



INFORMATION RELATED TO THE

REPORT ON THE

ICAO TECHNICAL ASSISTANCE PROGRAMME

PRESENTED UNDER A40-WP/4

TECHNICAL ASSISTANCE PROJECTS AND STAFFING BY STRATEGIC OBJECTIVE

AVIATION SAFETY PROGRAMME

1. States that benefited from the SAFE Funded Projects

Completed: APAC Combined Action Team (CAT) (Capacity Building in 2017 and 2018), Cambodia (Capacity Building in 2015), Comoros (Capacity Building), Gabon (Capacity Building), Kyrgyzstan (AOC Inspector OJT), Nepal (SSC Resolution and Capacity Building), Paraguay (Capacity Building), United Republic of Tanzania (AOC Inspector OJT), AFCAC/AFI-CIS, and Africa Flight Procedure Programme (AFPP – 1st Phase), UN Ebola Aviation Action Plan, Madagascar (Capacity Building), CASSOA (OPS Capacity Building), Aerodrome Certification for Caribbean States, Aerodrome Certification for Middle East States

Active: All States (CAPSCA), all States (DGCA Course), APAC Combined Action Team (CAT) (Capacity Building in 2019), Cambodia (Capacity Building in 2019), Guyana (Capacity Building), Sierra Leone (Capacity Building), Uruguay (Capacity Building), Aerodrome Certification for Caribbean States, Regional Accident and Incident Investigation (RAIO) for Civil Aviation Safety and Security Oversight System (CASSOS) Member States

2. States that benefited from the AFI Plan Fund Funded Projects

Active: Aerodrome Certification (Benin, Equatorial Guinea, Burkina Faso, Cameroon, Côte d'Ivoire, Eswatini, Gambia, Mali, Niger, Nigeria, Senegal, Angola, Mozambique, Namibia, Rwanda, Seychelles, Uganda and Zambia), Establishment of African ANSP Peer Review programme (All AFI States), SSP/SMS implementation (Botswana, Burkina Faso, Cabo Verde, Cameroon, Cote d'Ivoire, Ethiopia, Gambia, Ghana, Kenya, Madagascar, Mali, Mauritania, Mauritius, Morocco, Namibia, Niger, Nigeria, Senegal, South Africa, Sudan, Togo, Tunisia, Uganda and Zimbabwe), Search and Rescue (SAR) organizations (Botswana, Kenya, Madagascar, Mauritius, Mozambique, Namibia, Rwanda, Seychelles, Somalia, South Africa, United Republic of Tanzania, Uganda and 18 WACAF States), Fundamental Safety Oversight (FSO) implementation (Burundi, Central African Republic, Comoros, Djibouti, Eritrea, Eswatini, Guinea, Guinea-Bissau, Lesotho, Liberia, Sao Tome and Principe), Aircraft Accident and Incident Investigation (AIG) establishment in AFI States (48 AFI States)

3. States that benefited from IPAV Funded Projects

Completed: Cambodia (Assistance in the area of AGA), El Salvador (Assistance of safety management system and State safety programme (SMS/SSP) implementation), Fiji (Assistance in the area of Aerodrome and Ground Aids(AGA)), Guatemala (Assistance in the area of legislation), Jamaica (Assistance in the area of ANS), Timor-Leste (Assistance in the area of AGA), Solomon Islands (Assistance in the area of AGA)

Active: Honduras (Assistance to develop civil aviation master planning), Mozambique Assistance to enhance safety oversight capacity)

AVIATION SECURITY AND FACILITATION PROGRAMME

1. Aviation Security Improvement Plan (ASIP) activities (2017 and 2018)

Aviation Security Improvement Plans (ASIPs) are designed specifically for a State based upon the results of a needs assessment and the assistance requirements of that State, and may be initiated following a USAP audit or at a State's request.

Eleven States have successfully completed an ASIP in 2017 and 2018:

Bolivia, Burkina Faso, Burundi, Cameroon, Colombia, Comoros, Democratic Republic of the Congo, Gabon, Honduras, Liberia, Paraguay.

