

COMPREHENSIVE REGIONAL IMPLEMENTATION PLAN FOR AVIATION SAFETY IN AFRICA (AFI PLAN)

TWENTY-SECOND AFI PLAN STEERING COMMITTEE MEETING Kampala, Uganda, 15 May 2019

Agenda Item 3: Review the Implementation Status of ongoing AFI Plan Projects and consideration of new proposals.

(Presented by AFI Plan Secretariat)

EXECUTIVE SUMMARY

This paper presents an update on the status of implementation of the AFI Plan projects which were approved by the AFI Plan Steering Committee at its 17th and 20th meetings in May 2016 and December 2017 respectively. It also presents one additional Aeronautical Information Management (AIM) project proposal for the consideration of the Steering committee.

Action required: The Steering Committee is invited to:

- a) Note the information contained in this paper;
- b) Consider the inclusion of Sierra Leone, South Sudan and Somalia in the list of beneficiary States of the AFI Plan FSO Project;
- c) Approve the AIM Result Based Implementation Support (RDIS) project proposal and the associated budget, and
- d) Provide further instructions and guidance as deemed necessary.

1. **INTRODUCTION**

- 1.1 The Steering Committee at its 17th and 20th meeting approved funding for projects related to Aerodrome Certification, ANSP Peer Review, SSP Implementation, Search and Rescue (SAR) organization, Accident and Incident Investigation (AIG) and Fundamentals of Safety Oversight (FSO).
- 1.2 This paper presents an update on the status of implementation of these projects and in particular, the progress made since the 21st meeting of the AFI Plan Steering Committee.

2. AFI PLAN PROJECT IMPLEMENTATION PROGRESS – SUMMARY REPORT

2.1 During its 21st meeting, the Steering Committee reviewed the progress made in the implementation the AFI Plan projects which were approved at its 17th and 20th meeting and noted with satisfaction that the projects were progressing. Accordingly, the Steering Committee requested the AFI Plan Secretariat to continue coordinating and monitoring implementation of these projects and to report back on progress archived to its 22nd meeting.

Aerodrome Certification

- 2.2 The aerodrome certification project designed to support 16 African States to certify at least one of their International aerodromes was launched in August 2016, in both ESAF and WACAF Regions. Two additional States (Gabon and Rwanda) were added to the Project in 2017. In accordance with the project schedule, meetings with Directors General of CAAs and CEO of Airports of the beneficiary States as well as supporting States were conducted, to sensitize them on the importance of the project and secure the required commitment. Following the high level meetings three aerodrome certification workshops were conducted in Accra, Lomé and Nairobi for the benefit of Regulatory and airport personnel of both supporting and beneficiary States.
- 2.3 In accordance with the outcomes of the workshops, beneficiary States prepared and submitted their action plans to the two ICAO Regional Offices. Many States are progressing in the implementation of their plans, although some are still behind schedule. Implementation assistance and progress monitoring activities were conducted as required by the Project Teams. As results, 12 international Airports in 11 beneficiaries States (Abidjan, Bamako, Lagos, Abuja, Niamey, Libreville, Dakar, Maputo, Lusaka, Kigali, Manzini and Windhoek) have been so far certified. This achievement raised the percentage of certified aerodrome in Africa from 22,05% in 2016 to 27,69% as of today.
- 2.4 Main challenges faced in the project implementation are related to the resolution of deficiencies found on airports. This requires resources (that is in certain case unavailable), and commitment of States (both the CAAs and the airports operators Management). Another issue is the unavailability of trained technical personnel at both the CAAs and the airports Operators level. On the basis of the lessons learned so far and intensive engagement of the Project Team, improved implementation progress is expected by the end of 2019.
- 2.5 Finally, as endorsed by the SC /20 meeting, two more States/airports that newly met the 60% EI eligibility criterion, namely: Benin/Cotonou and Equatorial Guinea/Malabo were added to the project in 2018, thus bringing the number of beneficiary States to 20. States were officially informed through letters addressed to the Ministers who responded positively. Teleconferences and Workshops were held to give appropriate awareness, training and guidance for implementation, to both Senior Managers and technical staff of these States.

2.6 The ICAO Regional Offices are currently following the implementation of the action plans of the nine remaining States out of twenty involved in the Project, and are still calling on these States to increase their commitment to the full implementation of the Project.

