



SUPPLEMENTARY REPORT ON ACTIVITIES OF THE ORGANIZATION IN THE FIRST HALF OF 2016 AND REVIEW OF ACTION TAKEN ON RESOLUTIONS OF THE 38th SESSION OF THE ASSEMBLY

SAFETY

Global Aviation Safety Plan (GASP)

The Fourth Edition of the Global Aviation Safety Plan (GASP), following consultation with States and international organizations, was approved by the Council and will be presented to the 39th Session of the Assembly for endorsement. The GASP is a high-level policy document aimed at improving international civil aviation safety, capacity and efficiency for use at the global, regional and national levels. The GASP has been restructured and revised, and is supported by the global aviation safety roadmap which serves as an action plan to assist the aviation community in achieving the objectives presented in the GASP through a structured, common frame of reference for all relevant stakeholders.

Conflict zones

The Task Force on Risks to Civil Aviation proposed that ICAO develop a centralized system for the sharing of information on risks to civil aviation arising from conflict zones. In March 2015, the Council of ICAO agreed that there was an urgent need to establish and host a simple, centralized, web-based conflict zone repository and to make information available to States, the industry and the public. The Conflict Zone Information Repository began operations for an initial one-year period, starting on 2 April 2015, on the understanding that during this period there would be an ongoing process of review and evaluation. In this connection, the Council agreed to establish a subsidiary Repository Review Group (RRG) that would be responsible for this ongoing monitoring.

On 17 February 2016, the RRG reported to the ICAO Council regarding the repository's evaluation phase, including recommendations to modify it based upon the experience and inputs of the Member States of ICAO. Based upon this report, the Council agreed, on 17 June, that ICAO should continue operation of the Conflict Zone Information Repository on the following basis:

- that postings would be reserved for information that met the intent of “conflict zones” as defined by the ICAO Council;
- that posts on the ICAO website would only be made available when the information was made available by the State affected, or when another State provided the information and there was no disagreement between the two States; and

- that the repository would now also include links to States' own sources of information related to risks to civil aviation from conflict zones.

Next generation of aviation professionals

Under the Next Generation of Aviation Professionals (NGAP) Programme, ICAO has been working closely with its partners and key stakeholders to promote outreach activities around the world by participating in various aviation fora, developing communication and publicity tools, and engaging directly with students and educators.

In June 2016, ICAO hosted a workshop for air traffic controllers and air traffic safety electronics personnel. The workshop was aimed at providing additional guidance regarding the implementation of competency-based training in these two disciplines.

Aviation Safety Implementation Assistance Partnership (ASIAP)

The first face-to-face meeting of the ICAO Aviation Safety Implementation Assistance Partnership (ASIAP) was held on 25 November 2015 as a side meeting of the World Aviation Forum (WAF). The meeting provided an opportunity for partners to discuss how to coordinate and collaborate on technical assistance efforts. Quarterly telecons, the most recent taking place in March and May 2016, were held to discuss the partners' technical assistance activities in the identified priority States.

As the platform for ICAO and its safety partners to coordinate efforts for the provision of assistance to States, ASIAP has the following objectives: information sharing; prioritization of States and assistance needs; and coordination, cooperation and collaboration on assistance activities between partners. Members include Canada, China, France, Japan, Malaysia, Republic of Korea, Singapore, United Kingdom, United States, Airports Council International (ACI), Airbus, Boeing, the Civil Air Navigation Services Organisation (CANSO), the European Aviation Safety Agency (EASA), the International Air Transport Association (IATA), and the World Bank. Priority States selected by ASIAP for assistance are: Bahamas, Belarus, Cambodia, Egypt, Gabon, Guyana, Indonesia, United Republic of Tanzania, Viet Nam, and the following States with significant safety concerns (SSCs): Angola, Djibouti, Eritrea, Haiti, Kyrgyzstan, Malawi, Nepal and Thailand. Projects are underway in Cambodia, Gabon, Guyana, Haiti, Indonesia, Malawi, Nepal, Thailand, United Republic of Tanzania and Viet Nam. As a result of ASIAP, EASA is supporting the ICAO project in Nepal, while Boeing supports the ICAO project in Cambodia, and Japan the ICAO project in APAC Region States.

Prohibition on the transport of lithium batteries as cargo on passenger aircraft

The Council approved amendments to the 2015-2016 Edition of the *Technical Instructions for the Safe Transport of Dangerous Goods by Air* (Technical Instructions, Doc 9284) which prohibit the transport of lithium ion batteries as cargo on passenger aircraft. The additional requirements to mitigate risks posed by lithium batteries approved by Council in 2015 will remain in effect for transport on cargo aircraft.

The decision to introduce the prohibition was based on information provided by the Dangerous Goods, Flight Operations, and Airworthiness Panels and on test results which indicated that a fire involving high-density packages of lithium batteries can overwhelm aircraft cargo compartment fire protection systems.

The prohibition is intended as a temporary measure until controls are in place which establish an acceptable level of safety. One of the controls necessary is a performance-based packaging standard for transporting lithium batteries. An SAE committee, established at the request of ICAO, began developing this standard in February.

The Council also approved amendments to the 2015-2016 Edition of the *Supplement to the Technical Instructions* (Doc 9284SU) which introduce guidance to States on the transport of lithium batteries.

Remotely piloted aircraft systems (RPAS)

Demand for use of RPAS continues to grow dramatically around the globe. Regulatory authorities and air navigation services providers are facing increasing pressure from RPAS operators for access to airspace, while manufacturers and related industries are demanding clear regulations for certification and operation. Work continues on the development of a regulatory framework to facilitate access by remotely piloted aircraft into non-segregated airspace while maintaining the existing level of safety for manned aviation, and on a remote pilot licence.

A symposium on RPAS and remote air traffic services (ATS) was held in Stockholm, Sweden, and attended by 225 participants. The symposium raised awareness on how remote technologies are rapidly changing aviation.

The first regional workshop on RPAS, aimed at regulators, air navigation services providers, operators and manufacturers, was also held in Stockholm; more workshops are planned for 2016.

To complement the work of the Remotely Piloted Aircraft Systems Panel (RPASP), the Small Unmanned Aircraft Systems Advisory Group (SUAS-AG) was established to develop guidance material for States, including best practices for national regulations, focused particularly on small UAS, e.g. unmanned aircraft weighing less than 25 kg. The online toolkit can be found at: <http://www.icao.int/safety/RPAS/Pages/UAS-Regulation-Portal.aspx>

Enhancing protection of accident and incident investigation records

The 38th Session of the Assembly instructed the Council, taking into account the findings and recommendations of the Safety Information Protection Task Force (SIP TF) and further work informed by the recommendation of such group, to take such steps as necessary to ensure meaningful progress toward the development of new and/or amended provisions on protection of accident and incident records in Annex 13 — *Aircraft Accident and Incident Investigation*, and related guidance material, before the next ordinary session of the Assembly. Accordingly, the Secretariat established the Group of Experts on Protection of Accident and Incident Records (GPAIR) in April 2014 to finalize the recommendations of the SIP TF.

The proposed amendments to Annex 13 by GPAIR were adopted by the Council in March 2016. Amendment 15 to Annex 13, and the recently developed guidance material *Manual on Protection of Safety Information, Part I — Protection of Accident and Incident Investigation Records* (Doc 10053), are intended to: enhance protection of accident and incident investigation records; provide means to protect investigation records in the custody or control of the accident investigation authority; prioritize protection of records that are more sensitive in nature, i.e. cockpit voice recorders (CVRs) and airborne image

recorders (AIRs); assist States in the designation of the “competent authority” and the administration of “the balancing test”; and assist States to incorporate protections afforded in paragraph 5.12 of Annex 13 into national laws and regulations.

Air Navigation

Global Air Navigation Plan (GANP)

The Fifth Edition of the *Global Air Navigation Plan*, following consultation with States and International Organizations, was approved by the Council and will be presented to the 39th Session of the Assembly for endorsement as the strategic direction for the technical work programme of ICAO in air navigation. The GANP is a high-level policy document on air navigation capacity and efficiency issues as well as a planning and implementation document for use at the global, regional and national levels.

The Fifth Edition of the GANP updates the content of the aviation system block upgrades (ASBUs) and provides more information on implementing the ASBU elements using a performance-based approach to guarantee cost effectiveness of implementation investments.

Electronic Regional Air Navigation Plan (eANP)

During 2015 and the first quarter of 2016, the ICAO Regional Offices, in coordination with respective Planning and Implementation Regional Groups (PIRGs) and Headquarters, populated the new web-based platform of regional ANPs which consists of three volumes:

- Volume I containing stable ANP elements;
- Volume II containing dynamic ANP elements; and
- Volume III containing dynamic/flexible plan elements providing implementation planning for air navigation systems and their modernization, taking into consideration the ASBUs.

Volume I for all Regions but one has been approved by the President of the Council on behalf of the Council. Volume II is already approved for some Regions, and, in all Regions, States will approve Volume II by July. Volume III of the MID Region is already approved, and all others will be ready by December 2016 after endorsement by the corresponding PIRG.

International Codes and Route Designators Database (ICARD)

To address obsolete architecture and technical problems with the current ICARD application, ICAO is developing a new ICARD platform which will support the increasing need for five-letter-name codes (5LNCs) in airspace redesign and to accommodate new navigation capabilities and concept of operations.

The Civil Aviation Flight University of China (CAFUC) was selected to update the ICARD system which is expected to be delivered by the end of 2016. The new system is undergoing initial acceptance testing which has reflected continued progress towards the development of the new platform.

The new ICARD platform will provide system stability, increased processing speeds, minor enhancements and a more user-friendly design which will greatly improve efficiency for ICAO and State users.

Emergency Response

Global aircraft tracking

On 2 March 2016, the ICAO Council adopted Amendment 40 to Annex 6, Part I, which included, among other elements, SARPs relating to the location of an aeroplane in distress.

The SARPs establish the requirement for an aeroplane to autonomously transmit information from which a position can be determined at least once every minute when in a distress condition. An aircraft is in a distress condition when it is in a state that, if the aircraft behaviour event is left uncorrected, could result in an accident. The SARPs are applicable to new aeroplanes with take-off mass greater than 27 000 kg from 1 January 2021. The requirement also recommends that it apply to new aeroplanes with take-off mass greater than 5 700 kg from the same date.

The SARPs specify that autonomous transmission of position information needs to be active when an aircraft is in a distress condition. This will provide a high probability of locating an accident site to within a 6 NM radius. It also specifies that the transmission can be activated manually. The SARP is not technology-specific and will allow for various solutions, including a triggered transmission system. It specifies performance criteria such as that the autonomous transmission of position information needs to be capable of transmitting the information in the event of aircraft electrical power loss, at least for the expected duration of the entire flight.

A public website on global tracking initiatives (<http://www.icao.int/safety/globaltracking>) has been launched and is updated regularly.

Zika virus

In February 2016, the World Health Organization (WHO) declared the Zika virus outbreak in Brazil a Public Health Emergency of International Concern (PHEIC). WHO called for a coordinated and multi-sectoral response through inter-agency cooperation. ICAO assumed responsibility as the focal point for the aviation sector facilitating communication with the WHO and other UN agencies. ICAO participates in the UN Principals' meetings, WHO Emergency Committee meetings and functions as Advisor to WHO in aviation-related matters.

ICAO implemented an Aviation Sector Group comprised of ICAO, IATA, ACI, the International Federation of Air Line Pilots' Associations (IFALPA) and the International Transport Federation (ITF). Through the Aviation Sector Group ICAO ensures information-sharing between all stakeholders and the coordination of activities within the aviation sector. In consultation with this group ICAO has developed and implemented a web-based Airport Vector Control Register, providing information on the methods used by airports to control insects or animals that might transport an infectious disease.

The Airport Vector Control Register can be accessed by stakeholders and the public on the ICAO public website. The intent of the Register is to facilitate the sharing and dissemination of information and to assist States with development of disinsection policies based on risk assessment. ICAO is in the process of expanding on this initiative through the development of a comprehensive Risk Assessment Tool.

Disaster risk reduction in aviation and crises response mechanism

During its 208th Session, the Council considered a proposal to establish a strategy on disaster risk reduction in aviation that embodies the concepts of the United Nations “Sendai Framework for Disaster Risk Reduction 2015-2030”, as well as a proposal to establish a crises response mechanism. The Council agreed that this subject be considered by the Assembly and addressed as two distinct issues: the establishment of a disaster risk reduction strategy in aviation; and an ICAO emergency response policy.

Annex amendments — Adoptions in February-March 2016*Adoption of Amendment 173 to Annex 1 — Personnel Licensing*

Amendment 173 relates to health education and the application of basic safety management principles to the medical assessment process. The amendment replaces a current Recommendation relating to health education and prevention of ill health in Class 1 applicants under 40 years of age by means of a new Standard addressing similar principles but with wider application, and upgrades a Recommendation to a Standard concerning the application of basic safety management principles to the medical assessment process.

Adoption of Amendment 45 to Annex 2 — Rules of the Air

Amendment 45 concerns provisions related to adherence to flight plan and a reduction in the allowable variation in assigned or planned true airspeed/Mach number. Experience by ATS providers indicates that the current allowable tolerance of up to a 5 per cent change in speed before it is reported can prove to be too great in light of today’s reduced longitudinal separation minima. The amendment corrects this potential risk and extends applicability of the Standard to aircraft utilizing the Mach number as a speed reference. This amendment also ensures that both inadvertent and intentional speed deviations are covered so as to more accurately reflect the intent and conditions under which this Standard would be applied. Amendment 45 arose from the Separation and Airspace Safety Panel (SASP).

Adoption of Amendment 77 to Annex 3 — Meteorological Service for International Air Navigation

Amendment 77 relates to the provision of aeronautical meteorology information and to a global reporting format for assessing and reporting runway surface conditions.

Aeronautical meteorology information

The amendment concerning aeronautical meteorology introduces a further incremental addition to the digital exchange of meteorological information as a component of the system-wide information management (SWIM) environment by incorporating volcanic ash and tropical cyclone advisories as well as AIRMET information. Additional world area forecast system (WAFS) information on cumulonimbus clouds, icing and turbulence is introduced as well as reference to Internet-based services in lieu of the removal of reference to legacy satellite distribution systems. These updates provide for enhanced efficiencies and improved information on hazardous meteorological conditions.

Global reporting format — Runway surface conditions

The amendment concerning enhanced global reporting format for assessing and reporting runway surface conditions is designed to report runway surface conditions in a standardized manner such that flight crew are able to accurately determine aeroplane take-off and landing performance, resulting in a global reduction in runway excursion incidents/accidents. The amendment provides a solution to a long outstanding issue of relating aeroplane performance to runway state information in a more objective way and is part of a major revision to several Annexes.

Adoption of Amendment 59 to Annex 4 — Aeronautical Charts

Amendment 59 relates to satellite voice communications (SATVOICE) and to visual segment surface (VSS).

