to monitor four aspects of the impact of COVID-19 on civil aviation: the operational impact, the economic impact, aircraft utilization, and country-pair traffic. Furthermore, the Post-COVID-19 Forecasts scenarios were developed to update the passenger Long-Term Forecasts (LTFs) to account for both the short-term impacts of the COVID-19 pandemic and eventual long-term recovery. This required a combination of updated macroeconomic data and recent estimates of the demand shock (measured in changes to revenue passenger-kilometres (RPKs)) to the aviation industry.

APPENDIX E – Forecasting, planning and economic analysis

At the Eleventh Session of the Statistics Division (STA/11), ICAO's activities were reviewed in the area of air traffic forecasts and planning in accordance with Assembly Resolution A40-9, in which the Council was requested to update the single set of long-term traffic forecasts (LTFs) from which customized and/or more detailed forecasts could be produced. The LTFs have been updated with the 2018 baseline, and post-COVID-19 forecast scenarios were developed through the Multi-disciplinary Working Group on Long-term Traffic Forecasts (MDWG-LTF). The ICAO LTFs have been made available to Member States on the ICAO website,⁶ and more detailed forecasts can be accessed on the Civil Aviation Data Solutions (iCADS) platform⁷ for States' post-pandemic planning and implementation needs.

At the STA/11, consideration was also given to the progress made in the development of the methodological framework⁸ of the Aviation Satellite Account (ASA) for measuring the economic contribution of aviation to national economies. The ASA methodology will be used by States as a standard framework for measuring the economic and social impact of civil aviation activities and for securing financing for, and investments into, the air transport sector.

Studies on regional differences in international airline operating economics for the years 2013, 2014, 2015, 2016, 2017, 2018 and 2019 were carried out, and a study for the year 2020 is ongoing. Results are published in circulars on a biennial basis. Based on the results of these studies, values of the global and area weightings were provided, on an annual basis, to the International Air Transport Association (IATA) Prorate Agency to establish prorated factors for passenger revenues from interline journeys.

The Secretariat developed a cost-benefit analysis application⁹ to enable users to evaluate and benchmark costs and benefits of different investment options for a defined aviation infrastructure project. Several analyses are preloaded onto the application, such as net present value (NPV), internal rate of return (IRR) and cost-benefit ratio. An online application, Aero Tariffs,¹⁰ was developed to convert the paper-based *Tariffs for Airports and Air Navigation Services* (Doc 7100) into a web tool that provides an analytical platform in the formulation

⁵ <https://sdgs.un.org/goals/goal9>

⁶ <https://www.icao.int/sustainability/Pages/Post-Covid-Forecasts-Scenarios.aspx>

⁷ <https://data.icao.int/iCADS>

⁸ <https://www.icao.int/sustainability/Satellite/Pages/default.aspx>

⁹ <https://data.icao.int/CBA/>

¹⁰ <https://data.icao.int/aerotariffs>

and benchmarking of airport and air navigation charging policies.

ICAO has been actively monitoring the economic impacts¹¹ of the COVID-19 pandemic on civil aviation. Detailed reports and adjusted forecasts have been regularly made available on the ICAO public website starting on 21 February 2020.

The Universal Postal Union (UPU) was provided with the annual airline traffic and financial data and analyses to be used for the calculation of the basic air mail conveyance rate according to Article 53 of the Universal Postal Convention.

A40-10: Addressing Cybersecurity in Civil Aviation

At its 40th Session, the ICAO Assembly reaffirmed the importance and urgency of global commitment for action by all stakeholders to collaboratively address cybersecurity in civil aviation, and adopted the Aviation Cybersecurity Strategy. It also called on ICAO to develop an action plan to support the implementation of the Aviation Cybersecurity Strategy, and to continue to ensure that cybersecurity matters were considered and coordinated in a cross-cutting manner. Moreover, it noted some gaps in the structure for addressing cybersecurity in ICAO and discussed a set of criteria that could underpin a revised cybersecurity structure.

Cybersecurity Action Plan

In line with Resolution A40-10, ICAO developed and published, in November 2020, the Cybersecurity Action Plan to support States and stakeholders in implementing the Aviation Cybersecurity Strategy. The Cybersecurity Action Plan provides the foundation for ICAO, States and stakeholders to work together, and proposes a series of principles, measures and actions to achieve the objectives of the Strategy's seven pillars.

Taking into account the changing priorities of Member States due to the ongoing COVID-19 crisis and the experience of States and stakeholders in implementing aviation cybersecurity initiatives in their States and organizations, ICAO conducted a revision of the Cybersecurity Action Plan and published the second edition of the document in January 2022. The review included streamlining the language used in the document in order for it to be clearer and more concise. It also included a comprehensive review of the action items, which were clarified in terms of actions, indicators and initiation time.

Feasibility Study on the Mechanism to Address Cybersecurity in ICAO

At its 40th Session, the ICAO Assembly noted the multiple bodies involved in addressing cybersecurity in ICAO and expressed concern about the potential for gaps, duplication, inconsistency and loss of transparency. To address these concerns, the Assembly called on ICAO to bring the work of these groups under the aegis of an overarching structure, and discussed a set of criteria that could underpin a revised cybersecurity governance structure.

The Council, during its 218th Session, endorsed the methodology for the development of the Feasibility Study and Gap Analysis on the Mechanism to Address Cybersecurity. The first two phases of the study were presented during the Council's 219th Session. The Council requested the Secretariat to further consider and update the feasibility study, and delegated authority to the President of the Council to consider the establishment of a small working group composed of Council Representatives and Air Navigation Commission (ANC) Members to develop Phase 3 of the feasibility study with the assistance of the Secretariat. The Small Working Group met extensively between November 2020 and January 2021, considered several governance options and recommended a solution, which was approved at the 222th Session. The new governance

¹¹ <https://www.icao.int/sustainability/Pages/Economic-Impacts-of-COVID-19.aspx>

structure for cybersecurity in ICAO includes:

- a) the restructuring of the Secretariat Study Group on Cybersecurity (SSGC) into a cybersecurity panel reporting to the Aviation Security Committee;
- b) the integration of the Trust Framework Study Group into the ANC Panel structure; and
- c) the establishment of the Ad hoc Cybersecurity Coordination Committee (AHCCC) under the Council. The Committee membership comprises one member from the Air Transport Committee, Aviation Security Committee, ANC and every ICAO Panel and expert group addressing elements of cybersecurity in their work programme. The Committee is expected to offer the Council, and everyone involved in cybersecurity-related activities in ICAO, a single point of focus for all ICAO cybersecurity-related activities, hence enhancing the accountability, transparency, efficiency and coordination of ICAO's work on these topics. The Council, during its 224th Session, approved the Terms of Reference of the AHCCC.

Following the Council's decision on the new governance structure, the Cybersecurity Panel was established during the Council's 225th Session and held its first meeting in May 2022. The ANC, during its 219th Session, approved the conversion of the Trust Framework Study Group into an ANC Panel.

Adequacy of international air law instruments to address cyber-attacks on civil aviation

The Aviation Cybersecurity Strategy calls for the analysis of the relevant international legal instruments in order to identify existing or missing key legal provisions for the prevention and prosecution of, and timely reaction to, cyber incidents. This task was accordingly reflected in the Cybersecurity Action Plan as an action item for ICAO. As such, the SSGC established the Research Sub-Group on Legal Aspects (RSGLEG). The Sub-Group comprised legal and cybersecurity experts to ensure that all expertise required to address its objectives were available. At its last meeting in January 2022, the RSGLEG did not conclude on finalizing the study. Instead, it agreed that the document would present a basis for further deliberations at the 38th Session of the Legal Committee, which was held in March 2022, for its consideration.

Guidance material

In line with the Cybersecurity Action Plan, ICAO developed guidance material to support States and stakeholders in addressing cybersecurity in civil aviation, including guidance on traffic light protocol (TLP), cybersecurity policy and cybersecurity culture in civil aviation.

Awareness-raising and outreach activities

Raising the awareness of States and stakeholders of the importance of addressing cybersecurity in civil aviation has been a core activity of ICAO. The Organization has been, and continues to be, heavily involved in the organization of and participation in national, regional and international conferences, meetings and webinars in order to: promote cooperation between all stakeholders in the cybersecurity and cyber resilience fields; promote the implementation of the Aviation Cybersecurity Strategy and the Cybersecurity Action Plan; and promote, among Member States, the importance of the adoption and ratification of the Convention on the Suppression of Unlawful Acts Relating to International Civil Aviation (Beijing Convention) and Protocol Supplementary to the Convention for the Suppression of Unlawful Seizure of Aircraft (Beijing Protocol) of 2010 to support the deterrence of cyber threats and the punishment of cyber-attacks on civil aviation.