In order to successfully complete an ASIP, a State must devote time and resources to complete each phase of the assistance plan, as identified through the needs assessment. Each phase of an ASIP has performance indicators, conditions and quality assurance measures that must be met before the next phase of the ASIP is initiated. Therefore, a State's ability to complete an ASIP is dependent upon multiple factors, including the ability of ICAO to provide assistance to the State and the ability of the State to meet the conditions of the ASIP to ensure effective implementation of improved security measures. The effectiveness of an ASIP may be determined via the completion of requirements by the State, as set out in the needs assessment and through the subsequent USAP audit of the State's security programmes.

The following States remain actively engaged in the completion of an ASIP:

Bahamas, Benin, Chad, Congo, Djibouti, Ecuador, Guatemala, Guyana, Iraq, Laos, Madagascar, Malawi, Mauritania, Myanmar, Philippines.

ASIPs may be put on hold for a number of reasons, including the inability of a State to carry out the agreed activities under an ASIP, and regional conflicts or other security concerns reported by UNDSS that may prevent assistance from being provided. For States in which the ASIP is on hold due to the pending implementation of security improvements as required by the needs assessment, it is imperative that ICAO, through Headquarters and the Regional Offices, continue to engage with the State to strengthen their security programmes. The following States currently have ASIPs that have been placed on hold:

Central African Republic, Guinea, Guinea-Bissau, Niger, Sao Tome and Principe.

ASIPs are on-going assistance projects that are scheduled on an as-needed basis. ICAO has received requests from the following States to undergo a needs assessment and initiate an ASIP:

Bolivia, Colombia, Gambia, Indonesia, Panama, Peru, South Sudan.

2. Direct aviation security assistance activities (non-ASIP) including fellowships to training events and training events (2017 and 2018)

This section includes States that have received assistance on an ad hoc basis, both funded through ICAO and on a cost recovery basis, through partnerships with other international entities, as well as States that have participated in ICAO-endorsed training activities via the Aviation Security Training Centre (ASTC)

Network. In 2017 and 2018, 37 State-hosted aviation security assistance activities have been delivered. In the same timeframe, a total of 69 ICAO-sponsored aviation security courses and workshops were conducted through the ASTC Network, with 1,019 aviation security specialists from 128 Member States benefitting from the training.

The following States have been a recipient of ICAO training and assistance:

Albania, Algeria, Angola, Antigua and Barbuda, Argentina, Aruba, Austria, Australia, Azerbaijan, Bahamas, Bahrain, Belarus, Belize, Benin, Bolivia, Botswana, Brazil, Bulgaria, Burkina Faso, Burundi, Cabo Verde, Cameroon, Cayman Islands, Central African Republic, Chad, Chile, China, Colombia, Congo, Cook Islands, Costa Rica, Côte d'Ivoire, Cuba, Curacao, Czechia, Democratic Republic of the Congo, Denmark, Dominican Republic, Eastern Caribbean Civil Aviation Authority (Saint Vincent and the Grenadines, St. Lucia and Grenada), Ecuador, Egypt, El Salvador, Eswatini, Fiji, France, Gabon, Gambia, Georgia, Germany, Ghana, Grenada, Guatemala, Guinea, Guyana, Haiti, Honduras, India, Indonesia, Iran, Iraq, Ireland, Jamaica, Japan, Jordan, Kazakhstan, Kenya, Kiribati, Kuwait, Kyrgyzstan, Laos, Latvia, Lebanon, Libya, Lithuania, Luxembourg, Madagascar, Malaysia, Mali, Malta, Mauritania, Mauritius, Mexico, Montenegro, Morocco, Mozambique, Myanmar, Namibia, Nepal, Netherlands, New Zealand, Nicaragua, Niger, Nigeria, Oman, Pakistan, Panama, Paraguay, Peru, Philippines, Qatar, Republic of Korea, Republic of Moldova, Russian Federation, Rwanda, Sao Tome and Principe, Saudi Arabia, Senegal, Singapore, Slovakia, Solomon Islands, South Africa, South Sudan, Spain, Sri Lanka, Sudan, Suriname, Switzerland, Thailand, Togo, Tonga, Trinidad and Tobago, Tunisia, Turkey, Uganda, Ukraine, United Arab Emirates, United Kingdom, United Republic of Tanzania, United States, Uruguay, Uzbekistan, Vanuatu, Venezuela, Viet Nam, Yemen, Zambia, Zimbabwe.