Satellite voice communications (SATVOICE)

SATVOICE is part of a major revision to several Annexes and PANS, and the amendment introduces a provision on the aeronautical charts for SATVOICE number(s). The readily available information on SATVOICE number(s) assists the flight crew in contacting ATS units in a more efficient manner, which will have a positive impact on operational safety, particularly during an emergency situation.

Visual segment surface (VSS)

The amendment concerning VSS addresses the identification of penetrations of the VSS on aeronautical charts to contribute to improved safety through enhanced situational awareness of potential safety hazards. The update of the provisions relating to publication depiction and functionality requirements of fly-by and fly-over significant points, area minimum altitude (AMA), CAT H procedures and en-route airway directional use restrictions is intended to provide clarity and transparency to existing Annex 4 requirements to avoid misinterpretation by the users and support an effective implementation of the criteria, resulting in increased safety. This amendment to Annex 4 complements revisions to the *Procedures for Air Navigation Services — Aircraft Operations*, Volume II — *Construction of Visual and Instrument Flight Procedures* (Doc 8168, PANS-OPS) and guidance material.

Adoption of Amendments 40, 34 and 20 to Annex 6 — Operation of Aircraft Parts I, II and III

The amendments relate to: fatigue management approaches; protection of flight recorder recordings; harmonization and alignment of terms and language, updated performance-based navigation (PBN) provisions, enhanced vision system (EVS), and cargo compartment fire suppression considerations for diversion; improvements in assessing and reporting runway surface conditions; carriage requirements of flight recorders; timely recovery of flight data recordings for investigations; performance-based communication and surveillance (PBCS); and safety management.

Fatigue management approaches (Annex 6, Part I)

The consequential amendment concerning fatigue management approaches addresses the need to have a definition of fatigue which can be applied in any aviation industry sector, the revision to the title associated with the update, and the significant expansion of the supporting guidance material.

Protection of flight recorder recordings (Annex 6, Parts I, II and III)

The amendments concerning protection of flight recorder recordings in normal operations address, outside Annex 13 type investigations, the use of CVRs and AIRs which should be limited to safety-related purposes with appropriate safeguards, for inspections of flight recorder systems, or when associated recordings or transcripts are sought for criminal proceedings. Such proceedings are introduced into the amendment as an exception to the protections accorded to CVRs and AIRs in order to allow competent authorities to access and use this type of recordings and their transcripts without restriction in cases where criminal offences are committed and crew members involved may not have consented to such use (e.g. cases of hijacking). Likewise, the use of flight data recorders (FDRs), aircraft data recording systems (ADRS) as well as Class B and C AIR and airborne image recording systems (AIRS) should be limited to airworthiness or maintenance purposes, including flight data analysis programmes, with appropriate protections accorded by Annex 19.

Harmonization and alignment of terms and language, updated performance-based navigation (PBN) provisions, enhanced vision system (EVS), and cargo compartment fire suppression considerations for diversion (Annex 6, Parts I, II and III)

The amendments address the following issues: consistency in terminology (e.g. equipped and installed) and harmonization of terms and language across all parts of Annex 6; revised PBN provisions, aligned with the current PBN framework, necessary for the simplification of the PBN approval process; updated guidance material in the attachments and correction of inconsistencies in relation to EVS; and, in Annex 6, Part I, inclusion of a recommendation regarding the time capability of cargo compartment fire suppression (CCFS) of aircraft, which applies to both extended diversion time operation (EDTO) and non-EDTO operations.

Global reporting format — Runway surface conditions (Annex 6, Parts I and II)

The amendments relate to the use of an enhanced global reporting format for assessing and reporting runway surface conditions and address a small part of a major revision to several Annexes in order to introduce the global reporting format.

Carriage requirements of flight recorders (Annex 6, Parts I, II and III)

Performance-based provisions in Annex 6, Part I, were adopted by the Council for tracking and locating aeroplanes in distress, ensuring timely availability of flight recorder data to assist accident investigations. These include provisions to enable locating an accident site within a 6 NM radius, with an added advantage of assisting search and rescue operations.

The amendment to Annex 6, Part II, addresses the extension of CVR recording duration to 25 hours which will allow the capture of pre-flight and post-flight crew activities even for long-haul flights. Furthermore, the amendment allows for harmonization with FDR duration requirements. The amendment to Part III aligns text with Annex 6, Parts I and II.

Performance-based communication and surveillance (PBCS) (Annex 6, Parts I, II, and III)

The amendments clarify existing provisions concerning required communication performance (RCP) and add a provision for surveillance equipment and performance-based surveillance (PBS). The amendment is intended to ensure that aircraft communication and surveillance systems meet the RCP requirements and required surveillance performance (RSP) specification(s); and that the operator participates in monitoring programmes established by the air navigation service providers (ANSPs), as per Annex 11, Chapter 3, 3.3.5.2.

Safety management (Annex 6, Parts I and III)

The amendments ensure that references are updated to reflect the elevated status of Attachment B to Appendix 3 in Annex 19.

Adoption of Amendment 105 to Annex 8 — Airworthiness of Aircraft

The amendment relates to safety management and an enhanced global reporting format for assessing and reporting runway surface conditions.

Safety management

The amendment is a result of the extension of safety management systems (SMS) Standards and Recommended Practices (SARPs) in Annex 19 to organizations designing and/or manufacturing engines or propellers; the amendment to Annex 8 is required to ensure alignment with Annex 19.

Global reporting format — Runway surface conditions

The amendment addresses a small part of a major revision to several Annexes in order to introduce the global reporting format. The global reporting format is designed to report runway surface conditions in a standardized manner such that flight crew are able to accurately determine aeroplane take-off and landing performance, resulting in a global reduction in runway excursion incidents/accidents.

Adoption of Amendment 90 to Annex 10 — Aeronautical Telecommunications, Volume I

The amendment addresses issues associated with global navigation satellite system (GNSS), instrument landing system (ILS) and rationalization of conventional navigation systems.

Adoption of Amendment 90 to Annex 10, Volume II

The amendment addresses current limitations with the aeronautical fixed telecommunication network (AFTN) in terms of message line length, overall message length and the limited character set. The amendment also updates references to ICAO manuals and deletes references to common ICAO data interchange network (CIDIN)/aeronautical message handling system (AMHS) gateways, which are specific regional implementations. In terms of data link and SATVOICE, data link initiation capability (DLIC) has been included. The amendment also clarifies existing provisions on controller-pilot data link communications (CPDLC) and automatic dependent surveillance — contract (ADS-C) by introducing new terms in alignment with actual capabilities of the operational fleet. The amendment also introduces a reference to the *Global Operational Data Link (GOLD) Manual* (Doc 10037).

Adoption of Amendment 90 to Annex 10, Volume III

The amendment addresses a number of issues associated with the aeronautical mobile airport communications system (AeroMACS) and the SATVOICE.

AeroMACS

The amendment concerning the AeroMACS fulfills the need for a broadband communication system on the airport surface to support future air traffic management services by utilizing 5091 MHz to 5150 MHz spectrum allocated by WRC-07 and the need for AM(R)S services.

SATVOICE

The amendment concerning SATVOICE standardizes system characteristics essential for common infrastructure using different satellite companies, network service providers and aircraft equipment. The provisions will prevent further divergence in implementation and contribute positively to a transition from high frequency (HF) voice to SATVOICE as envisioned in the *Global Air Navigation Plan* (Doc 9750).

Adoption of Amendment 50 to Annex 11 — Air Traffic Services

The amendment relates to performance-based communication and surveillance (PBCS), procedure design and oversight, a consequential amendment resulting from Amendment 77 to Annex 3, and fatigue management for air traffic controllers.

Performance-based communication and surveillance (PBCS)

The amendment revises the previously existing provision regarding required communication performance (RCP) to performance-based communication (PBC) and adds new provisions for surveillance equipment and performance-based surveillance (PBS). The amendment also includes a requirement for establishment of a PBCS monitoring programme when RCP and RSP specifications are prescribed.

Procedure design and oversight SARPs

The amendment addresses the requirements for the regulatory framework on instrument flight procedure design service and definition of the responsibilities of Contracting States on the provision of safe flight procedures. This amendment will improve flight safety through consistent implementation of instrument flight procedure design services and oversight of the services by States.

Aeronautical meteorology

The amendment concerning aeronautical meteorology is consequential to Amendment 77 to Annex 3 and relates to an update of the definition of SIGMET in Annex 11.

Fatigue management for air traffic controllers

The amendment provides minimum Standards for the management of air traffic controller fatigue risk through both compliance with prescriptive limits and the implementation of a fatigue risk management system (FRMS).

Adoption of Amendment 15 to Annex 13 — Aircraft Accident and Incident Investigation

Amendment 15 relates to establishment of an independent accident investigation authority and protection of safety information.

Establishment of an independent accident investigation authority

An independent accident investigation authority refers to an authority that is functionally separate from State aviation authorities and other entities that could interfere with the conduct or objectivity of investigations so that the associated causes and contributing factors are properly and adequately identified.

Protection of safety information

The amendment focuses on: protection of investigation records in Annex 13 while balancing the objectives of the investigation and other public interests; effective means to protect records in the custody of or under the control of the accident investigation authority; and support to States in the administration

of the “balancing test” by the designated competent authority. The amendment recognizes that different circumstances require different protective safeguards and that full protection may be counterproductive. It also recognizes the accommodation of different legal systems and States’ practices in implementing effective protection of investigation records.

Adoption of Amendment 13 to Annex 14 — Aerodromes, Volume I

The amendment relates to: autonomous runway incursion warning system (ARIWS); visual aids; aerodrome design; and enhanced global reporting format.

Autonomous runway incursion warning system (ARIWS)

The amendment addresses the need for harmonization of procedures relating to ARIWS, when installed, for all aerodromes and types of systems. It is a complex system and its implementation needs to be balanced against other means with due consideration given to efficiency of the mitigation, efficiency of operations, costs and human factors aspects. There is no obligation or recommendation within the provisions to install such a system; the installation of such a system at an aerodrome would only be concluded following an assessment of the runway incursion risk at that aerodrome.

Visual aids

The amendment clarifies or modifies various provisions and notes including in relation to: runway holding position marking; intermediate holding position marking; and T-VASIS and AT-VASIS.

Aerodrome design

The amendment formally classifies blast pad prepared areas and allows for use of open-air water conveyances for removal of excessive rainfall on or near the runway.

Global reporting format — Runway surface conditions

The amendment relates to the use of an enhanced global reporting format for assessing and reporting runway surface conditions for standardized reporting such that flight crew are able to accurately determine aeroplane take-off and landing performance, resulting in a global reduction in runway excursion incidents/accidents.

Adoption of Amendment 7 to Annex 14 — Aerodromes, Volume II

The amendment addresses markings, object height restriction and emergency response planning at heliports. It also deals with removal of redundant definitions from Annex 14, Volume II.

Adoption of Amendment 39 to Annex 15 — Aeronautical Information Services

The amendment relates to: publication of information on runway end safety area (RESA) and arresting system in the aeronautical information publication (AIP); en-route airway directional use restrictions; global reporting format for assessing and reporting runway surface conditions; and PBCS and SATVOICE.

Runway end safety area (RESA) and arresting system

The amendment requires data concerning the arresting system to be measured, described and promulgated in addition to information related to the runway end safety area and is consequential to the amendment to the Annex 14, Volume I.

Global reporting format — Runway surface conditions

The amendment relates to the use of an enhanced global reporting format for assessing and reporting runway surface conditions for standardized reporting such that flight crew are able to accurately determine aeroplane take-off and landing performance, resulting in a global reduction in runway excursion incidents/accidents.

En-route airway directional use restrictions

The amendment, along with consequential amendments to Annex 4 and the *Aeronautical Information Services Manual* (Doc 8126), clarifies requirements with respect to en-route airway directional use restrictions and resolves confusion as to how they are depicted in the State AIPs .

PBCS and SATVOICE

The amendment supports PBCS provisions in Annex 11 regarding RCP/RSP specification(s) and ensures that RCP and/or RSP specifications are listed in a standardized format in a State's AIP. The amendment also includes a provision in the AIP for SATVOICE number(s) so that they are easily accessible to the flight operations personnel.

Adoption of Amendment 1 to Annex 19 — Safety Management

The amendment is based on existing principles in Annex 19 with some restructuring intended to facilitate effective implementation and is comprised of the following: an upgrade of State safety programme (SSP) provisions integrated with the State safety oversight (SSO) system critical elements (CEs); enhancement of safety management system (SMS) provisions; extension of an SMS to organizations responsible for the type design and/or manufacture of engines and propellers; and an upgrade of provisions for the protection of safety data, safety information and related sources.

Approved amendments to Procedures for Air Navigation Services (PANS) documents*Approval of Amendment 32 to the PANS-ABC*

The amendment adds new abbreviations and codes and deletes several considered obsolete. Abbreviations and codes concerning meteorology and the implementation of PBCS and SATVOICE are consequential to amendments to Annexes 3, 6, 11, 15 and the PANS-ATM (Doc 4444).

Approval of Amendment 1 to the PANS-Aerodromes

The amendment introduces provisions regarding the use of a global reporting format for assessing and reporting runway surface conditions. The amendment also restructures the PANS-Aerodromes into two parts for better readability: Part I contains high-level matters, including aerodrome certification, and Part II contains day-to-day operational matters such as foreign object debris (FOD), wildlife hazards and inspection of the movement area.

Approval of Amendment 7 to the PANS-ATM

The amendment relates to: performance-based longitudinal and lateral separation minima and automatic dependent surveillance — contract (ADS-C) climb and descend procedure (CDP); separation of departing aircraft from arriving aircraft that are following an area navigation (RNAV) or required navigation performance (RNP) route; data link initiation capability (DLIC), ADS-C, PBCS and SATVOICE communications; vectoring for final approach, advising of take-off run available (TORA) and use of SID/STAR; standard phraseology for de-/anti-icing ground and flight crews; emergency descent procedures; ARIWS; forwarding of special air-reports and definition of SIGMET information; and an enhanced global reporting format for assessing and reporting runway surface conditions.

Approval of Amendments 7 and 7 to the PANS-OPS, Volumes I and II, respectively

The amendments relate to: minimum obstacle clearance (MOC) reduction for turning departure procedures; the use of course to fix (CF) on departure legs; barometric-vertical navigation (Baro-VNAV) offset procedures; the use of PBN with instrument landing system/microwave landing system/ground-based augmentation system (GBAS) landing system (ILS/MLS/GLS); satellite-based augmentation system (SBAS) and GBAS procedure design requirements; VSS penetrations requirements; AMA determination requirements; and improvements to airborne collision avoidance system (ACAS) provisions.