State Safety Programme (SSP)

- 2.7 The SSP implementation project was initially developed to support the establishment of a sound safety oversight system in twenty-four (24) States, their eligibility being based on attainment of the 60% EI regional target. Such States are encouraged to further promote aviation safety by embracing safety management principles with a view to proactively address emerging safety risks by using consistent, data-informed approaches to implement smarter, system-level, risk-based safety oversight. The project was launched for a duration of 24 months with the following beneficiary States: 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.
- 2.8 Within the framework of the project, beneficiary States are being provided with safety management training for their regulatory and service provider staff involved in the implementation of SSP and SMS to build understanding of operational safety management processes with practical examples.
- 2.9 Since the 20th SC meeting, the SSP Project Document was revised to incorporate newly eligible States as well as the revised approach to SSP implementation on the basis of satisfactory implementation of SSP Pre-requisite Protocol Questions. In addition, SSP gap analyses were conducted in Kenya, Botswana, Zambia and Zimbabwe. In addition, remote guidance and assistance provided to States monitoring the state performance on OLF.
- 2.10 To date, moderate progress has been achieved by States towards implementation of safety management provisions as envisaged under the project, evident by select performance indicators: (1) SSP gap analysis start is accomplished for all eligible States; (2) SSP gap analysis completion is accomplished for 74% of the States and is in progress for 26% of the States; (3) SSP implementation plan definition is accomplished for 44% of the States, is in progress for 30% of the States and has not started for 26% of the States; and (4) SSP implementation is accomplished for none of the States, is in progress for 44% of the States and has not started for 26% of the States.
- Although the States face different challenges to varying degrees, it is evident that some specific issues are common to most States and are a significant contributor to the challenges faced: (1) qualified technical personnel; (2) resources; (3) enforcement; (4) licensing, certification, authorization and approval obligations; (5) management of safety risks; (6) safety management system obligations; (7) accident and incident investigation; (8) safety data/information collection, analysis, sharing and exchange mechanisms, hazard identification and safety risk assessment; (9) Surveillance obligations; (10) State safety performance; (11) State safety promotion; and (12) both internal and external communication and dissemination of safety information.

2.12 Way forward: (1) intensify technical assistance missions to States with special emphasis in assisting States to develop and implement SSP implementation plans and to perform self-assessment of SSP Foundation Protocol Questions and, when applicable, develop and implement corresponding corrective action plans (CAPs); and (2) progressively co-opt into the SSP Project additional States as and when they attain the EI threshold of 60%.

Search and Rescue (SAR) Organization

- 2.13 The ESAF project adopted a series of recommendations, as part of post implementation actions by the beneficiary States, to ensure continuity in SAR improvement as follows:
 - a) That a similar project be developed with the objective of assisting the remaining twelve ESAF States to establish their SAR organizations and strengthen cooperation at Regional level.
 - b) States were urged to follow-up directly with their State counterparts and arrange for signing of their SAR agreements developed during the workshop held in Nairobi based on the agreed timelines and to inform the Regional Office of such progress. All remaining SAR LoAs are to be signed by end of 2019but numerous challenges are still being experienced at national level within the States, with regard to high level coordination of the LoAs with other entities responsible to support SAR operations.
 - c) States were urged to use the institutional frameworks of Regional Economic Communities (RECs) such as, COMESA, EAC, IOC and SADC to facilitating signing of SAR agreements where high level intervention is necessary, and to request for and provide assistance in search and rescue for States with limited resources and infrastructure.
- 2.14 In the case of the WACAF region some States have started implementation of the plans of action which were developed with the assistance of the SAR experts team. The Regional Office in collaboration with AFCAC has been working to facilitate cooperation among States for the signing of SAR Agreements and multilateral MoUs. The Status of implementation of the project as at now is that:
 - a. Even though a regional SAR Technical Experts Team has been established; SAR gap analysis conducted; model SAR documentation (including draft Agreements) developed; and assistance missions conducted in some States, the unavailability or non-signature of SAR agreements remains a major challenge in the absence of a region wide approach and commitment of high-level national authorities.
 - b. In the light of the foregoing, and recognizing the capacity of AFCAC and RECs, as major partners, to facilitate the attainment of the SAR objectives as called for under the aforementioned Lomé Declaration, the Regional Office