3. Staff funded by voluntary contributions (as of 31 December 2018)

ICAO HQ: five positions (4 professional and 1 general service)
Regional Offices: three positions (3 professional)

4. Seconded/gratis staff (as of 31 December 2018)

Eight professional positions

5. IPAV Funded Project (2017 and 2018)

Co-funding of a Training and Capacity Building Officer (TCBO) for the Cooperative Aviation Security Programme (CASP) for the Asia and the Pacific Region to facilitate the delivery of training courses, workshops and seminars.

ENVIRONMENTAL PROTECTION PROGRAMME

1. ICAO-EU Project

1.1 The ICAO-EU project was a successful initiative funded by the European Union and implemented by ICAO to advance environmental protection in support of the *No Country Left Behind* initiative. It provided support to 14 selected States in Africa and the Caribbean for the development and implementation of States' Action Plans on Emissions Reduction and the establishment of CO₂ emissions monitoring systems for international aviation. ICAO managed the funds, provided the administrative services, and recruited project experts in each region, while the selected States appointed dedicated focal points and provided local offices for the project implementation. This approach proved beneficial to ensure the coherence of the project deliverables with ICAO's SARPs and policies, whereas the States were fully involved in the implementation.

1.2 The project was implemented from 2014 to 2019, and all objectives were achieved beyond the expected results. All 14 selected States developed and submitted fully quantified Action Plans on Emissions Reductions and also established National Action Plan Teams with relevant stakeholders of the aviation sector to oversee their implementation. An Aviation Environmental System (AES) was installed in each State as a tool to monitor CO₂ emissions from international aviation. To assist in the implementation of mitigation measures, ICAO selected four pilot projects to be executed with project funding based on their carbon reduction potential and replicability.

1.3 Two solar-at-gate projects were installed to power solar energy to aircraft during ground operations at the international airports in Douala, Cameroon and Mombasa, Kenya. The installed capacity of these projects is of 1,25MWp and 500kWp respectively and they will eliminate over 4,000 tonnes of CO₂ per year and will serve more than 7,500 flights per year. ICAO also supported the design and implementation of Continuous Climb and Descent Operations (CCO and CDO) at the international airports of Ouagadougou, Burkina Faso, and Libreville, Gabon. With these new procedures, there is less noise exposure and reductions in fuel burn and greenhouse gas emissions.

1.4 The project also funded five feasibility studies: four of which were on the use of sustainable aviation fuels (Burkina Faso, Dominican Republic, Kenya and Trinidad and Tobago); and one on the use of solar energy at Piarco International Airport (Trinidad and Tobago). These studies highlight new opportunities for ICAO Member States to implement low emissions aviation measures, as part of their Action Plans for the achievement of a more environmentally sustainable air transport sector.

1.5 Many States have expressed their interest to receive assistance on environmental protection under a similar model as the successful ICAO-EU project. Action Plans will have to be updated in light of the recent adoption of CORSIA. Additional funding will allow ICAO to extend these benefits to more Member States and replicate these pilot projects at a larger scale.

2. ICAO-UNDP-GEF Project

2.1 This technical assistance project aimed at supporting States implementing emission reduction measures, in particular developing States and Small Island Developing States (SIDS). Funded by the Global Environment Facility (GEF), the project was implemented by ICAO from 2015 to 2018, in cooperation with the United Nations Development Programme (UNDP).

2.2 The project supported the implementation of two solar-at-gate pilot projects at two airports in Jamaica – Norman Manley International Airport in Kingston and Sangster International Airport in Montego Bay. These demonstration projects now serve as a model for other airports to follow as an emission mitigation strategy.