A40-11: Consolidated statement on continuing ICAO policies related to aviation security

APPENDIX A – General policy

In recent years, useful lessons have been learned in the implementation of the Global Aviation Security Plan (GASeP), and such experience is being considered when making refinements to the GASeP to ensure that it leads to the continuous improvement of aviation security.

In this context, ICAO's Office of Internal Oversight (OIO) carried out an evaluation of the GASeP between April and November 2021. The purpose of the evaluation was to conduct a high-level analysis of the relevance, coherence, effectiveness, efficiency and sustainability of the GASeP in enhancing global aviation security and to provide recommendations to improve the delivery of results and the GASeP's management. The evaluation revealed that the GASeP had been a useful and relevant framework in advancing aviation security and had helped to raise the profile of aviation security at the political level.

However, the GASeP's aspirational target for 2020, namely, for 80 per cent of States to have over 65 per cent in effective implementation (EI), was not met. The next GASeP aspirational target is for 90 per cent of States to score over 80 per cent in EI by the end of 2023. All ICAO Regional Offices hold audit data relating to States to whom they are accredited, along with the Universal Security Audit Programme Continuous Monitoring Approach (USAP-CMA) schedule, and are working with States to identify assistance and capacity-building opportunities. The achievability of the 2023 and 2030 aspirational targets will only be determined by the political will and policy decisions of individual Member States.

In this regard, extensive activity has been undertaken to facilitate and promote implementation of the GASeP by all stakeholders, and has involved various ICAO Headquarters initiatives and key support from the Regional Offices. Numerous capability-enhancing initiatives have been developed and deployed in support of GASeP actions. In addition, ICAO symposiums play an important role in fostering knowledge-sharing in aviation security, reciprocal learning and peer review across all ICAO Regions. In 2019, ICAO held its annual Global Aviation Security Symposium, which focused on current and future innovations in aviation security technology and processes. The Symposium was held a week prior to the 40th Session of the ICAO Assembly. In 2020, the Symposium's theme was *Improving Security Culture by Connecting the Dots*, and in 2021, its theme was *AVSEC: Business not as Usual*. The 2021 Symposium included special sessions on the commemoration of the 20th anniversary of the attacks of 11 September 2001. Each Symposium was attended by numerous State and industry representatives. Through this strong global engagement, the GASeP has remained a cornerstone of States' aviation security priorities.

The Secretariat has continued to provide States and other stakeholders with access to data on GASeP implementation on a quarterly basis on ICAO's GASeP Secure Portal. In addition, the Secretariat has participated in several webinars and events organized by different regional and industry organizations to broadcast the work that is being done in this regard.

After considering the OIO's evaluation of the GASeP, the ICAO Council welcomed the OIO's three recommendations and the ICAO Management Action Plan, noting that their implementation would have resource implications. The Council also agreed that the OIO evaluation report could serve as a starting point for improving the implementation of the GASeP and updating it based on the experience gathered during the 2017–2022 period. The Council also noted that the GASeP Task Force was to be reactivated to address the recommendations in the evaluation report.

APPENDIX B – International legal instruments, enactment of national legislation and conclusion of appropriate agreements for the suppression of acts of unlawful interference with civil aviation

The importance of becoming party to aviation security conventions continues to be emphasized through

briefings and high-level meetings.

APPENDIX C – Implementation of technical security measures

The importance of a strong security culture in aviation was highlighted in Resolution A40-11. The Assembly recommended that ICAO continue to work on the development of tools to enhance security awareness and security culture, making it a priority and designating 2020 as the Year of Security Culture (YOSC). With the COVID-19 pandemic severely impacting aviation in 2020, the ICAO Council decided to defer the YOSC to 2021 (see C-MIN 220/7).

In State Letter AS8/23 – 20/125 (dated 13 November 2020), ICAO's Secretary General encouraged States, in collaboration with industry and other organizations, to support security culture activities. The Secretary General also requested the delivery of practical security culture events and initiatives throughout 2021 and beyond, by all entities, to help promote a strong and effective security culture in aviation. ICAO Electronic Bulletin EB 2021/018 (dated 18 May 2021) also contained information on the YOSC and suggestions in support of the initiative.

ICAO delivered a range of YOSC initiatives and activities and developed various ICAO security culture tools and resources throughout 2021. These were managed by a dedicated ICAO Secretariat project team at ICAO Headquarters, in coordination with the ICAO Regional Offices and Aviation Security Training Centres (ASTCs).

The ICAO security culture web page¹² was developed and will be maintained as a permanent resource. The web page includes security culture best practices from ICAO, States, industry and other organizations, and features guidance material, videos, leaflets, toolkits, training material, quizzes, checklists, frequently asked questions and articles offering tips and best practices on security culture. The website also contains a set of self-assessment questions to help organizations measure and improve their security culture. Also available on the website is a series of YOSC Newsletters highlighting security culture developments and resources.

ICAO held numerous global events in support of the YOSC, including the annual Aviation Security Symposium in September 2021. The Symposium built on the success of its 2020 edition, during which the YOSC was officially launched by ICAO's Secretary General. At these events, influential speakers from States and industry shared security culture tips and best practices. In February 2022, ICAO also held an online Security Culture Webinar, during which the YOSC was officially closed by the Secretary General. The Webinar highlighted global security culture achievements in 2021 and provided speakers with an opportunity to share their YOSC experiences. The Webinar also highlighted the various tools, resources and guidance available to support a permanent focus on security culture by all in aviation, giving speakers a platform to share security insights and best practices.

The international civil aviation community supported efforts to raise security awareness and promote a strong and effective security culture in aviation operations across the world throughout 2021. A summary document on global YOSC achievements is available in English on the ICAO security culture web page.¹³ The document highlights various security culture events, campaigns and initiatives, as well as security culture best practices and guidance material developed and shared by the aviation community.

ICAO continues to roll out a number of security culture assistance products, including: an interactive e-learning package on security culture; a security culture short film; security culture discussion cards for use in training, briefings and other assistance activities; and customizable resources (templates) to support local security culture campaigns.

¹² www.icao.int/Security/Security-Culture/Pages/default.aspx

¹³ [Summary Doc YOSC Achievements.pdf \(icao.int\)](#)

ICAO took action to adopt, without delay, Standards to strengthen the response to insider threat. Amendment 17 to Annex 17 — *Security*, adopted by the Council in November 2019, became effective on 30 March 2020. Amendment 17 arose from proposals made at the Thirtieth Meeting of the Aviation Security Panel (AVSECP/30), held from 13 to 17 May 2019, to ensure that the measures in Annex 17 were commensurate with the level of insider threat to civil aviation. The amendment included, but was not limited to, revised definitions on background checks and new and revised provisions on vulnerability assessments, training programmes and certification systems, access control and staff screening.

The Secretariat updated its relevant guidance material in the *Aviation Security Manual* (Doc 8973 – Restricted) to account for the need to screen all staff prior to entry into airport security restricted areas, as mandated by Standard 4.2.5 in Annex 17.

In addition, a holistic review of existing guidance material addressing insider threat, and more specifically, vehicle screening, was carried out, and adjustments were made accordingly.

Furthermore, to provide for the implementation of Standard 4.2.6, new guidance material was developed on the use of screening technology capable of detecting the presence of explosives.

APPENDIX D – The ICAO Universal Security Audit Programme

To address Assembly Resolution A40-11, Appendix D, on the ICAO Universal Security Audit Programme (USAP), the ICAO Secretariat made improvements to the USAP to ensure consistent interpretation of Annex 17 Standards and a more operational focus on the programme, address serious deficiencies in a timely manner and apply a risk-based approach to audit prioritization. Such improvements would ensure effective reporting of Member States' risk-based and outcomes-focused compliance with relevant security objectives, and were implemented in response to recommendations made by the Secretariat Study Group on the Universal Security Audit Programme. Some of the highlights include:

- a) identifying the Universal Security Audit Programme – Continuous Monitoring Approach (USAP-CMA) Protocol Questions (PQs) that assess compliance for each audited Standard, thereby enabling the creation of a revised compliance graph to better reflect operational compliance with Annex 17 Standards;
- b) conducting a full review of the USAP-CMA PQs to reflect Amendment 17 to Annex 17 and Amendment 28 to Annex 9 — *Facilitation*;
- c) preparing a semi-annual newsletter for USAP-CMA auditors to further strengthen recurrent training efforts;
- d) posting the list of National Coordinators and their contact details on the USAP secure portal;
- e) updating the *Universal Security Audit Programme Continuous Monitoring Manual* (Doc 9807) to clarify the audit methodology and clearly explain the updated risk-based approach to the prioritization of USAP-CMA activities;
- f) revising the corrective action plan template to improve the tracking of States' implementation of audit recommendations;
- g) modifying the semi-annual Electronic Bulletins issued by the Secretariat regarding USAP implementation in order to identify States that defer audits; and
- h) adjusting the scheduling of on-site audits to include more preparation time for documentation review.