Manuals produced (January to June 2016)

Doc 9880, *Manual on Detailed Technical Specifications for the Aeronautical Telecommunication Network (ATN) using ISO/OSI Standards and Protocols*

Doc 9966, *Manual on the Oversight of Fatigue Management Approaches* (2nd Edition)

Doc 10020, *Manual on Electronic Flight Bags (EFB)*

Doc 10053, *Manual on Protection of Safety Information, Part I — Protection of Accident and Incident Investigation Records*

Doc 10056, *Manual on Air Traffic Controller Competency-based Training and Assessment*

Doc 10057, *Manual on Air Traffic Safety Electronics Personnel Competency-based Training and Assessment*

Doc 10063, *Manual on Monitoring the Application of Performance-based Horizontal Separation Minima*

Fatigue Management Guide for Airline Operators (2nd Edition) ICAO/IATA/IFALPA

Fatigue Management Guide For Air Traffic Service Providers ICAO/CANSO/IFATCA

Fatigue Management Guide for General Aviation Operators of Large and Turbojet Aeroplanes ICAO/IBAC/FSF

SECURITY AND FACILITATION

Security

Draft Amendment 15 to Annex 17 and related guidance

The Council during the third meeting of its 208th Session considered proposals for Amendment 15 to Annex 17 — *Security*. These proposals arise from the review of Annex 17 by the 27th Meeting of the Aviation Security Panel (AVSECP/27), which convened in Montréal from 14-18 March 2016.

State letter AS 8/2.1-16/58 Confidential containing the proposed Annex amendment was disseminated to all Member States for review and comment on 8 June 2016, and it is envisaged that the proposed amendment will be presented to the Council for adoption during its 209th Session in November 2016, and will become applicable in July 2017.

New and/or revised provisions contained in proposed Amendment 15 to Annex 17 include: behavioural detection; innovation in aviation security; Man-Portable Air Defence Systems (MANPADS); risk assessments; cybersecurity; and landside security. Taking into account the escalating threat of terrorist attacks on landside areas of airports, combined with recent terrorist incidents in crowded places, both in airports and non-aviation locations, the elevation of existing Recommended Practices on landside security to Standards is being proposed in Amendment 15.

An updated ICAO *Global Risk Context Statement* (Fifth Edition) was issued in April taking into account the potential security threats and the global risk picture. Other guidance material is in development, including the ICAO *Civil Aircraft Operations Over Conflict Zones* document, which is expected to become available in the second half of 2016.

Universal Security Audit Programme (USAP)

Fourteen ICAO USAP-CMA audits were carried out in the first half of 2016, bringing the total number of USAP-CMA audits conducted to 10 documentation-based and 30 on-site audits. Figure 1 shows, as at 30 June 2016, aggregated global audit results of the USAP second cycle and the USAP-CMA, as they relate to the implementation of the Critical Elements of an aviation security oversight system. One ICAO Validation Mission took place in 2016, validating actions taken by one State to resolve its Significant Security Concern (SSeC). Over the course of 2016, three new SSeCs involving one State were posted on the USAP secure website, and one SSeC in another State was removed. As at 30 June 2016, there remained twelve unresolved SSeCs in five States.

The ICAO Public Key Directory (PKD)

The ICAO PKD was established to support Member States in gaining access to public key information stored in the chip to validate and authenticate ePassports and is an essential element of the ICAO Traveler Identification Programme (TRIP) Strategy.

Since January 2016, six additional Member States joined the ICAO PKD, bringing the total number of PKD participants to 52.

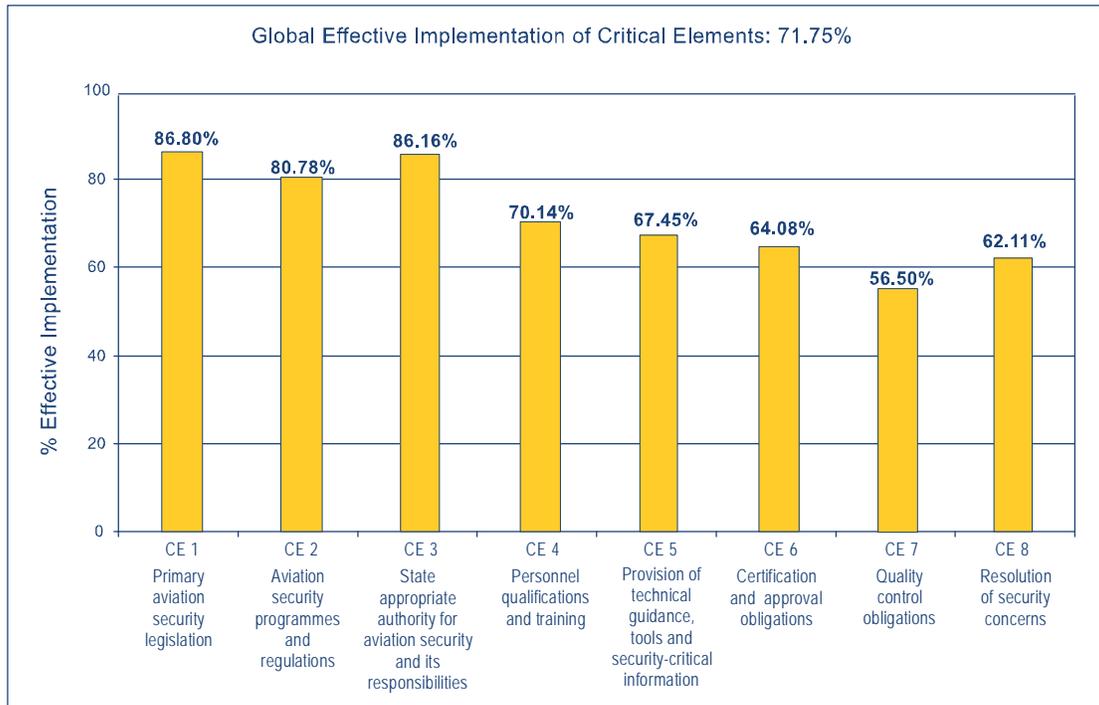


Figure 1.

With a view to encouraging participation in the ICAO PKD, Amendment 25 to Annex 9 – *Facilitation* which became effective in February 2016, presented a revision to the PKD Recommended Practice 3.9.1. The Recommended Practice is now divided into two Recommended Practices: one aimed at document issuers and one for border control authorities. ICAO strongly recommends PKD participation, and the revision of Annex 9 reinforces this position.

Following an ICAO tender procedure for an operational contract for the PKD operator, a contract for the provision of the ICAO PKD was signed with Bundesdruckerei GmbH as prime contractor for the complete design, development and operation of the PKD. Under this new contract which became fully operational in April 2016 and since January 2016, the registration fees for new PKD participants have decreased from USD 56 000 to USD 15 900 and similarly, the annual fees for existing participants will be reduced. It is noteworthy that as the number of PKD participants increases, the annual fee paid by each participant decreases.

Implementation Support and Development – Security (ISD-SEC)

In April 2016, ICAO, in cooperation with the African Civil Aviation Commission (AFCAC), organized the African Ministerial Conference on Aviation Security and Facilitation, which was held in Windhoek, Namibia. At the conclusion of the Conference, the Windhoek Declaration was adopted, which reaffirmed a commitment to improve the level of compliance with aviation security and facilitation SARPs within the African continent and called for an Action Plan to ensure the declaration and targets are implemented and achieved.

In June 2016, ICAO organized the first AFI SECFAL Aviation Security and Facilitation Symposium in Malabo, Equatorial Guinea. The Symposium deliberated on several themes and provided recommendations for consideration to be integrated into the AFI SECFAL Plan work programme. The symposium also considered the Report on the Outcomes of the African Ministerial Conference and urged States to enhance their commitments to the implementation of the Windhoek Declaration as well as stakeholders to create increased awareness on the objectives, activities and support to the AFI SECFAL Plan.

Facilitation

Development and implementation of facilitation provisions

The Ninth Meeting of the Facilitation Panel (FALP/9) was held in April 2016. The agenda of the meeting included topics such as recent facilitation developments in ICAO, the United Nations and other international organizations; proposals for amendments to Annex 9 (including new/revised SARPs on unaccompanied minors, Advance Passenger Information (API), Automated Border Controls and Electronic Travel Systems); and matters relating to the implementation of Annex 9. These recommendations are to be submitted for consideration by the Council during its 210th Session, in early 2017.

Doc 9636, *International Signs to Provide Guidance to Persons at Airports and Marine Terminals*, is in the process of being revised, with an expected publication in 2017.

National and international action in ensuring the security and integrity of traveler identification and border controls

The First Meeting of the Technical Advisory Group on the Traveler Identification Programme (TAG/TRIP/1) was held at ICAO Headquarters, from 30 March-1 April 2016. Among the items presented by the Secretariat for consideration were: a proposed Global Aviation Facilitation Plan (GAFP); a new job-card concept for monitoring and reporting progress in TRIP implementation; the launch of the new ICAO TRIP Platform to share information; an ICAO TRIP Strategy Promotional Plan; the development of a cost-benefit analysis to support the implementation of Automated Border Controls; a roadmap for the adoption of an Annex 9 Standard for ePassports; and the results of the ICAO questionnaire on TRIP Strategy Implementation and Assistance. The meeting also endorsed a draft Operational Plan for the implementation of the ICAO TRIP Strategy developed by the Secretariat.

TAG/TRIP/1 considered a wide range of technical issues, including the development of specifications and guidance relating to *Machine Readable Travel Documents* (Doc 9303), and the provision of compliance assistance to Member States. A new draft Terms of Reference (ToR) for TAG/TRIP was agreed by the meeting, subsequently approved by the Secretary General and circulated to Member States under State Letter EC 6/8-16/48 dated 3 June 2016. By the same State Letter, Member States and select international organizations were invited to nominate experts to serve on the TAG/TRIP in future. With a view to advancing its work, the TAG/TRIP/1 approved future work programmes of its two sub-groups: the New Technologies Working Group (NTWG) and the Implementation and Capacity-Building Working Group (ICBWG). Subsequently, the ICBWG met in The Hague (3-4 May 2016) and the NTWG met in Seattle (7-9 June 2016) to advance work on the implementation of the TRIP Strategy.

An ICAO Traveler Identification Programme regional seminar was conducted at Kish Island in Iran (Islamic Republic of) from 9-11 May 2016. The seminar was hosted by the Civil Aviation Organization (CAO) of Iran and served to highlight the relevance of the ICAO TRIP Strategy to reinforce national and international security and combat trans-border crime and terrorism, by preventing the movement of terrorists, implementing effective border controls, and controls on issuance of identity and travel documents.

During the first six months of 2016, a number of new or updated TRIP-related guidance materials were posted on the ICAO public website and on the new secure ICAO TRIP Platform. These included a *Collection of Best Practices for Acquisition of Machine Readable Travel Document Goods and Services* (March 2016), *Guidance for Circulating Specimen Travel Documents* (March 2016), *Best Practice Guidelines for Optical Machine Authentication* (April 2016), a new *Guide for Experts in Assessing Security of Handling and Issuance of Travel Documents* (May 2016), and *Guidance on Emergency Travel Documents* (May 2016). These guides were developed by the technical experts of the TAG/TRIP working groups.

Under the cover of ICAO TRIP Implementation, efforts to link the needs of States with ICAO expertise and the donor community continued to be successful. A number of capacity-building activities were conducted between January and June 2016 with the continued implementation of the Canada-funded project “Strengthening Travel Document Security and Identification Management in the Sahel”. The development of the ICAO Training Package (ITP) was finalized, leading to its validation in Douala, Cameroon, in March 2016. This training is critical for strengthening the competencies of front-line inspection officers from immigration and border control authorities to examine travel documents effectively, allowing them to expedite the movement of legitimate travelers while identifying high-risk individuals. With this training, ICAO will be in a position to respond positively to the assistance requests of Member States. Launched in the French language in May 2016, the ITP is also available in English and will shortly be so in Arabic. A technical assessment mission, the last of the four conducted under the project, took place in Yaoundé, Cameroon, in March 2016. At the same time, the liaison with the donor community is maintained in order to obtain funding to continue to assist States in implementing the ICAO TRIP Strategy.

National and international action and cooperation on facilitation matters

Following the adoption of UN Security Council Resolution 2178 (2014) that, inter alia, calls upon Member States to use Advance Passenger Information (API) passenger data to prevent the travel of foreign terrorist fighters, ICAO has enhanced cooperation with the UN Centre for Counter Terrorism (UNCCT) on joint work on API- and passenger name record (PNR)-related matters, especially by supporting its regional API-related implementation seminars in Bangkok (March 2016) and Amman (May 2016). Additional seminars are to be held in Vienna (July 2016), Istanbul (October 2016) and in Africa (December 2016).

ECONOMIC DEVELOPMENT OF AIR TRANSPORT

Economic policy and regulation

The third ICAO Air Transport Symposium (IATS) was held on 30-31 March 2016, addressing competition in international air transport. It provided a forum for officials from air transport and competition authorities and representatives from international organizations, the aviation industry and academia to exchange views and experiences, the outcome of which provided useful contributions to the work being undertaken

by the Air Transport Regulation Panel (ATRP) in developing draft international agreements for liberalization of market access, air cargo and air carrier ownership and control.

The ATRP working group held a meeting on 1-2 April 2016 which focused on addressing key issues relating to the draft agreements. The meeting was helpful in guiding further work of the working group.

The Secretariat continued its work in updating the ICAO *Policy and Guidance Material on the Economic Regulation of International Air Transport* (Doc 9587) and the *Manual on the Regulation of International Air Transport* (Doc 9626). A provisional version of the updated documents will be made available for the 39th Session of the Assembly.

The 2016 ICAO Air Services Negotiation Event (ICAN2016) will be hosted by the Ministry of Transport and Civil Aviation of the Commonwealth of The Bahamas. It will take place in Nassau from 5-9 December 2016. Preparation of the event is underway by the Secretariat in close coordination with the departments concerned of the host State.

Economics of airports and air navigation services

Pursuant to the recommendations of the fourth joint meeting of the Airport Economics Panel and the Air Navigation Services Economics Panel (AEP-ANSEP/4), the working groups established by the meeting undertook work in their respective areas as assigned, including reviewing related ICAO existing policies and guidance and developing proposals for consideration by the next joint meeting of the two panels.

Aviation data and economic analysis

ICAO initiated cooperation with regional airline associations with the signature of MOUs. Pursuant to the recommendations of the Aviation Data and Analysis Panel, ICAO continued to collaborate with Members of the Multidisciplinary Group on Long Term Forecast, comprised of experts from ten States and four international organizations.

ICAO continued to provide air transport data and metrics to the United Nations to support its Sustainable Development Goals (SDGs). ICAO's air transport indicator was approved to monitor progress towards SDG Goal 9, Target 9.1 (Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all). ICAO continued to collaborate with international organizations (UPU, UNCTAD, UN, World Bank) in order to share economic and trade data, e-commerce updates and big data analysis.

Finally, following the success of the first meeting of the ICAO World Aviation Forum (IWAF) in November 2015 and as recommended by the Council during its Off-site Strategy Meeting in 2016 (COSM 2016), the Secretariat will brand the IWAF as a preeminent annual outreach event to facilitate access to financing and foster partnerships with stakeholders, including, but not limited to, States, financial institutions, donors, international and regional organizations, and the aviation industry.