2.3 In addition, through this project, ICAO developed a set of four guidance documents on: financing, renewable energy, sustainable aviation fuels, and regulatory and organizational measures and also created analytical tools, including a MAC Curve tool to compare the cost-effectiveness of emissions mitigation initiatives that is available for the State Action Plans focal points. These guidance and tools are beneficial for the civil aviation authorities and aviation stakeholders for the implementation of the States' Action Plans on emissions reduction.

2.4 ICAO also produced an environmental technical platform, which is an interactive tool able to identify more than 1,000 emission mitigation strategies that have been successfully used by the aviation industry. These projects provide many options for developing States and SIDS to consider as they select and develop their own emission mitigation strategies. For the dissemination of these resources, guidance and tools developed by the project, ICAO organized two capacity building seminars for SIDs in the Caribbean and Asia-Pacific, which were held in April and May 2018 in Jamaica and Fiji, respectively.

2.5 Building upon the successful completion of the project, ICAO has developed outreach material, in order to increase the visibility of the project deliverables and to encourage Member States to consider the implementation of low emissions aviation measures. Such outreach material includes a series of short videos, highlighting the relevance of guidance documents developed to support State's strategies on CO₂ emissions reductions from international aviation. A magazine was also produced, collecting all lessons learned on the implementation of the project. This outreach material will be made available on the project's webpage ahead of the 40th Session of the ICAO Assembly.

ECONOMIC DEVELOPMENT

1. The ICAO Air Services Negotiation (ICAN) facility

1.1 The annual ICAN event was held in Bahamas, Sri Lanka and Kenya in 2016, 2017 and 2018, respectively. On average, every year, air service negotiators from around 70 States/Territories attended the event and over 400 formal and informal bilateral meetings were conducted. These resulted in the signing or initialling, annually, of more than 400 agreements (including many open skies agreements) and arrangements (such as Memorandums of Understanding, Agreed Record of Meetings). As in previous ICAN events, ICAO was commended by participating States for this facility which greatly improved the efficiency of the air services negotiation process.

2. Hands-on coaching sessions on aviation data and analysis

2.1 The objective of the regional aviation data and analysis seminar is to provide necessary support to collect and submit data by using the ICAO Statistical Air Transport Reporting Forms, and bring all stakeholders to review the situation and trends of aviation in the region as well as the understanding of the challenges and needs of the different stakeholders. The Seminar also provides information and guidance on the latest applications in data and analytics that are used for planning and decision making in ICAO, national administrations, airlines, airports and air navigation services providers (ANSPs).

3. Seconded/gratis staff

Secondments: six and seven positions (professional) in 2016 and 2017.

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TYPES OF TECHNICAL ASSISTANCE RECURRENT ACTIVITIES FUNDED BY REGULAR PROGRAMME

Note: To avoid duplication, the Regional Offices recurrent technical assistance activities presented to the Council in a separate annual report are not included in this paper.

1. Aviation Safety and Air Navigation Capacity and Efficiency

1.1 In addition to the provision of technical assistance projects funded by the SAFE, ICAO has been providing various technical assistance, through its regular programme, to States and regional organizations and groups to help them resolve safety deficiencies:

- a) assistance missions to States conducted by the Regional Offices;
- b) development of ICAO Plans of Action for States;
- c) flight procedure programmes in the Africa and Asia/Pacific regions;
- d) assistance in the implementation of safety management system (SMS) and State Safety Programme (SSP);
- e) continued assistance to the Cooperative Development of Operational Safety and Continuing Airworthiness Programmes (COSCAPs) and regional safety oversight organizations (RSOOs) in support of technical work;
- f) implementation of regional programmes through the regional aviation safety groups (RASGs) and planning and implementation regional groups (PIRGs) to attain regional safety targets and priorities for air navigation capacity and efficiency contained in the Global Aviation Safety Plan (GASP) and Global Air Navigation Plan (GANP);
- g) assistance in the implementation of performance-based navigation (PBN);
- h) assistance in the implementation of aviation system block upgrades (ASBUs);
- i) assistance in the implementation of the Runway Safety Programme; and
- j) assistance in the implementation of aeronautical information management (AIM).