APPENDIX E – The ICAO Implementation Support and Development – Security Programme (ISD-SEC)

Pursuant to Assembly Resolution A40-11, and affirmed by the priority objectives of the Global Aviation Security Plan (GASeP), one of ICAO's aims is to implement targeted assistance to address identified deficiencies in Member States. The primary objective of aviation security and facilitation assistance is to support Member States in resolving significant security concerns (SSECs) identified through the ICAO Aviation Security Audit Programme (USAP), and to assist States in implementing the Standards and Recommended Practices (SARPs) in Annex 9 — *Facilitation*, and Annex 17 — *Security — Safeguarding International Civil Aviation Against Acts of Unlawful Interference*.

Aviation Security Improvement Plans (ASIPs) are designed specifically for individual States based on the results of needs assessments and the States' assistance requirements, and may be initiated following a USAP audit or at a State's request. Each phase of an ASIP has performance indicators, conditions and quality assurance measures that must be met before the following phase of the ASIP is initiated. Therefore, a State's ability to complete an ASIP is dependent upon multiple factors, including the ability of ICAO to provide assistance to the State and the ability of the State to meet the conditions of the ASIP to ensure effective implementation of improved security measures. During the 2020–2022 triennium, there were 13 active ASIPs, and three were completed. Five additional ASIPs have been requested.

ICAO's aviation security training programme manages the delivery of six aviation security training courses and eight aviation security workshops. In order to provide aviation security training to all Member States under the framework of the *No Country Left Behind* initiative, the programme also manages the ICAO Aviation Security Training Centre (ASTC) Network. There are currently 36 members of the ASTC Network, operating in all seven ICAO Regions, with one new, ICAO-endorsed ASTC having joined the Network during the 2020–2022 triennium. In 2020 and 2021 combined, a total of 47 ICAO-sponsored aviation security courses and workshops were conducted through the ASTC Network, benefiting 576 aviation security specialists from 92 Member States.

In addition, the Secretariat recognizes the need to continue to update existing training to align it with the current iteration of Annex 17, the security-related SARPs in Annex 9, and ICAO's *Aviation Security Manual* (Doc 8973 – Restricted), and to develop new aviation security and facilitation training packages that address gaps in the current portfolio and new and emerging threats.

APPENDIX G – International and regional cooperation in the field of aviation security

United Nations Security Council Resolutions adopted prior to Resolution A40-11, such as Resolutions 2341 (2017), 2368 (2017), 2396 (2017) and 2482 (2019) pertaining to border controls, aviation security, critical infrastructure and counterterrorism, continue to shape the cooperation between ICAO and other United Nations agencies under the United Nations Global Counter-Terrorism Coordination Compact. This collaboration is an important pillar of ICAO's work in countering threats to civil aviation, as it allows challenges to be addressed through complementary activities leveraging each party's own competencies and capabilities in the areas of aviation security, facilitation and border control.

In 2020, ICAO was associated with the development, and is now participating in the implementation, of the United Nations Programme on Threat Assessment Models (TAM Programme), led by the United Nations Office of Counter-Terrorism (UNOCT). This programme is of great relevance to countering internal and external threats to civil aviation as it focuses on supporting Member States in the development of effective interagency coordination processes in order to establish a common approach to national threat assessments within the context of aviation security. It builds upon the Security Council's call, in its Resolution 2309, for Member States to deepen dialogue and cooperation on matters relating to aviation security, including the exchange of threat-related information amongst all relevant authorities. The TAM Programme also complements guidance material contained in ICAO's *Aviation Security Global Risk Context Statement* (Doc 10108 – Restricted) in the

performance of informed risk assessments by Civil Aviation Authorities, which enable the implementation of the most appropriate mitigation measures.

ICAO, as a partner in the United Nations Countering Terrorist Travel Programme together with UNOCT, the Counter-Terrorism Committee Executive Directorate (CTED) and United Nations Office on Drugs and Crime (UNODC), provides support to States in building their capacities to prevent, detect, investigate and prosecute terrorist offences and other serious crimes. Under the Programme, ICAO is particularly focused on ensuring the proper collection and analysis of both Advance Passenger Information (API) and Passenger Name Record (PNR) information as important components in efforts to counter terrorist travel. Fifty-one States have participated in the Programme since its inception in 2019. ICAO is working closely with UNOCT on its other projects dedicated to unmanned aircraft systems (UAS), cyber issues and protection of critical infrastructure and soft targets.

ICAO also continues to work closely with the CTED, including through the participation in on-site country visits to evaluate United Nations Member States' implementation of civil aviation counterterrorism-related resolutions, determine the efficacy of States' aviation statutes, regulations and policies, and provide recommendations to enhance capacity-building, in particular in relation to aviation security and API and PNR provisions. ICAO participated in seven (on-site) CTED visits in 2019 and eight missions, in an online format, in 2021.

A40-12: Declaration on aviation security – affirming global commitment to strengthening implementation

To assist States in promoting awareness of threats and risks to civil aviation, ICAO has continued to support and coordinate the activities of the Working Group on Threat and Risk (WGTR) of the Aviation Security Panel (AVSECP), which overviews security threats and risks to international civil aviation from a global perspective. In this connection, the second edition of ICAO's *Aviation Security Global Risk Context Statement* (Doc 10108 – Restricted) was published in 2019, and a new edition is due in 2022. In the meantime, the WGTR has updated its assessment of emerging and evolving security threats and risks to aviation from terrorism, which also included advice on the impact of COVID-19 on aviation security in September 2020. The assessment was published in a stand-alone document entitled "Updated Overview of Threats and Risks to Civil Aviation".

In addition, to foster the exchange of information between States, the Secretariat is leveraging its point of contact network to share timely security information that can have an impact on national, regional or international threat and risk assessments carried out by relevant authorities.

Furthermore, the Secretariat is continuously addressing innovation in aviation security, for example through the development and maintenance of the AVSECPaedia platform, the organization of innovation-focused events such as the ICAO Global Aviation Security Symposium, participation in industry-centric forums, and publication of guidance material on the use of screening technologies.

In order to encourage effective coordination and cooperation between aviation security and other disciplines, such as safety and facilitation, the Secretariat has implemented a coordinated approach on some dedicated topics but recognizes that wider coordination in some instances will be necessary across multiple stakeholders and expert groups.

Effective coordination has been taking place in areas such as air cargo security and safety. In order to deliver a holistic approach to the safe carriage of goods, different units of the Secretariat are actively supporting the Safe Carriage of Goods Specific Working Group of the Flight Operations Panel, which is a multidisciplinary group that integrates the expertise of the Flight Operations Panel into other disciplines such as cargo safety (including dangerous goods), airworthiness, safety and risk management, security and facilitation.

The coordination of safety and security efforts also took place in the development of Annexes, including in the establishment of international provisions pertaining to remotely-piloted aircraft systems operations. In this regard, the Secretariat took steps to ensure that the Aviation Security Panel participated in the development of aviation security requirements and measures in the forthcoming Part IV — *International Operations — Remotely Piloted Aircraft Systems* to Annex 6 — *Operation of Aircraft*.

To address the growing threat posed by the use of unmanned aircraft systems (UAS), the Secretariat also developed guidance material aimed at protecting aviation infrastructure from unmanned aircraft and providing best practices on prevention, coordination, preparedness and response. Given the multidisciplinary nature of this subject, coordination between various actors (appropriate authorities, air navigation service providers (ANSPs), airports operators, etc.) took place in order to achieve synergies and harmonization in responding to such threat.

Similar collaborative work on other Annexes, including Annex 10 — *Aeronautical Telecommunications*, Volume IV — *Surveillance and Collision Avoidance Systems*, the *Airport Planning Manual* (Doc 9184) and other documents is ongoing.