ENVIRONMENTAL PROTECTION

Committee on Aviation Environmental Protection (CAEP)

The CAEP/10 meeting was held from 1 to 12 February 2016. The meeting agreed on a comprehensive set of 17 recommendations that will help ICAO fulfil its mandate on aviation environmental protection. These include the recommendation of two new emissions standards, proposals for new publications, environmental trends and laying out the future work of CAEP.

Updated projections for aircraft noise and emissions were approved. These will be recommended as the basis for decision-making for matters related to the environment during the upcoming 39th Session of the ICAO Assembly. The trends show that aircraft noise, aircraft engine emissions that affect local air quality, and aircraft emissions that affect the global climate, are expected to continue to grow in the future, but at a slower rate than the growth in traffic.

The new aeroplane CO₂ emissions Standard, the first global Standard for CO₂ emissions of any sector, will apply to new aeroplane type designs from 2020 and to aeroplane type designs that are already in production in 2023. The new CO₂ emissions Standard is recommended for inclusion in a new volume of Annex 16 (Annex 16, Volume III — *Aeroplane CO₂ Emissions*).

The nvPM Standard, which will apply to engines manufactured from 1 January 2020, is for aircraft engines with rated thrust greater than 26.7kN and is the first of its kind. It includes a full standardized certification procedure for the measurement of nvPM, and the regulatory limit for the nvPM mass concentration is set at the current ICAO smoke visibility limit. The new nvPM Standard is recommended as an amendment to Annex 16, Volume II. The Standard will allow ICAO, through the work of CAEP, to develop a more stringent nvPM mass and number standard leading up to the CAEP/11 meeting in February 2019.

The CAEP/10 meeting agreed on recommendations related to technical aspects of a global MBM scheme for international aviation, namely: monitoring, reporting and verification (MRV) of CO₂ emissions, eligibility criteria for emissions units, and registries. CAEP recommended that the technical reports submitted to the meeting be used as the basis for further work, pending future decisions by the Council and Assembly.

A life-cycle analysis methodology for sustainable alternative fuels for use in a global MBM scheme was discussed during CAEP/10 as well as projections for the potential contribution of sustainable alternative fuels on net CO₂ emissions. The analysis by CAEP estimated that up to two per cent of fuel consumption could consist of sustainable alternative fuels in 2020. Significant uncertainties exist in predicting the contribution of sustainable alternative fuels in the long term, however based on the scenarios evaluated by CAEP, it is possible that up to 100 per cent of international aviation jet fuel demand could be met using sustainable alternative fuels in 2050.

A methodology to quantify air cargo CO₂ emissions was recommended by CAEP which complements the ICAO carbon calculator for passenger air travel emissions.

CAEP/10 recommended the development of a new circular on “Community Engagement on Aviation Environmental Management,” which identifies key principles for stakeholders communication, and an update to the *Airport Planning Manual* (Doc 9184), Part 2 — *Land-use and Environmental Management*, to include climate change considerations.

Important work continued on monitoring noise technology and understanding the progress towards the ICAO noise goals. This is part of the continued effort to ensure that the latest available noise reduction technology is incorporated into aircraft designs. Furthermore, the CAEP analysis of trends in aircraft noise shows that, under an advanced technology improvements scenario, an increase in aircraft operations may no longer result in an increase in noise contour area after 2030.

ICAO also continued its work on the development of a new supersonic noise Standard for future aircraft, and understanding of the current state of sonic boom knowledge, research and supersonic aeroplane projects. It is anticipated that the certification of a supersonic aeroplane could occur in the 2020-2025 timeframe.

Global Market-Based Measure (GMBM) Scheme

In January 2016, the Council established a High-level Group on a Global Market-based Measure Scheme to facilitate the convergence of views on a proposal for a global MBM scheme. The group met in February and April 2016 and made progress on improving the text of the proposal.

The High-level Meeting (HLM) on a Global MBM Scheme was held in May 2016 in Montréal with the purpose of facilitating a high-level discussion of a proposal on a global MBM scheme. The HLM successfully clarified and improved a number of provisions in the proposal. The meeting also recognized issues where further improvements were necessary, as well as possible alternative approaches and ideas to address the issues, with the view to enabling ICAO Member States to make a decision on a global MBM scheme at the next Assembly. The HLM also encouraged Member States to continue bilateral and multilateral consultations to bridge their views.

Further in the process to develop a global MBM scheme for international aviation, the “Friends of the President” Informal Group meeting was planned to be convened in Montréal to consider the results stemming from the bilateral and multilateral consultations by Member States related to the draft Assembly Resolution on a global MBM scheme, with a view to further developing compromise text. The results of the meeting would be reported to the Council, where the draft Assembly Resolution text would be approved for submission to the 39th Session of the Assembly in September and October 2016.

Global Aviation Dialogues (GLADs)

As a means to ensure the full engagement of States and other stakeholders, ICAO conducted a second round of five regional seminars — Global Aviation Dialogues (GLADs) — in 2016, covering all ICAO regions. The GLADs contributed to familiarizing participants with the proposed draft Assembly Resolution text and provided opportunities to receive feedback.

States’ Action Plans

By June 2016, 95 Member States, representing 88.1 per cent of global international air traffic, prepared and submitted action plans to ICAO, demonstrating the high level of interest and engagement of Member States in this initiative. All 14 States selected as part of the ICAO-European Union “Capacity Building and Assistance” project submitted their action plan to ICAO.

Assistance to States

The ICAO-European Union project “Capacity Building for CO₂ Mitigation from International Aviation” is a 42-month programme to support 14 selected States in Africa and the Caribbean to develop and submit robust State Action Plans on CO₂ emissions reduction activities, establish CO₂ emissions inventories, and pilot the implementation of measures to reduce fuel consumption and emissions.

A tailor-made Aviation Environmental System developed for Monitoring, Reporting and Verification (MRV) of CO₂ emissions has been installed in all 14 States, and all of them have submitted their action plans to ICAO.

Through the joint assistance project with the United Nations Development Programme (UNDP) financed by the Global Environment Facility (GEF) “Transforming the global aviation sector: emissions reductions from international aviation”, ICAO is implementing a pilot project in Jamaica to replace kerosene and diesel run Auxiliary Power Units with electric equipment powered by solar energy. This pilot project aims at facilitating the replicability of the solar technology at two selected airports, Norman Manley International Airport in Kingston and Donald Sangster Airport in Montego Bay.

LEGAL SERVICES AND EXTERNAL RELATIONS

Study of legal issues relating to remotely piloted aircraft

A questionnaire has been prepared and will be sent in due course.

Safety aspects of economic liberalization and Article 83 *bis*

Further to the recommendation by the Legal Committee to the Council, the Council endorsed all the recommendations during its 207th Session.

Implementation Strategic and Planning Group (ISPG)

On 20 April 2016, the Council, at its 208th Session, renamed the Strategic Planning Group (SPG) to the Implementation Strategic and Planning Group (ISPG).

The ICAO Council held its third off-site strategy meeting from 15 to 16 June 2016 in Quebec City, under the theme *Building Global Partnerships for Aviation Development (GPAD)*. Over one-and-a-half days, participants exchanged views on ICAO’s role in promoting and acting as an interface or platform to assist States in sourcing funds for their priority needs for the safe, secure, sustainable and orderly growth of international civil aviation; from donors, development agencies, financial institutions, and the private sector. Representatives of Member States on the Council together with Representatives to ICAO, the leadership team of the Air Navigation Commission and the senior management team of the Secretariat, including Regional Directors, participated in the meeting. Industry representatives from Airport Council International (ACI), Civil Air Navigation Services Organisation (CANSO) and the International Air Transport Association (IATA) as well as the European Union and Canada (Global Affairs Office) provided participants with pertinent information and insightful perspectives on ongoing activities, challenges and

opportunities to foster funding and global partnerships. Participants identified a number of recommendations for concrete strategies and steps to be taken to build and foster global partnerships with UN specialized agencies, financial institutions and donors as well as the private sector, for mobilizing resources to enhance air transport systems in Member States. Those recommendations, along with the associated activities and implementation timelines, were approved by the Council at the sixteenth meeting of its 208th Session held on 26 August 2016.

Note. Council off-site meetings are coordinated by the ISPG, which is supported by the Legal Affairs and External Relations Bureau in its role as ISPG Secretary.

International interests in mobile equipment (aircraft equipment) [to be updated]

During the first half of 2016, the Secretariat, on behalf of the Council in its capacity as the Supervisory Authority of the International Registry, continued to monitor the operation of the Registry to ensure that it functions efficiently in accordance with Article 17 of the *Convention on International Interests in Mobile Equipment* (Cape Town Convention). During its 207th Session in February 2016, the Council approved the changes to the *Regulations and Procedures for the International Registry* (Doc 9864) recommended by the Commission of Experts of the Supervisory Authority of the International Registry (CESAIR) at its seventh meeting held in December 2015. As at 30 June 2016, there were 72 ratifications and accessions to the Cape Town Convention and 65 ratifications and accessions to the Cape Town Protocol.

Legal issues relating to unruly passengers

Further to the *Protocol to Amend the Convention on Offences and Certain Other Acts Committed on Board Aircraft* (Montréal Protocol of 2014) adopted by the Diplomatic Conference on 4 April 2014, pursuant to the resolution adopted by the Conference, the Task Force on Legal Aspects of Unruly Passengers was established in 2015 to update ICAO Circular 288 (*Guidance Material on the Legal Aspects of Unruly/Disruptive Passengers*) to include a more detailed list of offences and other acts, as well as to make consequential changes to the Circular arising from the adoption of the Protocol. The Task Force, chaired by Mrs. M. Polkowska (Poland), held its first meeting in September 2015. It established three drafting groups respectively led by Singapore, Kenya and Finland for different chapters in the new guidance material. The second meeting of the Task Force was held in Geneva from 30 to 31 March 2016, hosted by IATA. An ICAO-IATA legal seminar was held after the meeting to promote the Montréal Protocol of 2014.

HUMAN RESOURCES

At the end of June 2016, there were 583 established posts within the Organization, of which 294 posts were in the Professional and higher categories and 289 were in the General Service category. The overall representation of women in the Secretariat in the Professional and higher categories stood at 30 per cent.

During the first six months of 2016, the Council approved amendments to *The ICAO Service Code* resulting from the ongoing comprehensive review of ICAO's Staff Regulations and Staff Rules with the view to further harmonizing these rules with those of other United Nations common system organizations, and with the overall objective of improving organizational efficiency. Among the amendments approved by the Council were changes relating to the implementation of the revised compensation package approved by the United Nations General Assembly (UNGA) for Professional and higher categories as well as the increase in the mandatory age of separation to age 65 for staff who joined ICAO after 1 January 2014. The Council also adopted dedicated policies on consultants and secondments, which supplement the existing Staff Regulations and Administrative Instructions.

The Secretariat continued to pursue the implementation of various outreach strategies and actions to assist in identifying and attracting qualified candidates of a high calibre from all Member States for the future work of ICAO. These initiatives included the enhancement of the number and type of internship opportunities offered at ICAO; the award of an Aviation Scholarship to a young Professional woman starting her career in aviation; and the mentoring of Young Aviation Professional Officers selected to work in Montréal to expand their knowledge and experience in the regulatory work of international civil aviation, as well as the inter-relationships with the aviation industry. Within the spirit of the *No Country Left Behind* initiative and under the framework of the Human Resources Development Fund (HRDF), the Organization worked closely with African States in the identification of secondment opportunities with ICAO which will assist these States in better meeting requirements for the effective implementation of ICAO Standards and Recommended Practices (SARPs) and other ICAO programme activities.

INFORMATION AND COMMUNICATION TECHNOLOGY (ICT)

ICT has invested extensively in the improvement of the central IT infrastructure and the deployment of new technologies to support the Assembly. Major improvements were made to the data storage, wireless network, and telecommunication services to meet increasing demands and ensure the delivery of reliable ICT services to stakeholder communities. With respect to service improvement, new services include the registration platform for ICAO events and improved Digital Signage and projection services in the Conference Block and the Secretariat offices. In total, more than 80 projects were completed in the areas of mobile and web collaboration, which led to increased use of web collaboration tools to improve ICAO's efficiency and reduce communication and traveling costs. Units across ICAO's bureaus have also cooperated in the delivery and deployment of new "Big Data" services to the Member States and external partners. Initial efforts in this respect were directed at the standardization of data format and query services to facilitate access to the vast volumes of aviation data collected by ICAO.

Regarding cybersecurity, significant progress has been made on the management of information security, risk, and compliance. The governance process for information security was reviewed, and fundamental information security administrative instructions have been implemented. An organization-wide information security awareness programme has been launched with the goal to train all staff in basic information security awareness. Other areas of improvement include application risk and vulnerability management, incident management as well as procedures for systems change management. In addition, a

cybersecurity strategic plan has been developed with a clear roadmap and document management framework towards the achievement of ISO 27001:2013 certification.

Web Management has seen fundamental upgrades of its underlying platform, enabling it to enhance and improve the creation and maintenance of ICAO's web content. ICAO's modernized branding has now been applied to its new public website. Furthermore, ICAO has been in the process of preparing key websites to be available in two additional languages, i.e., in Spanish and Arabic. To further enhance its reach within the multilingual aviation community, ICT's goal is eventually to provide public web content in the six official languages of the United Nations.

INFORMATION MANAGEMENT

Information Management carried on the development and support of enterprise and departmental systems for information management and business processes. Current active projects include the development of a Corporate Performance Management system, the development of a SARP's backbone, TCB's projects monitoring system, documents and records management services, the development of a new language services management system, the development of a new print ordering system, product developments for revenue-generation activities, an overhaul of the staff performance appraisal system (PACE), the implementation of an ICAO mobile app for ICAO events, and the ongoing digital capture of legacy documents.

All Council documents are now available in a searchable digital format in English; other languages will follow.

CONFERENCE SERVICES

In collaboration with the Government of Canada, an extensive upgrading of the ID card access control system, the building security CCTV system and security door locks was completed. The registration area for events is being expanded by three service booths to improve services, and the PKD secure room has been relocated to the Secretariat office tower for increased security and efficiency. Write-off of obsolete material was accomplished, and space was converted to accommodate additional offices.

Within the new Event Management Framework, Conference Services has developed easy-to-use tools, guidelines, training and certification programmes. The new CRM-based registration tool for ICAO events has been delivered and will be operational during the 39th Session of the Assembly (A39), allowing fast-track issuance of badges for Delegates who have completed their online registration with credentials.

Three major projects in the Conference Centre were completed in time for the A39:

- Electronic bell sound system to broadcast an audio signal to indicate to the participants that a meeting is about to start or resume.
- Digital signage to enhance the broadcasting capability in the Conference Centre by introducing screens outside every room to display ICAO content, which will be managed from a centralized console.
- Central projection management to improve the quality and availability of audiovisual services inside rooms with fixed projectors in all rooms, and which is administered centrally with a remote console.