- sought the support of the ECOWAS Commission to coordinate with sister RECs in the region, and in a joint effort including AFCAC, to address in particular the issue of SAR Agreements.
- c. Sequel to signing of SAR Agreements, a lot of preparatory works and documentation have to be completed. In this regard, the TET after carefully analyzing the feedback from the initiative taken so far concluded, that there was the need for more awareness at the national level for all agencies involved in the planning, organization, delineation of responsibilities and collaboration to achieve effective and operational SAR services. The TET has therefore proposed and will assist in the establishment of national interagency SAR platforms from which the development, establishment and operationalization of SAR services will take into consideration of the roles, responsibilities and needs of the agencies. The TET will facilitate workshops and provide assistance for national interagency platforms to develop/update all SAR documentation (legislation, decree, plan, manuals, operational procedures, minimum equipment list, agreements, memoranda of understanding, and SAR exercises).
- d. Furthermore, understanding has been reached with ECOWAS for the use of funding assistance from the African Development Bank through the RAF19805 PASTA-CO ECOWAS SAR project to support the ongoing SAR activities in the region which were initiated and funded by the AFI Plan. ICAO TCB in collaboration with WACAF regional office has submitted a draft project proposal. It is estimated that the funding provided for by the AFI Plan and PASTA-CO will provide assistance to twelve (12) WACAF States. Consequently, discussions have been held with AFCAC as a partner in the provision of effective and operational SAR for the region, and hving been enjoined by the Lomé high-level conference to establish a project for improvement of SAR, to collaborate with ICAO and ECOWAS in order to rise additional funding to cover assistance for twelve additional WACAF States.

Air Navigation Service Providers (ANSP) Peer Review

- 2.15 During the 39th session of the ICAO Assembly a working Paper (A39-WP456) was presented by ASECNA on behalf of African ANSPs. The Assembly was informed that the African Air Navigation Services Providers (ANSPs) Peer Review Programme, launched in February 2015 by the ICAO Council President. The Assembly was also informed that the aim of this initiative is to establish a regional framework of cooperation and peer review mechanism to improve air navigation operational performance in Africa, and that some ANSPs have initiated trials and drawn useful lessons.
- 2.16 The Terms of reference of the ANSP Peer Review Programme Coordination Team of Executives was established in June 2015. Immediately following on the 18th AFI Plan SC meeting, an AFI ANSPs Coordination Meeting chaired by ICAO Council President was held on 1st October 2016 in Montreal, and formulated recommendations concerning the way forward.

- A successful follow up meeting on these recommendations which was held in Freetown, Sierra Leone, 3-5 May 2017, developed and endorsed a Programme Reference Manual as well as a Cooperation Framework and a Roadmap for 2017-2018, to govern the implementation of the African ANSP Peer Review Programme, among other cooperation activities in the areas of air navigation services. The next steps include selection and training of reviewers, conduct of pilot reviews, development and implementation of corrective action plans and project evaluation. Accordingly, the training of reviewers has been coordinated with ASECNA and CANSO and conducted from 25 to 27 April 2018, Abidjan, Cote d'Ivoire. Coordination of implementation of ANSP peer review activities continue in the region based on available guidance material, including the conduct in 2019 of the intended pilot reviews using the harmonized guidance developed under the AFI Plan Project.
- 2.18 It is important to note that, within the established Cooperation Framework and in accordance with ANSP Roadmap for 2017-2018, ASECNA and CANSO have signed in 2018 a Memorandum of Cooperation (MoC) for the improvement of air navigation services on the African Continent. This positive development which brought the membership of the ANSP Peer Review Programme from 18 to 35 African States' ANSPs, fully supports the AFI Air Navigation Target pertaining to the participation in this continental programme.

Accident and incident Investigation (AIG)

- 2.19 The formulation of the AIG project takes into account the Decision of the 38th Assembly on the expansion of the AFI Plan activities to cover all safety-related areas including aircraft accident and incident investigation (AIG).
- 2.20 The AIG project was presented and approved at the 20th SC meeting and two workshops were subsequently conducted in Lagos, Nigeria and Addis Ababa, Ethiopia from 28 to 31 August 2018 and 3 to 6 September 2018, respectively, as part of the project. The workshop was facilitated by two AIG Experts from HQ with the support of one WACAF and one ESAF RO. The workshops provided participants with guidance for the development and implementation of harmonized legislative frameworks, regulations, and associated procedures required for the establishment of a State aircraft accident and incidents investigation system, in conformance with ICAO relevant reference documents.
- 2.21 A call was made by some participants to sensitize, at regional level, the higher national State authorities on their international obligations for accidents and incident investigations with the objective of facilitating the emergence of efficient safety culture and promoting the independence of any entity in charge of conducting aircraft accident investigation.
- In accordance with the RASG-AFI Plan AIG Project milestones, the delegates were urged, at the end of the workshop, to establish a collaborative scheme, under the initiative of the Champion State (Ethiopia) and the facilitation of one of the RSOOs, e.g. CASSOA, and the ICAO ESAF Regional office, for the development of harmonized