A40-13: The Universal Safety Oversight Audit Programme (USOAP) Continuous Monitoring Approach (CMA)

The Council, at the sixth meeting of its 225th Session, agreed on the revisions to the recommendations of the Ad Hoc USOAP CMA Advisory Group that resulted from State consultation, as amended by the Air Navigation Commission. These recommendations will support the evolution of the USOAP CMA into a more evidence-based, risk-informed and result-oriented programme by improving the data available to the programme, and will promote coordination and cooperation between ICAO and relevant partners. The Secretariat continues to prioritize States for USOAP activities using a risk assessment method that is applied on a universal basis and has processes in place to ensure its independence, standardization and transparency.

A40-14: Mitigation of the spread of disease through, inter alia, aircraft disinsection and vector control methods, and the importance of CAPSCA (Collaborative Arrangement for the Prevention and Management of Public Health Events in Civil Aviation) for implementation

Resolution A40-14 directed the Council to continue to engage with the World Health Organization (WHO) to develop performance-based criteria, recommendations and guidance on a scientifically based risk assessment model in relation to vector control measures including aircraft disinsection.

As part of the Collaborative Arrangement for the Prevention and Management of Public Health Events in Civil Aviation (CAPSCA), a model on vector control measures has been developed and will be expanded to include non-vector communicable diseases and disinfection measures, thus incorporating lessons learned during the pandemic and the potential consequences of climate change on vectors and public health in future.

An Assembly paper addressing this resolution and other proposals relating to the mitigation of the spread of disease is planned to be presented at the 41st Session of the Assembly.

A40-15: Development and implementation of facilitation provisions — combatting human trafficking

The Facilitation Panel's Working Group on Human Trafficking developed the Comprehensive Strategy for Combatting Human Trafficking in the Aviation Sector to equip States, civil aviation authorities and organizations, aircraft operators and airports with guidance and recommendations to inform their development of comprehensive counter-trafficking strategies. The Strategy was agreed on at the Twelfth Meeting of the Facilitation Panel (FALP/12) and approved by the Council's Air Transport Committee in September 2021.

A40-16: Consolidated statement of continuing ICAO policies related to facilitation

APPENDIX A – Development and implementation of facilitation provisions

On 1 June 2021, ICAO issued State Letter EC 6/3 – 21/25 requesting Member States to complete an online survey on advancing accessibility in aviation. The aim of the survey was to collect information from Member States on their regulations, statutes and policies relating to accessibility in aviation, facilitate the development of a compendium of such regulations, statutes and policies by the Facilitation Panel's Working Group on Advancing Accessibility in Aviation, and assist Member States in implementing Annex 9 — *Facilitation* provisions on facilitation of the transport of persons with disabilities.

As part of the High-level Conference on COVID-19 (HLCC 2021) Facilitation Stream, participants discussed improving accessibility in aviation and made four recommendations addressed to States, including to recognize the importance of the Standards and Recommended Practices (SARPs) of Annex 9 and to increase States' level of implementation of the relevant provisions, giving due regard to Doc 9984, *Manual on Access to Air Transport by Persons with Disabilities*. The recommendations were endorsed by the Conference's Ministerial Plenary and by the ICAO Council during its 225th Session in March 2022.

On 23 June 2020, the ICAO Council adopted Amendment 28 to Annex 9, which became effective on 30 October 2020 and applicable on 28 February 2021. The amendment incorporated new and revised provisions related to, inter alia, Passenger Name Record (PNR) data (in line with United Nations Security Council Resolution 2396 (2017)), the ICAO Public Key Directory (PKD) and unruly passengers.

As part of Amendment 29 to Annex 9, adopted by the Council on 9 March 2022, five Recommended Practices on facilitation of the transport of persons with disabilities were elevated to Standards, thereby strengthening the international regulatory framework in this area. The amendment to the Annex will become effective on 18 July 2022 and applicable on 18 November 2022. Member States will be obligated to ensure, inter alia, that when travelling, persons with disabilities are provided with special assistance enabling them to receive the same services customarily available to the general public, and that this assistance is provided in a manner that respects the dignity of the individual. Measures to ensure that hearing- and vision-impaired travellers are able to obtain flight service-related information in accessible formats will be obligatory. States will also need to take steps to provide adequate parking for people with mobility needs, designate points for the pick-up and drop-off of persons with disabilities at airport terminal buildings, and, to facilitate movement within the airport, ensure that access routes are free of obstacles and accessible. Amendment 29 to Annex 9 incorporates new and revised definitions and SARPs relating to public health emergencies, security of travel and health proof documents, relief and repatriation flights, air transport facilitation of persons with disabilities, assistance to aircraft accident victims and their families, trafficking in persons, trafficking in wildlife, and Passenger Name Record (PNR) data.

Doc 9957, *The Facilitation Manual*, is being updated by the Facilitation Panel's Working Group on Guidance Material (WGGM) to include guidance material for new and revised SARPs for both Amendments 28 and 29 to Annex 9, taking into account new and revised international best practices including guidance from the World Health Organization (WHO).

At the Twelfth Meeting of the Facilitation Panel, a dedicated working group on Annex 9 was established to ensure that the measures contained in Annex 9 were commensurate with the current and foreseeable environment for global aviation facilitation in civil aviation. The Air Transport Committee approved the Report the Facilitation Panel in September 2021.

APPENDIX B – National and international action in ensuring the integrity of traveller identification and border controls and enhancing security

The revised ICAO Traveller Identification Programme (TRIP) Implementation Roadmap was published on the ICAO public website. The Roadmap incorporates new and revised Annex 9 SARPs related to the ICAO TRIP Strategy with the objective of guiding Member States in their efforts to implement the Strategy and comply with the related Annex 9 SARPs and the international specifications for machine-readable travel documents (MRTDs) contained in Doc 9303, *Machine Readable Travel Documents*.

The eighth edition of Doc 9303, which consists of 13 Parts, was published on the ICAO public website in all ICAO languages in 2021. The newly added Part 13 provides specifications on visible digital seals to ensure the authenticity and integrity of non-electronic documents in a comparatively inexpensive, but highly secure, manner. The information on non-electronic documents is cryptographically signed, and the signature is encoded as a two-dimensional barcode and printed on the document itself.

The most strategic aspect of facilitating seamless and contactless procedures is the deployment of a digitized travel document such as the digital travel credential (DTC), the specifications of which build on the technology already deployed for the issuance and inspection of electronic machine readable travel documents (eMRTDs). The DTC can facilitate the use of facial recognition, especially when the content of the digitized eMRTD is validated before it is enrolled in passenger facilitation schemes. In response to the challenges posed by the COVID-19 pandemic on travellers' journeys, and following the recommendations set by the ICAO Council Aviation Recovery Task Force (CART), the ICAO Secretariat, with the assistance of experts from the International Organization for Standardization (ISO) and the Technical Advisory Group on the ICAO Traveller Identification Programme (TAG/TRIP) New Technologies Working Group (NTWG), developed the technical specifications for visible digital seals for non-constrained environments (VDS-NC), which provides a globally interoperable framework for the validation of vaccination, testing and recovery certificates. The use of the VDS-NC was considered to be the most suitable solution for presenting reliable and secure COVID-19 health proofs at border crossings.

To assist States and support the implementation of the ICAO TRIP Strategy, virtual and online symposiums, seminars and workshops were held from 2020 to 2022. The Sixteenth ICAO Traveller Identification Programme Symposium 2021 (TRIP 2021) was held online from 25 to 26 May 2021 under the theme *Game-changing Technologies Driving Seamless Border Management*, and was followed by the first joint ICAO/International Criminal Police Organization (INTERPOL) Passenger Data Exchange Forum from 27 to 28 May 2021. New and updated ICAO TRIP guidance material is available at <https://www.icao.int/Security/FAL/TRIP/Pages/Publications.aspx>.

To assist States through capacity-building and enhance the implementation of Annex 9 provisions, ICAO developed three training courses entitled Annex 9 — Facilitation, ICAO Traveller Identification Programme (TRIP) Strategy, and Assistance to Aircraft Accident Victims and their Families, for delivery in both online and classroom formats.

The Facilitation Panel's Working Group on Human Trafficking developed a Comprehensive Strategy for Combatting Human Trafficking in the Aviation Sector to equip States, civil aviation authorities and organizations, aircraft operators and airports with guidance and recommendations to inform their development of comprehensive counter-trafficking strategies. The Strategy was agreed on at the Twelfth Meeting of the Facilitation Panel (FALP/12) and approved by Air Transport Committee in September 2021.