REVENUE GENERATION ACTIVITIES

For the first six months of 2016, ARGF results indicate that the areas of events, product licensing and partnerships outperformed their budgeted expectations. The current focus is on growing revenue through capacity-building in support of new product and programme initiatives. With strategic actions in place, new resources were recruited and dedicated to supporting new initiatives in the Regions. New integrated approaches adopted in the areas of events, training and ICAO publications resulted in regional and Headquarters events which effectively hosted both training activities and symposiums. Moreover, partnerships between ICAO and the private sector were leveraged to support a new agenda of workshops on ICAO's Strategic Objectives at the 39th Session of the Assembly.

Modernization through the deployment of new digital technologies in printing contributed to improvements in the ICAO print shop, such as reduced inventory costs, reductions in staff costs, and increased productivity through larger print volumes.

COMMUNICATIONS

Public and media information activities, otherwise referred to as Communications (COM) at ICAO, were focused primarily on the following areas in the first half of 2016:

- Completion of the new ICAO public website;
- Secure free terminal video screens in Montréal-Trudeau International Airport for ICAO's Uniting Aviation message and A39/IWAF promotion;
- Coordination with the "Dreams Soar" round-the-world solo flight team on international facilitation regarding routes and landing permissions, local outreach during the Montréal stop, etc;
- Design and production of the Council President Certificates of recognition;
- Continued support and promotion of the Solar Impulse Round-the-World flight accomplishments on social media and in the *ICAO Journal*, leveraging our status as an Solar Impulse "Institutional Partner", up to and including the project's successful completion.

The Communications Section continues to produce or coordinate and finalize speeches and video presentations, editorial articles, interviews and publications for the President of the Council and the Secretary General and produce or augment editorial interview responses and article submissions on behalf of ICAO Directors and technical staff. A total of 59 news releases and news highlights were originated by COM during the first six months of the year.

ICAO issued 324 Tweets which received 2.249 million views in the first half of 2016, not including further response/engagement/retweet activities. Twitter followers increased 19 per cent during this period to a total of 53 000 from 43 000 at end 2015.

TECHNICAL COOPERATION

As at 30 June 2016, the total Technical Cooperation Programme implemented by ICAO is estimated at USD 32.2 million. Under various Trust Fund arrangements, the Technical Cooperation Bureau is currently executing 100 projects in 136 countries. It is estimated that a total Programme of USD 130.7 million will be implemented in 2016.

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

Region	As at 30 June 2015	As at 30 June 2016
Africa	25.8	4.4
Americas	14.9	22.4
Asia and Pacific	1.40	1.5
Europe and Middle East	0.9	0.6
Middle East	4.1	3.3
Total	47.10	32.2

Large Scale Technical Cooperation Projects

Large-scale technical cooperation projects and large-scale revisions (above USD 500 000) to ongoing national and regional projects funded by recipient governments and entities, which have been approved during the first semester of 2016, include:

- a) Afghanistan – Capacity building of Afghanistan Civil Aviation Authority (AFG/15/801)
- b) Argentina – Strengthening of the new National Civil Aviation Administration (ANAC) (ARG/07/803)
- c) India – Aeronautical Study on height limitations for new building plans near Mumbai International Airport (IND/15/802)
- d) Mali – Support to the United Nations Multidimensional Integrated Stabilization Mission in Mali (MINUSMA)'s Aerodrome infrastructure rehabilitation programme (MLI/15/801)
- e) Panama – Strengthening of the Civil Aviation Authority of Panama (PAN/15/801)
- f) Uruguay – Strengthening of the Directorate of Civil Aviation and Infrastructure (DINACIA) (URU/08/801)
- g) Regional project – Cooperative Development of Operational Safety and Continuing Airworthiness Programme for the Gulf States region (COSCAP-GS) (RAB/04/801)

Technical assistance projects and regional technical cooperation projects which received contributions from the ICAO Voluntary Funds during the same period include:

- a) Cambodia – Assistance in resolving safety oversight deficiencies (RAS/97/903-SF) – SAFE Grant (Boeing) in the amount of USD 30 000
- b) Cambodia – Assistance in resolving safety oversight deficiencies (RAS/97/903-SF) – SAFE Grant in the amount of USD 20 000
- c) ASECNA – Africa Region (AFI) Flight Procedure Programme (RAF/14/801-SF) – SAFE Grant (France) in the amount of €67 803.76

Donor contributions were received for the following technical cooperation projects:

- a) Afghanistan – Capacity building of Afghanistan Civil Aviation Authority (AFG/15/801) – Grant by the United States Department of State in the amount of USD 1 146 156
- b) Regional project – Cooperative Development of Operational Safety and Continuing Airworthiness Programme North Asia (COSCAP-NA) (RAS/02/901) – Grant by the Government of Canada in the amount of USD 130 000
- c) Regional project – Regional safety oversight system for Latin America (RLA/99/901) – Grant by Division Turbo SRL (Argentina) in the amount of USD 3 700
- d) Regional project – Development of Operational Safety and Continuing Airworthiness in the Commonwealth of Independent States (COSCAP-CIS) (RER/01/901) – Grant by Airbus (France) in the amount of USD 100 000

Recruitment of experts

The total number of international field experts and consultants recruited as at 30 June 2016 was 138, in addition to 812 national project personnel for a total of 950 serving officials, including 55 international field experts and consultants who were already in the field serving in ongoing projects.

Civil aviation training

In this period 189 fellowships were awarded for a total duration of 181.5 work/months, including 66 awards within the framework of Memoranda of Understanding signed by ICAO with 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 3 249 civil aviation administration personnel, and 148 staff received training by suppliers through the procurement component of technical cooperation projects.

Equipment and subcontracts

Two hundred and twenty (220) purchase orders were issued and total field procurement expenditure amounted to USD 15.9 million.

The Administrative and Operational Services Cost (AOSC) budget

As at 30 June 2016, the Administrative and Operational Services Cost (AOSC) Fund income amounted to USD 4.68 million and expenditures to USD 4.06 million, for an excess of income over expenditure of USD 0.62 million.

REVIEW OF ACTION TAKEN UP TO 30 JUNE 2016
ON RESOLUTIONS OF THE 38th SESSION
OF THE ASSEMBLY

Resolution	Subject and action taken
A38-1	<p data-bbox="363 583 1068 615"><i>Assistance to victims of aviation accidents and their families</i></p> <p data-bbox="363 648 1445 772">Pursuant to Resolution A38-1, the Council adopted Amendment 25 to Annex 9 — <i>Facilitation</i> on 12 June 2015, which includes a provision for States to establish legislation, regulations and/or policies in support of assistance to aircraft accident victims and their families.</p>
A38-2	<p data-bbox="363 808 950 840"><i>ICAO global planning for safety and air navigation</i></p> <p data-bbox="363 873 1445 997">Pursuant to Resolution A38-2, the Global Aviation Safety Plan (GASP) and the Global Air Navigation Plan (GANP), after consultation with States and international organizations, were approved by the Council and will be presented to the 39th Session of the Assembly for endorsement.</p> <p data-bbox="363 1031 1445 1218">The GASP is a high-level policy document aimed at improving international civil aviation safety, capacity and efficiency for use at the global, regional and national levels. The GASP has been restructured and revised, and is supported by the global aviation safety roadmap. The roadmap serves as an action plan to assist the aviation community in achieving the objectives presented in the GASP through a structured, common frame of reference for all relevant stakeholders.</p> <p data-bbox="363 1251 1445 1472">The GANP serves as the supporting strategic planning document for States, ICAO's planning and implementation regional groups (PIRGs), service providers, airspace users and industry stakeholders. The GANP has been updated to provide further guidance material towards implementation and to follow Assembly cycles. The ASBU modules have also been updated to take into account recent technological developments and standards' availability. However, the global structure of the two documents has been maintained to provide the necessary stability.</p>
A38-3	<p data-bbox="363 1507 954 1539"><i>Protection of certain accident and incident records</i></p> <p data-bbox="363 1572 1445 1883">Pursuant to Resolution A38-3, the Council adopted Amendment 15 to Annex 13 — <i>Aircraft Accident and Incident Investigation</i> on 22 February 2016. Key elements and considerations include: enhancement of the protection of investigation records, while balancing the objectives of the investigation and other public interests; effective means to protect records in the custody of or under the control of the accident investigation authority; support to States in the administration of the “balancing test” by the designated competent authority; accommodation of different legal systems and States' practices in implementing effective protection of investigation records. Likewise, the new <i>Manual on Protection of Safety Information, Part I — Protection of Accident and Incident Investigation Records</i> (Doc 10053) was published in June 2016 to provide guidance for the implementation of this amendment.</p>

A38-4 *Protecting information from safety data collection and processing systems in order to maintain and improve aviation safety*

Pursuant to Resolution A38-4, the Council adopted Amendment 1 to Annex 19 — *Safety Management* on 2 March 2016. One of the key elements of Amendment 1 was an upgrade of provisions for the protection of safety data, safety information and related sources. In January 2016, the Secretariat established a Safety Information Protection Implementation Group (SIP-IG) to assist the Secretariat in helping States with the implementation of new provisions related to the protection of safety data, safety information and related sources.

The Safety Management Panel (SMP) is working on the development of guidance and the identification of best practices to support the establishment of effective safety-reporting systems. Guidance for the establishment of these systems and the protection of safety data, safety information and related sources will be contained in the updated *Safety Management Manual* (SMM) (Doc 9859), publication of which is planned for 2017.

A38-5 *Regional cooperation and assistance to resolve safety deficiencies, establishing priorities and setting measurable targets*

Specific technical assistance (TA) projects, funded by either the Safety Fund (SAFE) or safety partners, have been developed to assist States resolve critical safety deficiencies including significant safety concerns (SSCs). As of 30 June 2016, eight projects have been completed, 16 projects are ongoing, and three projects are under development. A TA project for Uruguay contributed to the resolution of the two SSCs identified by the ICAO Universal Safety Oversight Audit Programme (USOAP) ICAO Coordinated Validation Mission (ICVM) in April 2014.

In coordination with the Regional Offices, all safety enhancement activities carried out by regional aviation safety groups (RASGs) are monitored to strengthen regional coordination and to facilitate, as well as to assist, in establishing objectives, priorities and indicators, as necessary. A global coordination meeting for the RASGs and the planning and implementation regional groups (PIRGs) was held in February 2015 to increase coordination and to align RASG and PIRG activities with the GASP and the GANP.

ICAO continued to work through the Regional Offices to closely monitor progress made on ICAO Plans of Action which are designed to address and resolve State-specific safety deficiencies in an efficient and timely fashion. Particularly, with respect to States with SSCs, ICAO periodically monitors the progress made through the Monitoring and Assistance Review Board (MARB), and actions are taken as appropriate.

Additionally, to properly address SSCs and safety-related deficiencies at a regional level, ICAO developed Regional Dashboards to monitor progress made in improving safety oversight in the region.

The first face-to-face meeting of the ICAO Aviation Safety Implementation Assistance Partnership (ASIAP) was held on 25 November 2015 as a side meeting of the World Aviation Forum (IWAF). The meeting provided an opportunity for partners to discuss how to coordinate and collaborate on technical assistance efforts. Quarterly telecoms are held to discuss partners' technical assistance activities in the identified priority States.

To compile all relevant safety information collected from the Regional Offices, RASGs, regional safety oversight organizations (RSOOs) and cooperative development of operational safety and continuing airworthiness programmes (COSCAPs), a database was created in order to analyse risks, as well as to help develop assistance projects.

A38-6

Support of the ICAO policy on radio frequency spectrum matters

Radio frequency spectrum is a finite and limited resource managed by the International Telecommunication Union (ITU) through its World Radiocommunication Conferences (WRCs) held every four years. The availability of the necessary radio frequency spectrum is a critical prerequisite for the safety of civil aviation and the effective implementation of the communications, navigation and surveillance/air traffic management (CNS/ATM) systems. As demand for radio spectrum from non-aviation users keeps growing, aviation faces ever-increasing competition for the limited available spectrum. Resolution A38-6 urges ICAO, Member States, international organizations and other civil aviation stakeholders to provide the resources and attention necessary to ensure continued access to the frequency spectrum resource by aviation, through the development of a comprehensive frequency spectrum strategy as well as active participation in WRCs, regional and other international spectrum-related activities.

ITU WRC-15 took place in Geneva on 2-27 November 2015. Positive results were achieved for aviation, fully satisfying the ICAO Position developed for this conference, protecting existing aeronautical safety services as well as gaining access to spectrum for new services. The essential elements contributing to this successful outcome were the timely development and coordination of the ICAO Position with all ICAO Member States in preparation for the conference, the active participation by ICAO experts in WRC-15 preparatory work of the ITU and regional telecommunication organizations, civil aviation representation in the delegations of States' spectrum administrators, and the active participation of the ICAO delegation at the conference itself.

Preparations are currently underway for the next WRC, scheduled for 2019. An ICAO Position is being drafted and is expected to be approved by the Council in 2017 after consultation with States. The first version of a comprehensive aviation frequency spectrum strategy was approved and published in 2014. Further development of the spectrum strategy is underway.

A38-7

Comprehensive Regional Implementation Plan for Aviation Safety in Africa

ICAO has played a lead role in coordinating assistance activities with various regional entities in support of the ICAO Plans of Action to avoid duplication of efforts, including the prioritization and coordination of all regional safety-related initiatives by the Regional Aviation Safety Group of the AFI region (RASG-AFI). To date, 32 AFI States have accepted the ICAO Plans of Action.

The AFI Plan continues to provide necessary support to States through regional safety oversight organizations (namely the Banjul Accord Group Aviation Safety Oversight Organization (BAGASOO) and East African Community Civil Aviation Safety and Security Oversight Agency (CASSOA)).

The AFI Plan promoted the establishment of the Association of African Aviation Training Organizations (AATO) aimed at harmonizing and standardizing aviation training in Africa.

Since 2008, the AFI Plan has conducted numerous seminars and workshops in various safety-related fields benefiting over 2 000 personnel from the region.

The Ministerial Conference on Aviation Safety in Africa (16-20 July 2012, Abuja, Nigeria) reaffirmed the commitment to promote reliable, sustainable and safe air transport in Africa. Efforts in attaining these aviation safety targets and achieving sustainable safety improvements have already shown tangible results. Between July 2012 and June 2016, the number of States throughout the AFI region with a level of Effective Implementation (EI) of 60 per cent and above increased from 14 to 24, and the number of States with SSCs declined from 20 to four.

As the achievement of the Abuja Safety Targets is critical to attain the GASP objectives at the AFI regional level, there is a need for continued assistance to States through the AFI Plan in collaboration with aviation safety partners, particularly to ensure that all aviation safety-related activities including, accident and incident investigation (AIG), aerodromes and ground aids (AGA), and air navigation services (ANS), are included in the programme and carried out in an effective and timely fashion.