regulations and investigators manual. In addition, during the Abuja workshop, it was suggested to organize a similar event, to allow the French Speaking States, to fully benefit from the contents of the workshop and prepare, in view of the ultimate goal of the Project, the grounds for the adhesion or creation of Regional accident and incidents investigation organization Agency (RAIAO).

2.23 Therefore, to ensure an efficient implementation of the next phase of the Project (harmonization of specific regulations and investigation guidance material) another edition of the previous workshop, open to all AFI States with an EI lower than 60 % in AIG, is to be hosted in Dakar Office, in the third quarter of 2020.

Fundamentals of Safety Oversight

- 2.24 The AFI Plan Fundamentals of Safety Oversight (FSO) project aims to support beneficiary States to establish the Fundamentals of Safety Oversight (FSO) system vis-à-vis the Critical Elements (CE) of a State Safety oversight system. In this regard, the project will assist beneficiary States to enhance their safety oversight capability with particular emphasis on the implementation of CE1 through CE5.
- Accordingly, the project prioritized to assist and support twelve (12) beneficiary States within the AFI Region i.e. Burundi, Central African Republic, Comoros, Djibouti, Eritrea, Guinea, Guinea-Bissau, Lesotho, Liberia, Sao Tome and Principe, Seychelles, and Swaziland.
- 2.26 The implementation of the project was initiated with the submission of the FSO project document to the beneficiary States together with a sample letter to be signed by each beneficiary State confirming formal acceptance of the project and commitment to implement the project's recommendations.
- As of 30th April, 2019, FSO assistance missions were conducted to Liberia (8-12 October 2018), Sao Tome and Principe (15-19 October 2019), Central African Republic (5-9 November 2018) and Guinea (29 April -3 May 2019 and 6-10 May 2019), Comoros (12-14 March 2018 and 11-15 March 2019), Djibouti (3 May 2018), Lesotho (19-21 November 2018), Seychelles (12-16 February 2018), eSwatini (22 January 2 February 2018), and Burundi (11-15 February 2019). Some of these assistance missions were coordinated and conducted with the participation of relevant RSOO experts.
- 2.28 To date, however, limited progress has been achieved by States in increasing the effective implementation (EI) of the critical elements (CEs) of a State safety oversight system, evident by select performance indicators: (1) current average USOAP score for the project States is 20.47% which is below the world average of 67.56%; (2) current number of the project beneficiary States that have achieved the target of 60% EI is zero; and (3) current number of the project States that have increased their individual EI since the commencement of the project is only one—Seychelles, whose EI increased from 27.70% to 40.37% following an ICVM (covering all areas except AIG and AGA) conducted in May 2018. This limited progress could also partly be attributed to the none-scheduling of validation activities in the concerned States.

- 2.29 It is noteworthy that the FSO beneficiary States strikingly face similar challenges, which are predominantly systemic in nature, particularly: (1) qualified technical personnel; (2) financial resources; (3) autonomous CAAs; and (4) political will.
- 2.30 Way forward: (1) high level intervention preferably at the level of ICAO Secretary General or Council President in the form of high level missions or Individual State letters to the States; (2) establish a special funding appropriated from SAFE Fund or AFI Plan to assist the project States implement comprehensive training programmes, with special emphasis on on-job-training (OJT) whereby inspectors from these States are attached to States that have achieved significant EIs in order to get exposed to and learn from best practices; (3) intensify technical assistance missions to States with special emphasis in assisting States to perform self-assessment of CMA Protocol Questions and, when applicable, develop and implement corresponding corrective action plans (CAPs); and (4) co-opt into the FSO Project those States that have never been audited under USOAP, specifically South Sudan and Somalia, which clearly deserve special assistance to establish safety oversight systems.