APPENDIX C – National and international action and cooperation on facilitation matters

Amendment 29 to Annex 9, adopted by the ICAO Council on 9 March 2022, contains a new Recommended Practice for aircraft and airport operators to develop appropriate plans to provide timely and effective assistance to aircraft accident victims and their families. As part of the amendment, Recommended Practice 8.46 will also be elevated to a Standard, obliging States to establish legislation, regulations and/or policies in support of aircraft accident victims and their families. The amendment will become effective on 18 July 2022 and applicable on 18 November 2022.

ICAO continues to partner in the United Nations Countering Terrorist Travel Programme, led by the United Nations Office of Counter-Terrorism (UNOCT), pursuant to a memorandum of agreement signed on 31 August 2020. The Programme takes an All-of-United Nations approach to assist Member States in building their capacities to prevent, detect, investigate and prosecute terrorist offences and other serious crimes, including their related travel, by collecting and analysing passenger data, including both Advance Passenger Information (API) and PNR data, in accordance with Security Council Resolution 2396 (2017), Annex 9 SARPs and other international law obligations. ICAO continues to provide a dedicated technical officer to the Programme, bringing the full range of ICAO's expertise in the field of passenger data exchange systems to all aspects of the Programme's implementation, namely, its legal, operational, industry engagement-related and technical aspects.

APPENDIX D – Passenger Data Exchange Systems

Pursuant to United Nations Security Council Resolution 2396 (2017), ICAO established a dedicated ad hoc PNR task force to review existing, and develop new, SARPs for the collection, use, processing and protection of PNR data. On 23 June 2020, the ICAO Council adopted Amendment 28 to Annex 9, which became effective on 30 October 2020 and applicable on 28 February 2021. This amendment introduced a suite of new PNR SARPs creating certainty for States and industry alike regarding the implementation of PNR requirements worldwide.

A40-17: Consolidated statement of continuing ICAO policies and practices related to environmental protection – General provisions, noise and local air quality

At its 40th Session, the Assembly endorsed the environmental trends to be used as the basis for decision-making on environmental matters, and requested that the Assembly be updated thereon at its 41st Session. In response to this request, and in support of a data-driven decision-making process, an extensive modelling and analysis exercise has been conducted during the triennium to deliver an updated set of environmental trends, including noise, local air quality (LAQ) emissions, and emissions that affect the global climate.

In comparison with the previous trends assessment, the updated trends show lower long-term projections for fuel burn, noise and LAQ emissions than those presented at the last Assembly, most of which are attributed to differences in central traffic demand forecasts, which have been significantly impacted by data from the COVID-19 pandemic. The previous 2015 forecast was produced during a period of steady global economic growth with the expectation that this expansion would continue with global gross domestic product (GDP) growing at an annual rate of 2.8 per cent over the 10-year period from 2015 to 2025, and 2.6 per cent over the 30-year period from 2015 to 2045.

In contrast, the current forecast includes the effect of the COVID-19 pandemic both on the economic recovery path from 2020 and the long-term outlook, and a more tepid 10-year annual global GDP growth rate of 2.4 per cent for 2018–2028 and 2.5 per cent over the 32-year period from 2018–2050. These updated traffic forecast scenarios were designed to reflect the possible trajectories of the aviation industry as it moves out of the current pandemic-driven downturn, and were used as the basis for the current environmental trends assessment, the feasibility study on a long-term global aspiration goal (LTAG) and analyses of the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA).

The recommendations of the Committee on Aviation Environmental Protection (CAEP) to amend Annex 16 — *Environmental Protection*, Volume I — *Aircraft Noise*, and the *Environmental Technical Manual* (Doc 9501), Volume I — *Procedures for the Noise Certification of Aircraft*, including to ensure that environmental Standards and Recommended Practices (SARPs) remain up to date and relevant, have been under consideration by the Council. ICAO is following up on possible noise issues related to Emerging Technology Aircraft (including urban air mobility concepts and remotely piloted aircraft) and the experiences of ICAO Member States in that regard.

The CAEP recommendations to amend Annex 16, Volume II — *Aircraft Engine Emissions*, and Doc 9501, Volume II — *Procedures for the Emissions Certification of Aircraft Engines*, including the complete restructuring to ensure alignment with the Air Navigation Commission's guidelines on drafting SARPs and Procedures for Air Navigation Services (PANS), improvements to the definition of equivalent procedure, amendments related to referenced documents, and changes to ensure consistency in applicability language, have been under consideration by the Council.

Updates to Doc 9889, *Airport Air Quality Manual*, were also made, including to information on aircraft non-volatile Particulate Matter (nvPM) emissions, the latest recommended calculation methodology, and dispersion modelling (see C-WP/15309, paragraphs 1.1–2.3, 3.1 and 4.1–4.2).

A40-18: Consolidated statement of continuing ICAO policies and practices related to environmental protection – Climate change

In response to a request made by the Assembly in Resolution A40-18, ICAO, its Member States and other stakeholders made significant efforts in exploring the feasibility of a long-term global aspirational goal (LTAG) for international aviation.

As part of this work, and to promote data collection and information-sharing on aviation in-sector CO₂ emissions reductions, the 2020 and 2021 editions of the ICAO Stocktaking on aviation in-sector CO₂ emissions reduction were convened in September 2020 and September 2021. During these events, States, industry leaders, researchers and innovators shared their ambitious plans, solutions and policies for carbon emissions reduction from international aviation, including with regard to technology, operations and fuels. The 2021 Stocktaking also included six pre-Stocktaking webinars, which took place from March to August 2021 and focused on various specific topics on green technologies and innovations.

In addition, ICAO developed the Tracker Tools website, which contains all the latest, updated information on aviation net zero initiatives and aviation CO₂ emissions reduction initiatives falling under the three streams of technology, operations and fuels. Information on partner projects within the ICAO Global Coalition for Sustainable Aviation is also provided. The Coalition is a forum for stakeholders aimed at facilitating the development of new ideas and accelerate the implementation of innovative solutions to further reduce greenhouse gas emissions at source, on the ground or in the sky.

The Committee on Aviation Environmental Protection (CAEP) undertook its technical work on the feasibility study on a long-term global aspirational goal (LTAG) since early 2020, which culminated at the CAEP's 12th meeting in February 2022. At the meeting, CAEP unanimously adopted its technical report on the feasibility of an LTAG, including scenarios, highlighting the potential for substantial CO₂ reductions through the use of aviation in-sector measures, including innovative aircraft technologies, operations and fuels. Recognizing the invaluable contributions of CAEP to delivering a high standard and quality of work, the Council agreed that the report would be used as the input for further considerations by States and stakeholders.

As part of the consultative process on the LTAG among States and other stakeholders, ICAO organized the LTAG Global Aviation Dialogues (GLADs) as a series of five regional events both in May 2021 and March–April 2022, with the aim of sharing information and raising awareness on the LTAG process and technical analyses, as well as enabling the exchange of views to facilitate further LTAG work and decision-making at the ICAO High-level Meeting on the feasibility of a long-term aspirational goal for international aviation CO₂ emissions reductions (20 to 22 July 2022) and subsequent 41st Session of the Assembly.

ICAO also continued to work with Member States in order to support the development and updating of State Action Plans. This initiative has become a key element of the Organization's capacity-building and assistance strategy to support Member States in implementing a broad range of CO₂ emissions mitigation measures selected from ICAO's basket of measures. By June 2022, 128 Member States, representing approximately 98 per cent of international aviation traffic, had voluntarily submitted action plans to ICAO. These successful

results demonstrate the high interest and engagement of Member States in this initiative, as well as the positive impact of ICAO's assistance and capacity-building activities.

The Assembly encouraged States that had already submitted action plans to share information contained therein and to build partnerships with other States in order to support States that had not prepared action plans. In this respect, ICAO has been facilitating the establishment of buddy partnerships between States, including the development of a draft agreement of cooperation aiming to establish a model framework according to which States can help other States. To date, nine partnerships have been established under the ICAO State Action Plan Buddy Programme.

ICAO continued to cooperate with other United Nations bodies and international organizations involved in policymaking on climate change as part of the United Nations Framework Convention on Climate Change (UNFCCC) process. While emissions from the international aviation and maritime sectors are not included as part of the nationally determined contributions (NDCs) under the UNFCCC Paris Agreement, these are separately addressed by ICAO and the International Maritime Organization (IMO) to complement the Paris Agreement goals. In this regard, ICAO regularly delivered statements and written submissions, and organized and participated in relevant meetings and side events during the Conferences of the Parties to the UNFCCC with the aim of maintaining ICAO's leadership role in all issues related to international aviation and climate change.