The AFI Plan works closely with RASG-AFI and the AFI Planning and Implementation Regional Group (APIRG). Accordingly, both RASG-AFI/3 and APIRG/20 Meetings, held in Yamoussoukro, Côte d'Ivoire, in December 2015, endorsed the AFI Plan targets for 2016, including having 70 per cent of African States achieve 60 per cent EI, no SSCs and certifying at least 45 per cent of all international aerodromes.

With respect to ANS, the AFI Plan has developed an implementation project to support the African ANSP Safety and Quality Assurance (ASQA) Programme; a peer review mechanism established in 2015.

A38-8 *Proficiency in the English language used for radiotelephony communications*

During the 38th Session of the Assembly, the Commission agreed that States should be encouraged to make use of the implementation tools developed by ICAO for language proficiency requirements and that the flexibility clause relating to States not compliant with the provisions by 5 March 2011 was no longer necessary. States should be encouraged to continue to make use of the implementation tools available to them. No updates are proposed for the 39th Session of the Assembly, and no further action is required.

A38-9 *Halon replacement*

Pursuant to Resolution A38-9, the Secretariat will report back to the Assembly on a timeframe for the replacement of halon in cargo compartment fire suppression systems. The report to be presented to the 39th Session of the Assembly for endorsement provides an update on the development of halon alternatives for aircraft fire suppression systems and proposes a new timeframe for the replacement of halon in cargo compartments.

A38-10 *Recognition of approval of flight simulation training devices (FSTD)*

Pursuant to A38-10, the fourth edition of the *Manual of Criteria for the Qualification of Flight Simulation Training Devices* (Doc 9625), Volume I — *Aeroplanes* was published and the Secretariat liaised with several States and a regional safety oversight organization (RSOO) to establish systems for the approval of FSTDs based on Doc 9625. This resulted in guidance becoming partially implemented in some national regulations or being recognized

as an acceptable means of compliance for approving FSTDs. Work is progressing with other States and the RSOO. Additionally, the Secretariat is developing an update to the *Manual on the Approval of Flight Crew Training Organizations* (Doc 9841) to include better guidance on the recognition of approvals of training organizations and their FSTDs.

- A38-11 *Formulation and implementation of Standards and Recommended Practices (SARPs) and Procedures for Air Navigation Services (PANS) and notification of differences*

One of the key subjects in Assembly Resolution A38-11 is the provision of more guidance in respect of the notification and publication of differences (Resolving Clause 15 refers). Pursuant to this resolution, the Council, at the sixth meeting of its 207th Session on 26 February 2016, approved amendments to the Note on the Notification of Differences (“Note”) and the Form for the Notification of Compliance or Differences (“Form”). The amended Note and Form are available as attachments to the electronic version of State letters on the adoption of various Annex amendments.

The amended Note and Form together with the new *Manual on Notification and Publication of Differences* (Doc 10055) should provide increased clarity to States regarding the implementation of Article 38 of the Chicago Convention and will be rolled out to States through incorporating learning material on them in existing, relevant classroom and computer-based training courses (including those related to the Universal Safety Oversight Audit Programme).

- A38-12 *Consolidated statement of continuing ICAO policies and associated practices related specifically to air navigation*

As a full review of the Consolidated statement was undertaken at A38, no updates are proposed for the 39th Session of the Assembly

- A38-13 *Composition of the Air Navigation Commission and participation in its work*

No further action required.

- A38-14 *Consolidated statement of continuing ICAO policies in the air transport field*

Appendix A — Economic regulation of international air transport

Section I. Agreements and arrangements

In May 2014 and March 2016, the Organization held the second and third ICAO Air Transport Symposia (IATS), which focused, respectively, on sustainable development of air transport and competition in international air transport.

The 12th and 13th meetings of the Air Transport Regulation Panel (ATRP) were held, respectively, in May 2014 and September 2015.

In June 2015, the Council formally adopted the text of a long-term vision for international air transport liberalization, to serve as a reference point and an inspirational guide for Member States in the pursuit of the ultimate goal of liberalization. It also formally adopted core principles on consumer protection as policy guidance for States and concerned stakeholders.

The ICAO Air Services Negotiation event (ICAN) was held in Durban, South Africa, in 2013; in Bali, Indonesia, in 2014; and in Antalya, Turkey, in 2015. By the end of 2015, 137 States representing 72 per cent of the total ICAO membership had utilized the ICAN event at least once.

Section II. Cooperation in regulatory arrangements

ICAO developed tools to enhance the transparency of States' competition rules, and to foster cooperation, dialogue and regulatory compatibility. In this respect, a compendium of competition policies and practices in force nationally or regionally was developed and is available at <http://www.icao.int/sustainability/Compendium/Pages/default.aspx>.

The ICAO online database on consumer protection regimes and practices was updated. In addition, a Secretariat study of different consumer protection regimes applicable to international air transport was made available on the ICAO website (http://www.icao.int/sustainability/pages/eap_ep_consumerinterests.aspx).

The Organization continued to promote States' adherence to international conventions and agreements, such as the *International Air Services Transit Agreement* (IATA) and the *Convention for the Unification of Certain Rules for International Carriage by Air* adopted in Montréal on 28 May 1999. This task was accomplished through a State letter sent in July 2015 and through global/regional meetings.

Additional targeted assistance was provided by ICAO to States according to their needs and local situation. For example, with the objective of fostering air cargo development in Africa, an ICAO meeting on the subject was held in Lomé, Togo, in August 2014. Similarly, a Regional Air Transport Conference was held in Montego Bay, Jamaica, in October 2014, and a Meeting on Sustainable Development of Air Transport in Africa was held in Antananarivo, Madagascar, in March 2015. These meetings resulted in the adoption of declarations and regional action plans, which provided an impetus for air transport development.

ICAO's cooperation with international organizations such as the World Tourism Organization (UNWTO) and industry stakeholders was strengthened in areas of common interest, such as connectivity, travel and tourism promotion, market access liberalization, consumer protection and assistance to Small Island Developing States (SIDS). For example, a Medellín Statement on Tourism and Air Transport for Development was adopted by the Joint UNWTO/ICAO High-level Forum held in Medellín, Colombia, in September 2015. ICAO also actively participated in the Global Travel Association Coalition (GTAC), a group composed of leading government and private sector organizations from the travel and tourism sector. The objective of the group is to promote a better understanding of the role of travel and tourism as a driver for economic growth, employment and sustainable development.

Section III. Airline product distribution

No updates.

Section IV. Trade in services

No updates.

Section V. Elaboration of policy guidance

Work was undertaken to update the ICAO *Policy and Guidance Material on the Economic Regulation of International Air Transport* (Doc 9587) and the *Manual on the Regulation of International Air Transport* (Doc 9626), a provisional version of which will be made available for the 39th Session of the Assembly.

Appendix B — Statistics

The first meeting the Aviation Data and Analysis Panel (ADAP/1) was held in April 2014.

The ICAO Statistics Programme has been modernized as part of the Enterprise Data Management (EDM) initiative, which aims to harmonize different sources of data at the organizational level, using standard reference tables and taxonomies by creating a holistic repository of cross-functional data. The re-engineering process will bring a better application interface, improve interoperability with States, UN agencies, international organizations, industry and other stakeholders, and allow a better dissemination of the data collected.

The new ICAO Data+ web-platform (<https://www4.icao.int/newdataplus>) was enhanced with visual analytical functions, allowing users to quickly visualize trends, differences and similarities between data selections and make competitive benchmarking analyses.

The re-engineering of the Statistics Programme created opportunities for ICAO to leverage its harmonized raw data and transform them into useful information for economic analyses. The Secretariat developed business analysis tools, the ICAO CO₂ Reporting and Analysis System (ICORAS) and an airline operating economics study.

ICAO has established a joint venture, at the specific project level, in partnership with the Universal Postal Union (UPU), the UN Conference on Trade and Development (UNCTAD), the International Transport Forum (ITF) at the Organization for Economic Co-operation and Development (OECD), the World Tourism Organization (UNWTO) and the Interdisciplinary Centre for Mathematical and Computational Modelling (ICM) of the University of Warsaw.

Assistance and aviation data and analysis have been provided to States and international organizations upon request.

Appendix C — Forecasting, planning and economic analyses

The Multi-disciplinary Working Group on Long-term Traffic Forecasts (MDWG-LTF) under the Aviation Data and Analysis Panel (ADAP) developed a single set of long-term traffic forecasts with a 30-year horizon. The MDWG-LTF is comprised of ten Member States and three international organizations. The membership of MDWG-LTF also includes five members of the Committee of Aviation Environmental Protection (CAEP) working groups.

A time-series data set of Revenue Passenger Kilometres (RPK) and Freight Tonne Kilometres (FTK) was created for both international and domestic operations at city-pair and carrier levels from 1995 to 2012 by compiling: a) actual traffic data reported by States to ICAO (through Air Transport Reporting Forms A, B and C) and published directly by States, the coverage of which was over 90 per cent of air passenger traffic and 95 per cent of freight traffic; and b) estimated traffic data based on the airline schedules published in the Official Airline Guide (OAG), which was used to fill in the gaps. This initial data set was subsequently reconciled with operations data in the Common Operations Database (COD)

maintained by the CAEP in order to establish common baseline traffic volumes for the year 2012.

The Working Group developed long-term traffic forecasts for 50 route groups, from which customized or more detailed forecasts can be produced for various purposes, such as safety, air navigation systems planning and environmental analysis.

Appendix D — Taxation

A State survey was conducted in July 2015 concerning States' positions and adherence to ICAO's policies on taxation in international air transport. The survey results will be available as a supplement to Doc 8632.

(<http://www.icao.int/publications/pages/publication.aspx?docnum=8632>).

Appendix E — Airports and air navigation services

The fifth joint meeting of the Airport Economics Panel (AEP) and the Air Navigation Services Economics Panel (ANSEP) was held in May 2015.

In exploring ways and means by which to finance aviation infrastructure development, ICAO conducted extensive research on the experiences of States in the development of various models of Public-Private Partnership (PPP) for infrastructure projects (www.icao.int/sustainability/Pages/im-ppp.aspx). An updated report on airport economics was made available on the ICAO website at www.icao.int/sustainability/Pages/eap-im-airports.aspx.

A Multi-disciplinary Working Group on the economic challenges linked to the implementation of the Aviation System Block Upgrades (MDWG-ASBUs) produced reports on how to conduct cost-benefit analyses, business case study and economic impact analyses, as well as financing schemes.

A State survey was conducted in July 2015 concerning the level of implementation of ICAO's policies on charges. The survey results indicate that most of the 83 responding States (covering 84 per cent of the world scheduled traffic) have followed the ICAO policies.

Appendix F — Air carrier economics

Studies on regional differences in international airline operating economics for the years 2011, 2012 and 2013 were carried out and a study for the year 2014 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 IATA Prorate Agency to establish prorate factors for passenger revenues from interline journeys.

Appendix G — Air mail

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

A38-15

*Consolidated statement of continuing ICAO policies related to aviation security***Appendix A — General policy**

Generous voluntary contributions received from Member States have made it possible for ICAO to continue efforts to enhance aviation security worldwide, facilitate and focus international/regional cooperation, promote government industry collaboration and enhance coordination of partners. These donor contributions have also ensured progress in implementing the ICAO Comprehensive Aviation Security Strategy (ICASS) during the 2014-2016 triennium, and thereby fully supporting ICAO's *No Country Left Behind* initiatives. Valuable lessons learned from ICASS confirm the continued relevance of the strategy as a robust framework for guiding ICAO action on aviation security matters, which should be extended in its current form until a new Global Aviation Security Plan — GASeP — is approved for implementation.

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 the aviation security conventions continues to be emphasized through briefings and at high-level meetings.

Appendix C — Implementation of technical security measures

To promote efficiency and effectiveness of security measures, ICAO continued to make new and updated guidance available throughout the triennium, including the Ninth Edition of the *Aviation Security Manual*, which is complemented by stand-alone guidance on the following topics:

- Impact Assessment (in aviation security);
- Security Culture;
- Security Management Systems (SeMS); and
- Recognition of Equivalence of Security Measures.

In close consultation with the Aviation Security (AVSEC) Panel Working Group on Threat and Risk (WGTR), ICAO continued to monitor potential security threats (e.g. cybersecurity, landside security remotely-piloted aircraft systems, person-delivered improvised explosive devices, and Man-Portable Air Defence Systems). Prompt communication and dissemination of aviation security risks through guidance to all States and stakeholders facilitated coherent, effective and timely action. Other guidance material has been issued in order to increase States' capacity to prioritize aviation security resources based on risk, which include: *Civil Aircraft Operations Over Conflict Zones*, *Man-Portable Air Defence Systems (MANPADS) Information and Airport Vulnerability Assessment Guide*, and the cybersecurity repository on the ICAO secure portal. Addressing new and existing threats was also emphasized through ICAO continuous monitoring and implementation assistance activities.

A proposed Amendment 15 to Annex 17 — *Security* is currently in development, which will include new and/or revised provisions on behavioural detection, innovation in aviation security, MANPADS, risk assessments, cybersecurity and landside security. Specifically with regard to provisions concerning landside security, the ICAO Council took into account the escalating threat of terrorist attacks on landside areas of airports, combined with recent

terrorist incidents in crowded places, both in airports and non-aviation locations, and decided to elevate existing Recommended Practices on landside security to Standards.

Appendix D — Action of States concerned with an act of unlawful interference

Following recent events and attacks on civil aviation, the Council requested that Member States be reminded of their obligation to report Acts of Unlawful Interference (AUI) to ICAO by the most expeditious means, as required by Annex 17. To help facilitate such an obligation, the ICAO Secretariat, in collaboration with the Aviation Security Panel, has developed a revised AUI reporting form, which aims to simplify its utilization and expedite its submission by focusing on gathering key data and critical information concerning the incident.

Appendix E — The ICAO Universal Security Audit Programme

Full implementation of the Universal Security Audit Programme Continuous Monitoring Approach (USAP-CMA) began in 2015, and regular reports are made to the Council regarding the status of implementation of the Programme. A report on the overall implementation of the USAP-CMA has been prepared for presentation to the 39th Session of the Assembly. This includes a report on the overall implementation of the Programme, the main results of the audits and analysis of the level of implementation of the critical elements of States' aviation security oversight systems, and an indicative level of compliance with Annex 17 Standards.

Appendix F — The ICAO Implementation Support and Development — Security Programme (ISD-SEC)

The ICAO Aviation Security Assistance and Capacity Building Strategy activities include: the leadership, coordination and provision of needs-based assistance to Member States; the promotion of regional cooperation; oversight and coordination of a global network of Aviation Security Training Centres (ASTCs); and the development and maintenance of Aviation Security Training Packages (ASTPs).

The strategy lays out a framework under which the aviation security needs of Member States are identified, and a roadmap to an effective national aviation security system compliant with Standards and Recommended Practices (SARPs) is implemented. The success of this strategy is centred on Aviation Security Improvement Plans (ASIPs) that are developed in partnership between ICAO and the assisted State, and incorporate a role for other assistance providers, such as regional organizations, other Member States and, where appropriate, industry. ASIPs emphasize the need for States' political will and full commitment to strengthen aviation security in order to benefit from the support of ICAO and other partners.