1.2 States with ICAO Plans of Action

Angola, Azerbaijan, Bahamas, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Central African Republic, Chad, Comoros, Congo, Côte d'Ivoire, Democratic Republic of the Congo, Djibouti, Equatorial Guinea, Eritrea, Eswatini, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kazakhstan, Kyrgyzstan, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Niger, Nigeria, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, Togo, and Zambia.

2. Aviation Security and Facilitation

2.1 ICAO's activities to support Member States in implementing effective aviation security and facilitation programmes encompass:

- a) structured ASIPs that use a multi-phase methodology and assistance tools tailored to a State's specific needs;
- b) training of aviation security personnel using ICAO aviation security training packages (ASTPs) and workshops at ICAO Aviation Security Training Centres (ASTCs) or under special arrangements with a State or regional organization;

- c) the regular provision of guidance and advice to States in support of their implementation of ICAO Standards and Recommended Practices (SARPs). Such guidance and advice may be provided through special-purpose missions or through communications with State authorities responsible for aviation security and facilitation;
- d) support to projects conducted within ICAO, such as the Comprehensive Regional Implementation Plan for Aviation Security and Facilitation in Africa (AFI SECFAL Plan) and the Cooperative Aviation Security Programmes (CASPs) in Asia Pacific and the Middle East (CASP-AP and CASP-MID, respectively); and
- e) partnerships with United Nations and other organizations, such as the United Nations Counter-Terrorism Executive Directorate (CTED), the United Nations Office of Drugs and Crime (UNODC), and the World Customs Organization (WCO), as well as industry stakeholders and regional entities that support aviation security and facilitation.

3. Environmental Protection

3.1 ICAO provides technical assistance through its regular programme budget, the majority of which is in connection with the State Action Plans on CO₂ Emissions Reduction, where the Secretariat provides direct support to States in the development of their action plans. The specific assistance is in the form of developing guidance and tools, answering questions, conducting seminars, and ensuring that the guidance and tools meet the evolving needs of States. Recently, the Secretariat, with the support of an ad hoc group of the Committee on Aviation Environmental Protection (CAEP), updated ICAO Doc 9988, *Guidance on the Development of States' Action Plans on CO₂ Emissions Reduction Activities*.

4. Economic Development

4.1 Assistance provided for States, which is designed to raise awareness of, and facilitate the implementation of ICAO's policies and guidance while reducing State's costs in performing its economic regulatory functions, in the form of a) the ICAO Air Services Negotiation (ICAN) facility and regional meetings on action plans for the sustainable development of air transport, including cargo services; b) hands-on coaching sessions for aviation data and analysis; and c) regular provision of guidance and advice through communications with State authorities. The organization of such events relies on in-kind contributions from States.

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TRAINING PROGRAMMES BY ICAO REGION

Table 1. Number of participants enrolled in computer-based training courses per ICAO Region (2017 to March 2019)

Computer-based training courses	NACC	SAM	EUR/ NAT	ESAF	WACAF	MID	APAC	Total Partici- pants
Universal Safety Oversight Audit Programme (USOAP) Computer-based Training (CBT)	3	6	2	1	5	0	4	21
Aviation Medicine Concepts For Medical Examiners course	33	23	31	24	23	54	71	259
Total Participants:	36	29	33	25	28	54	75	280

Table 2. Number of courses delivered per ICAO Region

Classroom courses	NACC	SAM	EUR/ NAT	ESAF	WACAF	MID	APAC	Total Courses
Dangerous Goods Part 1 – Using the Technical Instructions for the Safe Transport of Dangerous Goods by Air	0	0	0	0	0	0	1	1
Director General of Civil Aviation Authorities (DGCA)	1	0	0	0	0	0	1	2
Government Safety Inspector- PEL Course	0	0	0	0	2	0	0	2
Government Safety Inspector- AIR Course	0	0	0	0	2	1	0	3
Government Safety Inspector- OPS Course	0	0	0	1	3	0	0	4
Senior and Middle Managers Training Course, Managing compliance with ICAO SARPs	3	2	4	4	5	2	5	25
Control of the authenticity and validity of travel documents at airport borders - PBN Procedure Design	0	1	0	1	2	1	1	6
PANS-OPS Procedure Initial Design Course	0	0	0	0	4	0	3	7
AVSEC Cargo and Mail	0	0	1	0	0	1	4	6
AVSEC National Inspectors	1	2	5	1	0	4	4	17
AVSEC Crisis Management	1	1	2	0	0	0	0	4
AVSEC Instructors	1	2	4	0	0	1	0	8
AVSEC Basic	0	0	0	0	0	0	0	0
AVSEC Airport Security Supervisors	1	0	1	2	0	1	0	5
Total Courses:	8	8	17	9	22	11	22	