ICAO also continued to keep abreast of developments in other United Nations bodies, including IMO, the Intergovernmental Panel on Climate Change (IPCC), World Meteorological Organization (WMO), United Nations Environment Programme (UNEP), World Health Organization (WHO) and United Nations Environment Management Group (EMG). Thanks to its Carbon Emissions Calculator, the ICAO Secretariat has been playing a key role in supporting other United Nations organizations in estimating the air travel-related portion of greenhouse gas inventories, as part of the strategy for sustainability management across all United Nations system organizations (see C-WP/15391, paragraphs 1.1–3.3).

A40-19: Consolidated statement of continuing ICAO policies and practices related to environmental protection – Carbon Offsetting and Reduction Scheme for International Aviation (CORSA)

As requested by the Assembly in Resolution A40-19, the ICAO Council has overseen the implementation of CORSA with the support of its Climate and Environment Committee (formerly the Advisory Group on CORSA (AGC)), its Technical Advisory Body (TAB) and its Committee on Aviation Environmental Protection (CAEP).

Prior to the start of CORSA's pilot phase on 1 January 2021, the Council successfully developed all the essential components of the CORSA implementation package, namely: Standards and Recommended Practices (SARPs) in Annex 16 — *Environmental Protection*, Volume IV — *Carbon Offsetting and Reduction Scheme for International Aviation (CORSA)*; guidance in Doc 9501, *Environmental Technical Manual*, Volume IV — *Procedures for demonstrating compliance with the Carbon Offsetting and Reduction Scheme for International Aviation (CORSA)*; and five CORSA Implementation Elements.

The first edition of Annex 16, Volume IV, became applicable on 1 January 2019, which was the starting date for the monitoring, reporting and verification (MRV) of CO₂ emissions under CORSA. Amendments to Annex 16, Volume IV, are currently being considered by the Council on the basis of technical recommendations put forward during the 12th CAEP meeting in February 2022. In addition, updates to the *Environmental Technical Manual*, Volume IV, which compiles technical guidance to support the implementation of SARPs, will be consequential to the next edition of Annex 16, Volume IV.

The five CORSA Implementation Elements, as reflected in various ICAO documents directly referenced in Annex 16, Volume IV, contain materials that are essential for the implementation of CORSA. These have been developed by the Council and approved for publication on the ICAO CORSA web page, www.icao.int/corsia (see C-WP/15393, paragraphs 1.1–1.4).

A40-20: Increasing the efficiency and effectiveness of ICAO

Under the direction of the Council and Secretary General, ICAO has focused its efforts on increasing efficiency and effectiveness. As directed by the Council, the ICAO Business Plan 2023–2025 has been prepared through a systematic planning process and robust results-based management (RBM) approach with a view to: better defining planned results and targets; achieving coherent organization-wide results (under the One ICAO approach) and performance monitoring; improving effectiveness, transparency and accountability; aligning results with resources; and driving the development of the Regular Budget. The Business Plan will also be made available to Member States and its current version presented, during the triennium concerned, to each ordinary session of the Assembly. Among its key features, the Business Plan 2023–2025:

- a) has been developed to be adaptable to changes in priorities during the triennium due to unforeseen circumstances (such as crises and decisions made at high-level conferences), as well to other relevant changes in the external environment, and to make improvements on an ongoing basis;
- b) contains a new Transformational Objective that addresses key modernization activities for making the Organization more efficient and fit-for-purpose to carry out future mandates;
- c) is based on a clear, logical framework consisting of outcomes, outputs and activities; and
- d) facilitates the One ICAO approach by integrating activities and leveraging synergies across the Bureaus and Regional Offices, with a view to achieving each of the Plan's outcomes.

Additional concrete steps have been taken to: increase transparency; improve the workplace environment; update dashboards with real-time operational data; develop innovative new partnerships with external stakeholders; increase organizational effectiveness and ensure that consensus-based results remain a core value and objective of ICAO and its subject matter expert bodies; and mobilize additional resources for the improved delivery of objectives, including:

- a) taking a leadership role in clarifying the Organization's areas of accountability vis-à-vis the Assembly, including through the development of the ICAO Accountability Framework;
- b) implementing and integrating risk management and internal controls into the Organization's programmes and activities for further operational efficiency and effectiveness;
- c) introducing reforms in the management of ICAO's new human resources strategy to align it with relevant best practices identified throughout the United Nations system;
- d) revising the Information and Communications Technology (ICT) Strategy, which includes a Digital Transformation Initiative covering all areas of modern ICT to optimize and improve processes across ICAO, including the functional requirements for monitoring performance based on the Business Plan Performance Monitoring Framework; and
- e) adopting a Resolution calling for complete and timely responses to State letters along with periodic performance reports on responses to State letters to the Assembly, pursuant to a decision made by the Council at its 203rd Session.

ICAO has also introduced procedural, managerial and administrative reforms to streamline the working methods and procedures of the Assembly, thereby achieving greater accountability, transparency and efficiency. In particular, efforts have been made to ensure an effective oversight mechanism and independent procedure for reporting to the Council. Reporting procedures have been streamlined to eliminate the requirement for minutes for the meetings of the subsidiary bodies. Alternative options will also be provided for the presentation of general statements from Member States (such as pre-recorded video messages) to reduce the pressure on the available time slots. Lastly, more modern and efficient voting procedures, for example

electronic voting systems for the election of the Members of the Council, have been introduced since the 37th Session of the Assembly; however, additional options for greater efficiencies will be further explored, especially as regards the distribution process.

A40-21: Aviation's contribution towards the United Nations 2030 Agenda for Sustainable Development

At its 40th Session, the ICAO Assembly adopted Resolution A40-21: Aviation's contribution towards the United Nations 2030 Agenda for Sustainable Development. During the triennium, ICAO remained fully committed to working in close collaboration with States and other stakeholders to support the realization of the 2030 Agenda for Sustainable Development, mainly through the initiatives summarized below.

Given the role of ICAO as an official observer in the Inter-Agency and Expert Group on Sustainable Development Goal Indicators and the custodian agency of Sustainable Development Goal indicator 9.1.2 (Passenger and freight volumes, by mode of transport) within the framework of the 2030 Agenda, ICAO continued to provide the United Nations with data and analyses, which are reflected in the annual global Sustainable Development Goals report and online United Nations platform for monitoring the progress made towards achieving the Goals.

In 2020, ICAO brought its 193 Member States together with stakeholders from the aviation sector for international cross-sectoral collaboration, which led to preparation of a series of reports by the Council Aviation Recovery Task Force (CART) and accompanying guidance, which played an important role in steering the world back on track towards realizing the 2030 Agenda.

Given the importance of aviation in global efforts to recover from the COVID-19 pandemic, ICAO was invited to the meetings of the United Nations Executive Committee and Deputies Committee held in June and July 2020. During these meetings, ICAO proposed a number of recommendations, which led to the inclusion of a civil aviation perspective in the United Nations Secretary-General's policy brief on COVID-19 and transforming tourism, published in August 2020.

The active participation of ICAO in a variety of forums and in the preparation of United Nations-led publications and reports provided opportunities for stronger advocacy around the Sustainable Development Goals and for inspiring accelerated actions in the aviation industry. In October 2021, ICAO participated in the second United Nations Global Sustainable Transport Conference, which took place in Beijing, China, and had been actively engaged in the substantive preparations for the Conference. In addition, since the adoption of Resolution A40-21, ICAO has continued to provide its yearly contributions to the thematic reviews of the high-level political forum on sustainable development (HLPF), held annually under the auspices of the United Nations Economic and Social Council (ECOSOC).

Partnerships are strong enablers for promoting ICAO's Strategic Objectives and contributions to the 2030 Agenda and Sustainable Development Goals. Important strides have been made mainly through the development and release of ICAO's Partnership Framework Secretariat Guidelines and Revised General Secretariat Instructions on Agreements, Memoranda of Understanding (MoUs) and Similar Arrangements (GSIs). The two guidance documents, which complement the *ICAO Policy on Interactions with External Parties*, provide internal guidance for Secretariat staff on the policies, processes and procedures related to partnership activities. In addition, the ICAO Partnerships Platform was launched in 2021.

As part of ICAO's ongoing activities related to partnerships and collaborations in support of the Organization's core mission, new partnerships were facilitated between ICAO and leading entities, including the Inter-American Development Bank (IADB), International Labour Organization (ILO), United Nations Children's Fund (UNICEF), World Food Programme (WFP), World Tourism Organization (UNWTO) and World Economic Forum (WEF). Many of ICAO's partnership activities during this period focused on COVID-19 and were aimed at increasing ICAO's capacities to deliver on objectives, improving outreach and advocacy, and creating funding opportunities.