The Secretariat supported the Aviation Security Assistance Providers Group to coordinate the provision of assistance globally. Group activity includes the exchange of information regarding current assistance projects and assuring a collective approach to aviation security assistance and capacity-building.

Addressing the continuing need for global and regional AVSEC training, ICAO's network of ASTCs has expanded to 30 centres, with additional centres requesting recognition. In support of its training and assistance initiatives, the Secretariat will complete a review of all

its ASTPs by the end of 2016 to ensure consistency with the competency-based training requirements of the ICAO Global Aviation Training Policy.

Under the leadership of the Secretariat, ICAO supports various regional AVSEC initiatives, such as the Asia Pacific Regional Aviation Security Coordination Forum (RASCF) and the Comprehensive Regional Implementation Plan for Aviation Security and Facilitation in Africa (AFI SECFAL Plan).

In accordance with the Annex on Aviation Security to the ICAO/EU Memorandum of Cooperation (MoC), which establishes, inter alia, a framework for information exchange and joint activities, the Secretariat is actively coordinating assistance activities funded by the European Union (EU) through the European Civil Aviation Conference (ECAC).

Appendix G — Action by the Council with respect to multilateral and bilateral cooperation in different regions of the world

Continued efforts in promoting mutual recognition of aviation security processes were made through extensive collaboration with stakeholders and industry, including dissemination of the newly developed guidance material *Recognition of Equivalence of Security Measures* as well as information exchange and debate through the AVSEC Panel. Formalized aviation security mutual recognition agreements are gaining increased momentum in the management of bilateral aviation security affairs.

Appendix H — International and regional cooperation in the field of aviation security

In the period since the 38th Session of the ICAO Assembly, ICAO has fostered cooperation among Member States and with other stakeholders with the aim of improving aviation security and air transport facilitation, both at the regional and global levels.

In February 2016, ICAO signed a Memorandum of Understanding (MoU) with Airports Council International (ACI) providing a framework for cooperation to enhance security at airports worldwide. The MoU establishes a mechanism to support ACI's Airport Excellence (APEX) in Security Programme which is designed to help airports identify and address security vulnerabilities.

ICAO has also strengthened cooperation in the area of cargo security, working closely with the World Customs Organization (WCO) under the MoU signed in 2011, hosting joint conferences and workshops, and publishing a joint pamphlet entitled *Moving Air Cargo Globally*, all promoting the secure moving of cargo and mail globally. In this regard, ICAO also collaborates with the WCO and the United Nations Office on Drugs and Crime (UNODC) to support their newly launched Air Cargo Programme, which aims to establish units that can profile cargo processed at the airport in order to minimize the risk of air consignments being used for illicit activities, including acts of unlawful interference.

A38-16

*Consolidated statement of continuing policies related to facilitation****Appendix A — Development and implementation of facilitation provisions***

In 2013, Amendment 23 to Annex 9 – *Facilitation* became applicable. The Amendment, focused on Appendix 13 to Annex 9, was adopted so as to enhance passenger data sharing and efficient responses to a pandemic or a large-scale epidemic. In November 2013, the Council adopted Amendment 24 to Annex 9. This Amendment related to facilitating the transport of persons with disabilities and also related to such issues as the security of the travel document issuance process; inspection of travel documents at airports; utilization of Advance Passenger Information (API) and Passenger Name Record (PNR) data systems; and the procedures relating to the removal of inadmissible persons and deportees. A facilitation seminar for States of the NACC Region was held in Mexico in May 2013. The seminar focused on programme priorities as well as issues relating to inadmissible persons and deportees and the establishment of national air transport facilitation programmes. API and PNR data matters were also emphasized.

In 2014, Amendment 24 to Annex 9 became applicable. The Eighth Meeting of the Facilitation Panel was held in Montréal from 24-28 November 2014. In addition to endorsing a new Manual on National Air Transport Facilitation Programmes, it made proposals for amendments to Annex 9. Facilitation (FAL) Regional Seminars were held in the various ICAO Regions, including one in Lima in September; another in Paris in October. The seminars focused on Advance Passenger Information (API) and Passenger Name Record (PNR), as well as issues relating to inadmissible persons and deportees, the establishment of national air transport facilitation programmes, access to air transport by persons with disabilities, the ICAO Traveler Identification Programme (TRIP) Strategy, the ICAO Public Key Directory (PKD), and other FAL matters relevant to the States in the Regions.

In 2015, the Council adopted Amendment 25 to Annex 9. The Amendment related to, inter alia, issues such as assistance to aircraft accident victims and their families, Machine Readable Travel Documents (MRTDs), cargo facilitation and INTERPOL's Stolen and Lost Travel Documents (SLTD) database. A new Manual on *Model National Air Transport Facilitation Programmes (NATFP)* was published. The Manual contains guidance on how States may comply with Standards 8.17, 8.18 and 8.19 of Annex 9. During the year, in the light of Standard 3.10.1 (13th Edition, 2011) of Annex 9 that required Contracting States to ensure of expiration of non-machine readable passports by 24 November 2015, the Secretariat undertook an intensive communications campaign to remind States of the "deadline," and to respond to State letter EC6/3-12/70, *Implementation of Standard 3.10.1 of Annex 9 – Facilitation*. By 31 December 2015, formal responses to the State letter indicated that 140 Member States had complied with the deadline, with 16 States indicating compliance after the deadline had passed. A facilitation seminar for States of the APAC Region was held in Bangkok in March 2015.

Appendix B — National and international action in ensuring the security and integrity of traveler identification and border controls

In 2013, the ICAO Traveler Identification Programme (TRIP) was endorsed by the 38th Session of the Assembly, as a strategy for strengthening travel documents globally. ICAO TRIP emphasizes a holistic approach to identification management in order to maximize both security and facilitation aspects, and is expected to increase the capacity of States to uniquely identify individuals by providing authorities with effective identification tools and guidance. ICAO continued to assist Member States on all matters related to Machine

Readable Travel Documents (MRTDs), including capacity-building activities funded by donors. At the regional level, the Organization relied on seminars supported by host States to promote awareness of MRTDs, biometrics and security standards. One regional seminar was held in Sint Maarten, Dutch Antilles in July; another took place in Burkina Faso in November. Both events promoted best practices for managing secure passport issuance and border control systems while emphasizing the importance of issuing ICAO-compliant MRTDs and participating in the ICAO Public Key Directory (PKD). In addition to regional MRTD seminars, ICAO held its ninth MRTD Symposium and Exhibition in Montréal in October. The annual symposium focused on the benefits of implementing automated border controls using ICAO Standards and specifications and the advantage of utilizing effective border control inspection tools such as the ICAO PKD. By year's end, the PKD had grown to 39 participants, with the addition of Belgium, Ireland, the Republic of Moldova and Thailand. States are urged to join the PKD because of the importance of enhancing cross-border security and air transport facilitation. ICAO continued in 2013 to promote PKD membership through a series of workshops.

In 2014, under the ICAO TRIP Strategy, a number of significant activities were conducted. Implementation of the strategy started with Phase I in the African Region through assistance projects developed in close cooperation with regional organizations such as: Communauté des États Sahélo-sahariens (CEN-SAD), Common Market for Eastern and Southern Africa (COMESA), Economic Community of Central African States (ECCAS), and Economic Community of West African States (ECOWAS). Efforts to link the needs of States with ICAO expertise and the donor community proved successful through Canada's support of the "Strengthening Travel Document Security in the Sahel" initiative, which focused on building capacity in the Region through workshops, training and technical assessment missions.

Meanwhile, ICAO continued to address capacity-building needs in other regions in Africa, and in Central Asia and the Americas through project proposals and assistance activities. Two MRTD Regional Seminars were held, one in Uzbekistan in April and the other in Spain in June. Both events promoted best practices for managing secure passport issuance and border control systems while emphasizing the importance of issuing ICAO-compliant MRTDs and participating in the ICAO PKD. During the Regional Seminar in Spain, ICAO, in close coordination with the European Commission, organized interoperability tests for the Supplementary Access Control (SAC) digital protocol, which became mandatory for all new ePassports issued in European Union Member States after December 2014. Elsewhere, ICAO continued MRTD gap assessments in beneficiary States, particularly within the Central and Southern American Region, with the support of Canada.

Border integrity and border control management was the focus of the Tenth Symposium and Exhibition on MRTDs, Biometrics and Border Security in Montréal in October, which was attended by 505 participants. One of the main outcomes of the Twenty-second Meeting of the Technical Advisory Group on Machine Readable Travel Documents (TAG/MRTD/22) held in Montréal in May was endorsement of the Seventh Edition of Doc 9303 – *Machine Readable Travel Documents*. The meeting considered a wide range of other issues relating to the implementation of the ICAO TRIP Strategy, including the Group's revised terms of reference, development of a work programme and a new TRIP web portal. With a view to advancing its work, TAG/MRTD/22 approved future work programmes of its two sub-groups: the New Technologies Working Group and the Implementation and Capacity-Building Working Group.

ICAO continued to promote PKD membership through a series of workshops and regional seminars, urging States to join because of the importance of enhancing cross-border security and air transport facilitation. New participants – Brazil, Iran (Islamic Republic of), Philippines, Qatar, Seychelles and Uzbekistan joined the ICAO PKD during the course of the year, bringing the total number to 45 participants.

In 2015, efforts to link the needs of States with ICAO expertise and the donor community continued to be successful. A number of significant ICAO TRIP Implementation activities were conducted in 2015, including capacity-building initiatives. The Canada-funded project “Strengthening Travel Document Security and Identification Management in the Sahel” continued throughout 2015 with a Regional Seminar that took place in Niamey, Niger in January 2015, technical assessment missions in Mali and Tunisia, and the development of a TRAINAIR PLUS Standardized Training Package (STP) entitled “Control of the Authenticity and Validity of Travel Documents at Airport Borders–Level 1”. This training course was developed jointly by FAL and the Global Aviation Training Section (GAT) to meet the increasing demand for technical assistance by ICAO Member States to reduce the use of fraudulent travel documents in order to combat cross-border crime and terrorism. The STP aims at further advancing knowledge and skills required by front-line officers to identify fraudulent travel documents when performing travel documents examination.

In March 2015, the Government of Canada funded a similar project with a focus on the Caribbean. More border-control oriented, this project includes the development of a Risk-based Model of Border Controls including an assessment guide, two regional seminars and four technical assessment missions.

An MRTD Regional Seminar was held in Nairobi in November. ICAO TRIP continued to promote news and features on travel document and identification management issues contained in the ICAO *MRTD Report* – Volume 10, issue 1 to 3. The objective of the Report is to provide a comprehensive account of new developments, trends, innovations and applications in the field of MRTDs to ICAO Member States and the international aeronautical and security communities. The foundation of holistic traveler identification management was the focus of the Eleventh Symposium and Exhibition on MRTDs in Montréal in October, which was attended by over 500 participants representing 86 States and 18 international organizations. The Seventh Edition of Doc 9303 was published in English. One new participant – Colombia – joined the ICAO PKD during the course of the year, bringing the total number to 46 participants. In March 2015 the contract for the provision of the ICAO PKD was signed with Bundesdruckerei GmbH as prime Contractor for the complete design, development and operation of the PKD.

Appendix C — National and international action and cooperation on facilitation matters

In 2013, guidelines for States’ implementation of PNR system requirements and dissemination of the PNRGOV message were posted on ICAO’s website. Endorsed by ICAO, the WCO and IATA, the PNRGOV message is a standard electronic format for transmitting PNR data from airlines to States, and is intended to harmonize the use of PNR systems globally, increase the effectiveness of data utilization and enhance both aviation security and facilitation. ICAO joined IATA and WCO in compiling a passenger data toolkit that contains a set of training and awareness materials on API and PNR. The toolkit will be used in the context of a worldwide campaign to promote global standards and guidelines for API and PNR. Also in 2013, the fourth edition of the Guidelines on Advance Passenger Information, published jointly by ICAO, WCO and IATA, was made available. The document

aims to help States implement national API programmes as well as promote international harmonization. It incorporates guidance on the Passenger List (PAXLST), a standard electronic message developed specifically to handle passenger manifest transmissions. It features new provisions for addressing aviation security as well as issues related to data protection and “Interactive API” (iAPI), a more advanced method of passenger processing at airports. Both the PNRGOV message and the API guidelines complement relevant Annex 9 SARPs.

In 2015, following the adoption of UN Security Council Resolution 2178 (2014) that, inter alia, calls upon Member States to use API to prevent the travel of foreign terrorist fighters, ICAO enhanced cooperation with the UN Centre for Counter Terrorism on joint work on API- and PNR-related matters.

A38-17

Consolidated statement of continuing ICAO policies and practices related to environmental protection — General provisions, noise and local air quality

Appendix A — General

In order to further disseminate information on ICAO’s policies and guidance material, articles on ICAO’s work on the environment were published in various editions of the ICAO Journal, 2013 Environment Report, and other publications; various environmental symposiums and seminars have been organized on Aviation and Climate Change (May 2013), Green Technology (September 2014), Global Aviation Partnerships on Emissions Reductions (September 2015).

Two series of Global Aviation Dialogues (GLADS) were also organized in five venues across the ICAO regions. GLADs have been held in response to the request by the 38th Session of the Assembly to organize seminars and workshops on a global scheme for international aviation in order to facilitate information and engagement of all ICAO Member States.

ICAO organized side-events and exhibition booths during the United Nations Framework Convention on Climate Change (UNFCCC) process.

Updated projections for aircraft noise and emissions were approved. These will be recommended as the basis for decision-making for matters related to the environment during the upcoming 39th Session of the Assembly.

Trends show that aircraft noise, aircraft engine emissions that affect local air quality, and aircraft emissions that affect the global climate are expected to continue to grow in the future, but at a slower rate than the growth in traffic. For the first time, the trends included an assessment of the potential contribution of alternative fuels on net CO₂ emissions. It is estimated that up to 2 per cent of this fuel consumption could consist of sustainable alternative fuels in 2020. Significant uncertainties exist in predicting the contribution of sustainable alternative fuels in the long term; however, based on the scenarios evaluated by CAEP, it is possible that up to 100 per cent of international aviation jet fuel demand could be met using sustainable alternative fuels in 2050. The future development and use of alternative fuels will highly depend on the policies and incentives in place for such fuels, and also the ecological and economical effectiveness of their use. Based on the analysis assumptions, if enough alternative jet fuel were produced in 2050 to completely replace petroleum-derived jet fuel, it would reduce net CO₂ emissions by 63 per cent.

The aircraft noise trends show that, under an advanced technology improvements scenario, an increase in aircraft operations may no longer result in an increase in noise contour area after 2030.