**TECHNICAL ASSISTANCE BUDGET BY ORGANIZATIONAL ENTITY
REGULAR PROGRAMME FUND**

(in thousands of Canadian dollars)

Bureau/ Regional Office	Strategic Objective	Budget¹ 2018	Total Expenses² 2018
ANB	Safety	2 241	1 837
ANB	Air Navigation Capacity and Efficiency	1 106	947
ATB	Security and Facilitation	1 909	2 337
ATB	Economic Development of Air Transport	358	313
ATB	Environmental Protection	251	243
Sub-total (Headquarters):		5 865	5 676
APAC	All Strategic Objectives	1 274	1 470
ESAF	All Strategic Objectives	1 210	1 177
EURNAT	All Strategic Objectives	1 313	1 417
MID	All Strategic Objectives	813	784
NACC	All Strategic Objectives	1 186	1 056
SAM	All Strategic Objectives	1 105	1 143
WACAF	All Strategic Objectives	1 262	1 290
Sub-total (Regional Offices):		8 162	8 338
Grand Total:		14 027	14 014

¹ Budget includes 2018 appropriations plus carryover of 2017 savings

² Total expenses excludes 2018 commitments

**TECHNICAL ASSISTANCE BUDGET BY ORGANIZATIONAL ENTITY
REGULAR PROGRAMME FUND**

(in thousands of Canadian dollars)

Bureau/ Regional Office	Strategic Objective	Budget¹ 2017	Total Expenses² 2017
ANB	Safety	3 071	2 318
ANB	Air Navigation Capacity and Efficiency	1 211	900
ATB	Security and Facilitation	1 926	1 769
ATB	Economic Development of Air Transport	383	316
ATB	Environmental Protection	263	239
Sub-total (Headquarters):		6 854	5 543
APAC	All Strategic Objectives	1 299	1 384
ESAF	All Strategic Objectives	1 206	1 262
EURNAT	All Strategic Objectives	1 261	1 299
MID	All Strategic Objectives	801	700
NACC	All Strategic Objectives	1 063	1 050
SAM	All Strategic Objectives	1 145	1 234
WACAF	All Strategic Objectives	1 327	1 440
Sub-total (Regional Offices):		8 103	8 371
Grand Total:		14 957	13 914

¹ Budget includes 2017 appropriations plus carryover of 2016 savings

² Total expenses excludes 2017 commitments

**TECHNICAL ASSISTANCE BUDGET BY ORGANIZATIONAL ENTITY
REGULAR PROGRAMME FUND**

(in thousands of Canadian dollars)

Bureau/ Regional Office	Strategic Objective	Budget¹ 2016	Total Expenses² 2016
ANB	Safety	4,393	2,799
ANB	Air Navigation Capacity and Efficiency	3,214	1,888
ATB	Security and Facilitation	1,651	1,384
ATB	Economic Development of Air Transport	184	223
ATB	Environmental Protection	228	199
Sub-total (Headquarters):		9,669	6,493
APAC	All Strategic Objectives	1,785	1,950
ESAF	All Strategic Objectives	899	919
EURNAT	All Strategic Objectives	703	562
MID	All Strategic Objectives	785	803
NACC	All Strategic Objectives	2,487	2,383
SAM	All Strategic Objectives	341	320
WACAF	All Strategic Objectives	844	898
Sub-total (Regional Offices):		7,843	7,835
Grand Total:		17,513	14,328

¹ Budget includes 2016 appropriations plus carryover of 2015 savings

² Total expenses excludes 2016 commitments

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