The ICAO Secretariat took part in discussions with the Development Operations Coordination Office (DOCO) as well as some of its members in relation to the evaluation of an invitation extended to ICAO by the United Nations Deputy Secretary-General to join the United Nations Sustainable Development Group (UNSDG).

With regard to capacity-building for the sustainable development of aviation, a new ICAO Civil Aviation Master Planning (CAMP) Course was developed based on guidance on national aviation planning frameworks. In addition, the guidance itself is being updated to incorporate resilience and preparedness plans. In the same vein, an implementation road map was developed based on recommendations from an analysis of the aviation needs of Pacific small island developing States, and various action items of the road map continue to be implemented.

A40-22: Resource Mobilization

At its 40th Session, the ICAO Assembly adopted Resolution A40-22: Resource Mobilization. The Resolution lays down a path for diversifying ICAO's donor base by promoting resource mobilization activities targeting international financial institutions and multilateral development banks.

The mobilization of voluntary funds at ICAO was a challenge from 2019 to 2021. During this period, ICAO's voluntary funds cumulatively received contributions of CAD 26.1 million, which represented a 43 per cent decrease from the previous 2016–2018 triennium (CAD 45.6 million) and an 80 per cent increase from the 2013–2015 triennium (CAD 14.5 million). During 2019–2021, CAD 22.0 million (84 per cent) was contributed by States and CAD 4.1 million (16 per cent), by others. The top financial contributors to voluntary funds for 2019–2021 were the United States of America (CAD 6.9 million), China (CAD 6.4 million), the European Commission (CAD 2.2 million), the Republic of Korea (CAD 1.5 million) and Saudi Arabia (CAD 1.4 million).

Regarding in-kind contributions, Member States supported ICAO through the deployment of gratis personnel, including short- and long-term secondees, and the organization of conferences, events, summits, meetings and workshops. The top five States providing gratis personnel¹⁴ during 2019–2021 were China (CAD 6.0 million), France (CAD 2.8 million), the United States of America (CAD 2.6 million), Singapore (CAD 2.6 million) and Turkey (CAD 1.4 million).

The ICAO Secretariat is drafting a resource mobilization strategy to reverse the downward trend in voluntary financial contributions and enhance the mobilization of quality, multi-year, flexible resources from public and private sector donors in a timely manner to meet the unfunded activity needs reflected in the ICAO Business Plan 2023–2025.

A40-23: Comprehensive Regional Implementation Plan for Aviation Security and Facilitation in Africa

The implementation of the African Aviation Security and Facilitation (AFI SECFAL) Plan is anchored on a three-phase (short-, medium- and long-term) work programme approved by the Plan's Steering Committee. The Steering Committee has so far held 11 meetings since its inception in 2015, the most recent of which was held in Nigeria in May 2022. The completion of the Plan's medium-term phase on 31 December 2020 has had a positive impact on the effective implementation of State aviation security oversight systems and compliance with Annex 17 — *Security* Standards and Recommended Practices (SARPs) and Annex 9 — *Facilitation* provisions supporting both border management and security objectives. During the medium-term phase, the planned activities and goals under the Plan were largely achieved despite the impact of the COVID-19 pandemic, which provided a good basis for implementation of the long-term phase (2021–2023). In order to have a harmonized approach to delivering on ICAO's Strategic Objectives, the AFI SECFAL Plan's work programme, the Windhoek Declaration and Targets, and the Africa and Middle East Aviation Security Roadmap have all been aligned with the Global Aviation Security Plan (GASeP).

¹⁴ Gratis personnel contributions equivalent in CAD.

A40-24: Consolidated statement of ICAO policies on technical cooperation and technical assistance

In line with the goal of achieving greater efficiency, this reporting period saw the development and endorsement by the Council of the Technical Cooperation Bureau (TCB)'s new Strategy and Business Model, which are aimed at enhancing the services provided by the Bureau in coordination and partnership with other ICAO Bureaus and Regional Offices and delivering greater value to ICAO Member States. The new Strategy and Business Model include: a number of structural changes, such as the transfer of the Procurement Section from TCB to the Bureau of Administration and Services; the development of a new ICAO procurement code in line with United Nations best practices; the introduction of a standardized methodology for the end-to-end management of projects based on a fully collaborative One-Single Process (OSP) approach; the incorporation of principles rooted in the Balanced Scorecard methodology with enhanced key performance indicators (KPIs) and strategic initiatives; and the commencement of TCB's digital transformation with the development of an integrated performance management and reporting system to facilitate the systematic collection of information for monitoring, reporting, learning and strategic planning purposes.

Building on the One ICAO approach, and with a view to realign ICAO's technical assistance and technical cooperation activities under the new Business Model, the new policy on ICAO's implementation support provided to States and approved by the Council in March 2022 responds to the Assembly's request for the Secretariat to strengthen and harmonize the coordination and management of the Technical Cooperation and Technical Assistance Programmes, projects, services and activities through clear delineation of each Bureau's mandate to avoid duplication and redundancy.

In order to support States in the effective implementation of ICAO Standards and Recommended Practices (SARPs), in 2020, TCB launched the Implementation Packages (iPacks) initiative as one of ICAO's coordinated efforts to support Member States in their recovery from the COVID-19 pandemic, in line with the Bureau's revenue diversification strategy for the triennium. In addition, a joint project planning exercise was carried out, which, by leveraging the Regional Offices' outreach functions and extensive knowledge of regional needs, identified a number of States in need of ICAO support across all regions and their specific requirements that could be addressed through the implementation of civil aviation-related projects.

A40-25: Implementing Aviation Training and Capacity-Building Strategies

Competency-based training courses help States to build the human resources capacities they need to achieve ICAO's Strategic Objectives. ICAO's Bureaus and Regional Offices, TRAINAIR PLUS Programme (TPP) Members, industry and academic institutions have been working with the Global Aviation Training Office (GAT) to develop new courses or have existing courses reviewed and recognized by ICAO. During the 2019–2021 triennium, 22 ICAO training packages (ITPs) were developed, 13 were translated, and 32 were transitioned from classroom to online classroom format. In addition, 18 Member ITPs (M-ITPs) and 57 Standardized Training Packages (STPs) were developed by TPP Members and recognized by ICAO, while 25 Partnership Training Packages (PTPs) were accepted by the Organization. There are currently eight ITPs, five M-ITPs, six PTPs and 39 STPs under development.

The ICAO Course Catalogue is composed of over 300 courses. Since 2019, 1 344 ICAO-recognized courses have been delivered globally with an estimated 29 225 trainees in attendance. A total of 195 instructors, 33 instructional systems design (ISD) validators, and five assessors are qualified and available on the TRAINAIR PLUS Electronic Management System (TPeMS) roster. The current ICAO online training portfolio comprises 38 courses, and approximately 12 878 trainees have completed ICAO online courses.

Since 2019, GAT has conducted over 90 assessments, including initial assessments and reassessments, of training organizations to first validate their acceptance as TPP Members, and then to maintain the validity of their membership. Currently, GAT assesses an average of 30 training organizations each year to analyse and determine the capability of TPP Members to develop and deliver ICAO-harmonized training packages.

Collaborations with academic institutions contribute to the attraction, training and retention of current and future aviation professionals. Since 2019, GAT has established 10 partnerships with academia that have encompassed 14 PTPs spanning online courses, academic certificates, diplomas and Master's degrees in English, French, Spanish and Russian.

GAT has developed a Post-training Evaluation (PTE) Methodology that measures the impact of training courses developed under the guidelines of the *Training Development Guide Competency-based Training Methodology* (Doc 9941). ICAO-recognized training courses are required to be reviewed at least once every three years to ensure continuous validity and course quality, taking into account the quantitative and qualitative feedback received through the PTE. In this respect, GAT collaborates with the Bureaus on course updates to make sure that ICAO courses are in line with the most current ICAO provisions, and therefore support the Organization's Member States in capacity-building and human resources development.

ICAO's Assembly Resolution A40-25 urges States to share their strategic plans addressing learning and development in aviation including the practical application of the ICAO Aviation Training and Capacity-Building Roadmap and to assist each other to optimize access to learning activities for their aviation professionals. A comprehensive template for the provision of consultancy services for the development of the Roadmap has been developed by GAT, as well as a template for the implementation of the proposed solutions. Such template can, and has been, customized and included in TCB project proposals.