Appendix B — Development of Standards, Recommended Practices and Procedures and/or guidance material relating to the quality of the environment

The CAEP/10 meeting (February 2016) finalized a recommendation on an aeroplane CO₂ emissions certification Standard. The new CO₂ emissions Standard is recommended for inclusion in a new Volume to Annex 16 — *Environmental Protection* (Volume III — *Aeroplane CO₂ Emissions*). The Secretariat is currently progressing the new Standard through the SARP adoption process which will conclude in early 2017.

A new volume of the *Environmental Technical Manual* (Doc 9501) on the use of procedures for the CO₂ emissions certification of aeroplanes was recommended by the CAEP/10 meeting and will be published by ICAO as the First Edition of Volume III of Doc 9501.

The CAEP/10 meeting recommended the first nvPM Standard for aircraft engines greater than 26.7kN. The nvPM Standard, which will apply to engines manufactured from 1 January 2020, is the first of its kind. The new nvPM Standard was recommended as an amendment to Annex 16, Volume II — *Aircraft Engine Emissions*. In addition, further general maintenance amendments to Annex 16, Volume II, were recommended to keep the environmental SARPs up to date and relevant. The Secretariat is currently progressing the amendments to Annex 16, Volume II, including the new nvPM Standard, through the SARP adoption process.

The *Environmental Technical Manual* (Doc 9501) — *Procedures for the Emissions Certification of Aircraft Engines* was updated and will be published by ICAO as an amendment to Doc 9501, Volume II.

The recommendations to amend Annex 16, Volume I — *Aircraft Noise* included general maintenance to keep the environmental SARPs up to date and relevant. The Secretariat is currently progressing the amendments to Annex 16, Volume I, through the SARP adoption process.

The *Environmental Technical Manual* (Doc 9501) — *Procedures for the Noise Certification of Aircraft* was updated and will be published by ICAO as an amendment to the current Doc 9501, Volume I.

Recommended Method for Computing Noise Contours Around Airports (Doc 9911) was updated and the publication of this revision is forthcoming.

Guidance on the Development of States' Action Plans on CO₂ Emissions Reduction Activities (Doc 9988) was updated by the Secretariat to include "Rules of Thumb" that can be used to estimate the benefits from the elements of the ICAO Basket of Measures to address CO₂ emissions from international aviation.

CAEP developed a circular to share lessons learned and good practices to assist States and the aviation industry to engage communities and to address environmental questions/matters. The ICAO Circular *Community Engagement for Aviation Environmental Management* was delivered at the CAEP/10 meeting.

Appendix C — Policies and programmes based on a “balanced approach” to aircraft noise management

The CAEP/10 meeting recommended the publication of an updated *Airport Planning Manual* (Doc 9184), Part 2 — *Land-use and Environmental Management*. It includes specific recommendations on land-use planning and management, which is one of the elements of the “balanced approach” to aircraft noise management.

Appendix D — Phase-out of subsonic jet aircraft which exceed the noise levels in Volume I of Annex 16

No action.

Appendix E — Local noise-related operating restrictions at airports

No updates. The Secretariat developed a scope of work for a global analysis of the effects of night curfews, however, appropriate funding to carry out the work was not brought forward.

Appendix F — Land-use planning and management

In the context of the growing demand for international air transport, the CAEP/10 meeting recommended the publication of an updated *Airport Planning Manual* (Doc 9184), Part 2 — *Land-use and Environmental Management*.

Appendix G — Supersonic aircraft — The problem of sonic boom

The CAEP began to anticipate the possible resumption of supersonic flights by discussing progress on a new supersonic noise Standard for future aircraft.

During the CAEP/11 cycle, progress has been made on identifying certification measurement locations for assessing sonic boom noise on the ground; selecting an appropriate noise metric for use in a Standard that assesses sonic boom noise and shows favourable correlation between outdoor measurement and indoor human response; and evaluating the benefits of using sonic boom predictions in supersonic noise certification in addition to physical measurements.

The current state of sonic boom knowledge, research and supersonic aeroplane projects indicates that the certification of a supersonic aeroplane could occur in the 2020-2025 timeframe.

Appendix H — Aviation impact on local air quality

During the CAEP/10 meeting, the first nvPM Standard for aircraft engines greater than 26.7kN was recommended. The nvPM Standard, which will apply to engines manufactured from 1 January 2020, is the first of its kind. The new nvPM Standard was recommended as an amendment to Annex 16, Volume II — *Aircraft Engine Emissions*.

A38-18

Consolidated statement of continuing ICAO policies and practices related to environmental protection — Climate change

ICAO and its Member States have been active in addressing CO₂ emissions from international aviation by developing and facilitating the implementation of a “basket of mitigation measures” in order to achieve ICAO’s global aspirational goals for the international aviation sector of improving fuel efficiency by 2 per cent per year and keeping its CO₂ emissions from 2020 at the same level (carbon neutral growth from 2020).

The Secretariat cooperated with CAEP to update the 2013 ICAO CAEP trends assessment to support discussion by the Council and subsequently by the 39th Session of the ICAO Assembly.

The new CO₂ emissions Standard is recommended as being included in an entirely new volume to Annex 16 (Volume III) to the Convention on International Civil Aviation, for adoption by the ICAO Council. This new Standard, the first global design Standard for CO₂ emissions of any sector, will apply to new aeroplane type designs from 2020 and to aeroplane type designs that are already in production in 2023. This means that if an in-production aeroplane design is changed after 2023, the aeroplane would be required to comply with the CO₂ emissions Standard. A production cut-off date of 2028 means that in-production aeroplanes that do not meet the Standard from 2028 can no longer be produced, unless the designs are modified to comply with the Standard.

Recognizing that many of the operational improvements defined in the ICAO Global Air Navigation Plan (GANP) offer the potential to deliver fuel and CO₂ emissions reductions, an analysis of environmental benefits from the implementation of such measures has been conducted. ICAO also continued to support States and stakeholders in their efforts to develop and deploy alternative fuels for aviation, including regular updates to the ICAO Global Framework for Aviation Alternative Fuels (GFAAF) and the projection on future production of such fuels and their life-cycle environmental benefits.

As part of its cooperation with the United Nations Framework Convention on Climate Change (UNFCCC) Secretariat, the ICAO Secretariat has been developing methodologies under the UNFCCC Clean Development Mechanism (CDM) for aviation-related projects. The methodology on “electric taxiing systems for airplanes” was approved by the CDM Executive Board in November 2015. In May 2016, a second CDM methodology on “solar power for domestic aircraft at-gate operations” was approved. These methodologies are the first-ever aviation-related CDM methodologies.

Significant efforts have been made to fulfil the request of the 38th Session of the Assembly to develop a global market-based measure (MBM) scheme for international aviation. Initial progress was made by the ICAO Council’s Environment Advisory Group (EAG) with technical support provided by the ICAO CAEP, using a “Strawman” approach, which started with a basic proposal for a global MBM scheme with a view to generating discussion and analyses on advantages and disadvantages of design elements, thus allowing for improvements of the Strawman proposal. The EAG met 15 times in total, and a series of analyses requested by the EAG and the Council were undertaken by the CAEP.

In January 2016, the Council established a High-level Group on a Global Market-Based Measure Scheme to facilitate the convergence of views on a proposal for a global MBM scheme. The group met in February and April 2016, and made progress on improving the proposed text.

Further in the process to develop a global MBM scheme for international aviation, a High-level Meeting (HLM) on a global MBM scheme was held in May 2016 in Montréal with the purpose of facilitating a high-level discussion of a proposal on a global MBM scheme. The HLM successfully clarified and improved a number of provisions in the proposal. The HLM also recognized issues where further improvements were necessary, as well as possible alternative approaches and ideas to address the issues.

As a means to ensure the full engagement of States and other stakeholders, ICAO conducted two rounds of five regional seminars — Global Aviation Dialogues (GLADs) — in 2015 and 2016, covering all ICAO regions in each round. The seminars contributed to familiarizing participants with the proposed draft Assembly Resolution text and provided opportunities to receive feedback.

In addition, work on technical aspects of a global MBM scheme (e.g. monitoring, reporting and verification (MRV); emissions units criteria (EUC) and registries) was also undertaken by the ICAO CAEP, in support of the discussion by the EAG and Council.

By June 2016, 95 Member States, representing 88.1 per cent of global international air traffic, prepared and submitted action plans to ICAO, demonstrating the high level of interest and engagement of Member States in this initiative. ICAO also launched the “Buddy Programme”, whereby States that have submitted action plans are encouraged to build partnerships with Member States that have not yet prepared action plans, in order to provide support and share experiences and knowledge.

ICAO also updated its *Guidance on the Development of States’ Action Plans on CO₂ Emissions Reduction Activities* (Doc 9988) whose quantification elements have been automated in a software tool, known as the ICAO Environmental Benefits Tool (EBT). As part of its capacity-building activities, ICAO conducted eight environmental seminars back-to-back with hands-on workshops on action plans across the ICAO Regions and at ICAO Headquarters. Four hundred contacts were made with national action plan focal points.

As part of ICAO’s efforts to provide further assistance to States and facilitate access to financing for the development and implementation of States’ action plans, ICAO established partnerships with the European Union (EU), as well as with the Global Environment Facility (GEF) and the United Nations Development Programme (UNDP).

The ICAO-EU joint assistance project, “Capacity Building for CO₂ Mitigation from International Aviation”, is a €6.5 million project to assist 14 States from Africa and the Caribbean in the development of their action plans; setting up of their Aviation Environmental Systems (AES) to monitor aviation emissions; and implementation of measures to reduce aviation emissions. Following the kick-off seminars in the Dominican Republic in December 2014 and in Cameroon in February 2015, national action plan teams were established in all the selected States, and all States submitted action plans by June 2016. ICAO continued to provide support in the implementation of mitigation measures included in the action plans.

The ICAO-GEF-UNDP joint assistance project, “Transforming the Global Aviation Sector: Emission Reduction from International Aviation”, is a USD 2 million project, including the development of guidance and supporting mechanisms to assist the identification and implementation of measures to reduce aviation CO₂ emissions, and a practical pilot project in Jamaica consisting of the replacement of kerosene and diesel run Auxiliary Power Units

with electric equipment powered by solar energy. The pilot project in Jamaica aims at facilitating the replicability of solar technology at airports.

A38-19

Promotion of the Beijing Convention and the Beijing Protocol of 2010

The Organization continued to promote the ratification of the *Beijing instruments* through a State Letter (LE 3/44, LE 3/45-14/69), visits to Member States by the President of the Council and/or the Secretary General as well as meetings with high-level government officials. In addition, the Organization continuously promotes their ratification during personal deposits by State officials and during other ICAO meetings. The Organization co-sponsored or participated in legal seminars hosted by Namibia, Poland, the Republic of Korea, Singapore and IATA to promote, inter alia, these instruments. Furthermore, it joined the United Nations Office of Drugs and Crime (UNODC) in Bangladesh and Nigeria to promote the instruments and contributed to the publication entitled “Counter-Terrorism Legal Training Curriculum Module 5 — *Transport-related (civil aviation and maritime) Terrorism Offences*”. As of 8 July 2016, the Convention had been signed by 31 States and ratified by or acceded to by 14 States; and the Protocol signed by 33 States, and ratified by or acceded to by 15 States.

A38-20

Promotion of the Montreal Convention of 1999

There is continued emphasis on ratification matters by the President of the Council and the Secretary General and other ICAO officials during their visits to States; where a State has not ratified the Convention, it is urged to do so. The Organization promotes ratification at legal seminars, during personal deposits by State officials, Assembly sessions and other ICAO meetings. As of the date of this report, the Montreal Convention of 1999 has been ratified by 120 States.

A38-21

Term limits for the Offices of the Secretary General and the President of the Council

The Resolution was published in Doc 10022 *Assembly Resolutions in Force (as of 4 October 2013)*, which has been circulated to Member States.

A38-22

Budgets for 2014, 2015 and 2016

Section A: No action required.

Section B: No action required.

Section C: No action required.

A38-23

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

South Sudan's date of membership is 10 November 2011 and the date from which this country is assessable is 1 December 2011 at an assessment rate of 0.06 per cent. No further action required.

Resolution	Subject and action taken
A38-24	<p data-bbox="363 205 1446 268"><i>Discharge by Member States of financial obligations to the Organization and action to be taken in case of their failure to do so</i></p> <p data-bbox="363 304 1446 430">During 2015, the Secretary General dispatched to all Member States three State letter schedules showing the amounts due for the current year and up to 31 December of the previous year. Thus far, for 2016, the Secretary General dispatched one State letter on the same subject.</p> <p data-bbox="363 466 1446 592">No new arrangements were yet proposed since the last Session of the Assembly. The Council continues to promote its policy of inviting Member States in arrears to make settlement proposals for the liquidation of long-outstanding arrears of contributions in accordance with ICAO Resolution A37-32.</p> <p data-bbox="363 627 1446 781">As at 15 June 2016, the voting power in the Assembly of 21 Member States was deemed to be suspended due to arrears of contributions equal to or in excess of the total assessments for the three preceding financial years and of those Member States not in compliance with agreements entered into in accordance with Assembly Resolution A37-32, Resolving Clause 4 b).</p> <p data-bbox="363 816 1446 976">The additional measures stipulated in A37-32, Resolving Clause 9, were also applied during the period to those Member States which were deemed to have their voting power suspended under Article 62 of the Convention. Only those States which have no outstanding annual assessed contributions except for the current year's assessment were eligible for election to the Council, Committees and bodies.</p>
A38-25	<p data-bbox="363 1003 1024 1035"><i>Incentives for the settlement of long-outstanding arrears</i></p> <p data-bbox="363 1066 589 1098">No action required.</p>
A38-26	<p data-bbox="363 1129 1065 1161"><i>Assessments to the General Fund for 2014, 2015 and 2016</i></p> <p data-bbox="363 1192 1446 1318">The Secretary General notified Member States of their assessments for 2015 in State letter A1/8-15/39 dated 29 May 2015; State letter A1/8-15/70 dated 1 September 2015; State letter A1/8-15/83 dated 30 November 2015; and for 2016 in State letter A1/8-16/59 dated 10 June 2016.</p>
A38-27	<p data-bbox="363 1346 623 1377"><i>Working Capital Fund</i></p> <p data-bbox="363 1409 1435 1482">The Council approved the recommendation that an increase to the Working Capital Fund to USD 8.0 million be made. No further action is required.</p>
A38-28	<p data-bbox="363 1509 846 1541"><i>Amendment of the Financial Regulations</i></p> <p data-bbox="363 1572 1446 1646">The 15th edition of the <i>ICAO Financial Regulations</i> (Doc 7515), incorporating all amendments approved by the 38th Session of the Assembly, was published in 2014.</p>
A38-29	<p data-bbox="363 1673 1446 1736"><i>Approval of the accounts of the Organization for the financial years 2010, 2011 and 2012 and examination of the Audit Reports thereon</i></p> <p data-bbox="363 1768 675 1799">No further action required.</p>

Resolution	Subject and action taken
A38-30	<i>Appointment of the External Auditor</i> No further action required.

— END —