Supplementary AFI Plan funding for Sierra Leone SAFE Project

- 2.31 Following approval of by the 21st SC meeting to provide additional funding from the AFI Plan of US\$60,000. A further request was submitted to SAFE for an additional CAD 50,000 to cater for the shortfall and the management reserve/contingency. With all funding requirements having been met, the SAFE Fund project was launched on 9 May, 2019, in Freetown, by the Minister of Transport and Aviation of Sierra Leone, in the presence of the ICAO Regional Director and Senior Management of the consultants, CAAi, UK. The project is in 2 Phases with a total duration of 4 months; focusing in the first instance, on the establishment of a safety oversight system at the SLCAA as relates to ORG, ANS and AGA, and in the subsequent phase implementation of licensing and certification activities, as well as conducting of continued surveillance.
- 2.32 Since the SAFE Fund for Sierra Leone is very limited in scope and the State is in urgent need of assistance in the other audit areas, a request is hereby made to the AFI Plan Steering Committee to consider and approve inclusion of Sierra Leone in the list of beneficiary States of the AFI Plan FSO Project to cover LEG, PEL, OPS, AIR and AIG.

3 AERONAUTICAL INFORMATION MANAGMENT (AIM) PROJECT

3.1 The ICAO Council has recently adopted a new amendment (Amendment 40) Annex 15 to the Convention on International Civil Aviation (Chicago Convention) and approved a first new edition of PANS-AIM covering Aeronautical Information Services (AIS). The new provisions enable global air transport operations to complete the transition from product-centric and paper-based AIS legacy processes to a fully data-centric, quality-assured and digital aeronautical information management (AIM) environment.

- 3.2 In light of these latest developments, ICAO has been urged to establish a robust and collaborative framework to support States to expedite implementation and to help them overcome difficulties that may be faced by users, if aeronautical information products are not of the right quality and are implemented in different ways without harmonization nor standardization.
- 3.3 Accordingly, a project proposal on AIM Result Based Implementation Support (RDIS) for AFI States has been developed as requested by the 21st meeting. The objectives, strategies, key activities and specific targets to be achieved at the end of the project are defined and properly justified within the project documents, which is attached to this DP as **Attachment A**. The total estimated cost of the project is 98,000.00 USD. The AIM project proposal is hereby submitted for the consideration and approval of the Steering Committee and the required funding provided.

4 ICAO Workshop on the Implementation of a National Aviation Safety Plan (NASP)

- 4.1 ICAO Assembly Resolution A39-12 on ICAO global planning for safety and air navigation calls upon States and invites other stakeholders to cooperate in the development and implementation of regional, sub-regional and national plans based on the frameworks of the GASP and GANP. In this regard, ICAO has developed guidance to help States to identify what to include in a NASP, in a structured way with a model text to be presented at the workshops for possible adoption and adaptation by States and stakeholders. Based on Resolution A39-12, the RASG-AFI/4 meeting adopted in October 2017 its conclusion 4/1, requesting that States establish a national aviation safety plan, including goals and targets consistent with the regional aviation safety plan, and in line with the GASP objectives, the global aviation safety roadmap, and based on their operational safety needs.
- Anational Aviation Safety Plan (NASP), which is to be conducted in the ESAF and WACAF Regions during the period 24 28 June, 2019 is intended to develop competencies for persons involved in the planning and implementation of a national aviation safety plan, in alignment with the ICAO Global Aviation Safety Plan (GASP) and the regional aviation safety plan. This includes identifying national operational safety risks and other safety issues, such as challenges related to the State safety programme (SSP) implementation, and planning initiatives to address them. The workshop will also address the State's strategic approach to managing safety in civil aviation, including national safety goals, targets and indicators. This event is focused on flight operations and safety management specialists, civil aviation safety inspectors, airline safety managers, and representatives from organizations involved in accident and incident investigation. The workshop has already been conducted in some ICAO Regions and it is envisaged that all the Regions will benefit from it.
- 4.3 The breakdown of the cost for conducting the workshops in the ESAF and WACAF Regions, covering travel and subsistence allowance for one Expert, is as follows: **DSA** (**USD**): Nairobi 5 * 282 = 1,410; Dakar 3* 265 = 795; **TA**: 5* 47 = 235; **Airfare**: 7206.00 \$; **Total**: 9,646.00 \$. In addition, an estimated amount of USD5,000 per workshop

would be required for coffee breaks and lunches. Funding support in **the amount of USD20**, **000** is hereby requested from the AFI Plan.