In order to have a structured and comprehensive approach to address the shortage of aviation professionals in Africa, the African Aviation Security and Facilitation (AFI SECFAL) Plan Steering Committee requested the Association of African Aviation Training Organizations (AATO) to assess aviation training needs in Africa, with the support of GAT. AATO subsequently outlined these needs in the African Aviation Training Roadmap, which was approved by the AFI SECFAL Plan Steering Committee in May 2019 in Uganda. GAT is currently supporting the implementation of the Roadmap in the Africa-Indian Ocean Region.

GAT has outlined comprehensive financial and technical information, including key performance indicators and its mission, vision statement and value proposition in its Operating Plan (C-WP/15230 refers) and Business Plan (C-WP/15088 refers).

To better support Member States in identifying training needs, GAT developed a new online course entitled Training Needs Analysis (TNA) Fundamentals, which was launched at the end of 2021. Through this course, personnel from Civil Aviation Authorities and Civil Aviation Training Centres responsible for training can gain the knowledge needed to determine whether a TNA is required to address a performance gap, and learn about the steps associated with conducting a TNA, in accordance with the relevant ICAO provisions. This course is also intended to be integrated into an Implementation Package (iPack) in order to provide States with the relevant guidance material, tools and expert support to conduct a TNA.

A40-26: Commercial space transport (CST)

The United Nations Office for Outer Space Affairs and ICAO signed a memorandum of understanding (MOU) in December 2019 to collaborate closely on CST. ICAO has also continued to participate as an observer on the United Nations Committee on the Peaceful Uses of Outer Space (COPUOS). ICAO continues to engage with States and stakeholders in this area, although certain matters have had to be deferred due to the pandemic.

A40-27: Innovation in aviation

Under the guidance of the Council, ICAO has identified four dimensions of innovation, which structure and rationalize the implementation of Resolution A40-27, as follows:

- a) **Interactions with innovators** (Resolution A40-27 operative clauses 1, 4 and 5). This dimension

pertains to interactions with diverse stakeholders including industry, research entities and State agencies, and to the sharing of lessons learned by Civil Aviation Authorities with experience in facilitating the integration of new entrants and uptake of innovation in international civil aviation;

- b) **Incorporating innovation into ICAO's global Standards in a timely fashion** (Resolution A40-27 operative clauses 2 and 3). This dimension includes exploring options to bring new standards into ICAO for consideration and accelerated adoption;
- c) **Review of ICAO's Standard-making procedures** (Resolution A40-27 operative clauses 2 and 3). A crucial component of incorporating innovation into ICAO's work and achieving the Organization's Strategic Objectives is to optimize ICAO's long-standing processes and procedures. These efforts have included a review of the Air Navigation Commission's procedures, the working methods of ICAO's panels and other expert groups, and, as appropriate, the deliberative processes of the Council and relevant Committees; and
- d) **Organization of the ICAO Secretariat to open up to technologies and adapt its internal processes** (Resolution A40-27 operative clauses 2, 3 and 4).

The activities implemented by the Secretariat and presented under the innovation section of the Annual Report of the Council are aimed at enforcing the provisions included in this Resolution, in line with the aforementioned four areas.

A40-28: Consolidated statement of continuing ICAO policies in the legal field

APPENDIX C – Ratification of ICAO international instruments

The Protocol to Amend the Convention on Offences and Certain Other Acts Committed on Board Aircraft, done at Montréal on 4 April 2014 (Montréal Protocol of 2014), entered into force on 1 January 2020.

A State letter was issued on 21 May 2021 (SL-LE 3/1.20, LE 3/1.21 – 21/38), in which States that had not done so were reminded to ratify the 2016 Protocols Amending Articles 50 (a) and 56 of the Convention on International Civil Aviation adopted by the 39th Session of the ICAO Assembly. As at 1 May 2022, each Protocol had 70 ratifications. One hundred and twenty-eight ratifications are required to bring each Protocol into force.

Despite the temporary closure of ICAO Headquarters in the midst of the COVID-19 pandemic, the Legal Affairs and External Relations Bureau (LEB) continued to discharge the depositary functions incumbent to the Organization through the establishment of contingency measures. It also continued to provide support to Member States and international organizations with respect to ratification matters and to promote ratification of international air law instruments through administrative actions as well as at virtual legal seminars. The President of the Council and the Secretary General have promoted ratification of international air law instruments during meetings with high-level government officials of Member States.

APPENDIX D – The teaching of air law

LEB participated in and facilitated several events aimed at, inter alia, promoting the ratification of international air law treaties. At the invitation of the Civil Aviation Authority of Portugal, LEB delivered a course in Lisbon from 13 to 15 January 2020. It also organized a legal seminar in Banjul hosted by the Gambia on 24–25 February 2020 and participated, on 29 September 2020, in an online workshop organized by the United Nations Office on Drugs and Crime (UNODC) on emerging threats and critical infrastructure protection. LEB assisted the Global Aviation Training Office (GAT) with the development and delivery of the ICAO International

Air Law Course, which promotes, inter alia, the ratification of international air law instruments. The Course, which has benefited over 700 participants since 2018, has been delivered in-person at ICAO Headquarters and in the Regions as well as through virtual means. In collaboration with LEB, an ICAO legal seminar hosted by the Republic of Korea in a hybrid format in Seoul from 12 to 14 April 2022, for which over 900 participants from 114 States were registered, covered new and emerging threats against civil aviation and the related air law instruments.

APPENDIX E – Adoption of national legislation on certain offences committed on board aircraft (unruly and disruptive passengers)

The Secretariat provided input to the work of the Council Aviation Recovery Task Force (CART) in reviewing the *Manual on the Legal Aspects of Unruly and Disruptive Passengers* (Doc 10117) with regard to its application to the implementation and enforcement of COVID-19 measures on board aircraft. Following this input, the CART Report (disseminated to Member States in State letter EC 2/76-20/67 of 8 June 2020 and updated in State letter EC 2/76-21/64 of 5 October 2021) highlighted actions that could be taken by Member States to manage unruly and disruptive behaviour. This includes training, public awareness and the review of national legislation to ensure that unruly and disruptive behaviour relative to COVID-19 measures is properly covered.

The Secretariat monitors events and responds to inquiries relating to the Montréal Protocol of 2014 and Doc 10117 with regard to their application to the implementation and enforcement of COVID-19 public health and safety measures on board aircraft. In this regard, more than 10 Member States have become party to the Montréal Protocol of 2014 since the outbreak of COVID-19 and the introduction of public health and safety measures. The Secretariat also presented at the IATA Cabin Ops Safety Conference on 7 December 2021, outlining the approach and tools available from ICAO that States could use to deal with unruly and disruptive passengers, including for the purposes of enforcing public health and safety measures in the context of COVID-19. The trend of unruly and disruptive behaviour on board aircraft arising from the application of public health measures, including the use of masks, was one of the emerging issues affecting civil aviation covered at the 2022 ICAO Legal Seminar held in Seoul, Republic of Korea, along with promoting the ratification of the Montréal Protocol of 2014.

APPENDIX G – Enhancing the capacity and effectiveness of States to implement air law treaties and update national laws and regulations

In May 2019, the Secretariat organized the inaugural Civil Aviation Legal Advisers Forum (CALAF), which was hosted by Singapore. More than 80 legal advisers from 40 Member States and one regional organization participated in the Forum, which serves as a platform for exchanges among legal advisers, including for the promotion of ratification of international air law treaties. In 2020 and 2021, in lieu of convening CALAF, the Civil Aviation Legal Advisers Exchange (CALEx) provided a virtual platform for legal advisers to share and exchange on current and emerging legal issues.

A40-29: Confirmation of Council action in assessing the contributions to the General Fund and determining advances to the Working Capital Fund of States which have adhered to the Convention

No further action required.

A40-30: Assessments to the General Fund for 2020, 2021 and 2022

The Secretary General notified Member States of their assessments for 2020 in State letter A1/8-19/86, State

letter A 1/8-20/54 and State letter A 1/8-20/92; for 2021, in State letter A 1/8-20/104, State letter A 1/8-21/39 and State letter A 1/8-21/59; and for 2022, in State letter A 1/8-21/77.

A40-31: Working Capital Fund

No further action required.

A40-32: Approval of the accounts of the Organization for the financial years 2016, 2017 and 2018 and examination of the Audit Reports thereon

No further action required.

A40-33: Appointment of the External Auditor

No further action required.

A40-34: Budgets for 2020, 2021 and 2022

Section A: no action required.

Section B: no action required.

Section C: no action required.

— END —