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TECHNICAL ASSISTANCE PROPOSAL OUTLINE

ESTABLISHMENT OF AIM RESULTS-BASED IMPLEMENTATION SUPPORT (RBIS) PROCESS FOR THE AFI REGION

ICAO SECRETARIAT

1. BACKGROUND AND JUSTIFICATION

- 1.1 The ICAO Council has recently adopted a new amendment (Amendment 40) to Annex 15 to the Convention on International Civil Aviation (Chicago Convention) and approved a first new edition of PANS-AIM covering *Aeronautical Information Services (AIS)*. The new provisions enable global air transport operations to complete the transition from product-centric and paper-based AIS legacy processes to a fully data-centric, quality-assured and digital aeronautical information management (AIM) environment.
- 1.2 The 13th ICAO Air Navigation Conference (AN-Conf/13) held in October 2018 in Montreal, Canada highlighted the importance and the benefits associated with these new provisions which provide a harmonized approach to transition to AIM, an enhanced understanding of the roles and responsibilities of stakeholders along the aeronautical data process, better means for States to increase quality at origination and to maximize integrity along the data chain and efficiencies in managing and processing aeronautical data through the use of digital products; however their impact on States, including the transposition of Annex 15 and PANS-AIM into national and regional regulations, the reinforcement of quality measures at the origination and along the aeronautical data process, the completion of the transition to digital AIM, etc. is significant.
- 1.3 In light of these latest developments, ICAO has been urged to establish a robust and collaborative framework to support States to expedite implementation and to help them overcome difficulties that may be faced by users, if aeronautical information products are not of the right quality and are implemented in different ways without harmonization nor standardization.
- 1.4 In the AFI Region, specific ICAO AIM Projects have been initiated to advance implementation in the aeronautical information domain:
 - a) **AFI AIM** Project /2019/001, designed to assist selected AFI Region States with Quality Management System (QMS) implementation;
 - b) **AFI AIM Project** /2019/003, designed to assist selected AFI Region States with TOD Implementation;
 - c) **AFI AIM**/Project /2019/002, designed to assist selected AFI Region States with AIXM and eAIP implementation.
- Among these projects, high priority is given to the one supporting the implementation of QMS in a digital/electronic AIM environment. An analysis of selected USOAP Protocol Questions (PQs) for the African Region shows that the effective implementation of properly organized QMS as applied to AIS processes is only 33%;

therefore still low as an average value. An important pre-requisite for States to effectively transition from AIS to AIM is to ensure that quality measures are in place.

- 1.6 In order to increase capacity of AFI States to effectively implement the ICAO AIM provisions, it is proposed to further enhance its mechanisms through the establishment of an "AIM Results-Based Implementation Support (RBIS) for the AFI Region, with an initial focus given to support the implementation of QMS in digital AIM environments. Once the concept proves to be successful, the same mechanism will be applied to assist States with TOD, AIXM and eAIP implementation.
- 1.7 The AFI Plan Steering Committee (SC) is requested to evaluate this identified priority. If the AFI Plan SC will decide that a higher priority should be given to the TOD or AIXM/eAIP implementation, the RBIS Concept will be adapted accordingly.

2. KEY ELEMENTS OF THE AIM RBIS CONCEPT, AS APPLIED TO THE AFI REGION

- 2.1 The primary objective of the AIM RBIS Concept is to bring AFI States to a good implementation stage through a standard process which includes two main phases, as follows:
 - a) <u>Phase I: AFI AIM regional workshops</u>, to help AFI States better understand to a greater depth of the activities needed to achieve the requirements contained in the ICAO AIM-related provisions (Annex 15, PANS-AIM); to provide insights on how effectively transition to AIM through States best practices; to provide opportunities for interaction with the States in the AFI region; and to promote the AIM Go-Team visit process (Phase II).
 - b) <u>Phase II: AIM Go-Team visits</u>, to assist AFI States with a tailored implementation support process.

2.2 Phase I will include:

- a) Gap-analysis of the AFI Region status of implementation of AIM-provisions, through existing AFI projects, Protocol Questions, States questionnaires, etc.;
- b) Feedback on Gap-analysis based on Presentations of Respective APIRG AIM Project Coordinators on status of implementation of existing AFI projects
- c) Preparation of the regional workshops programmes, based on the outcome of the gap-analysis;
- d) Regional workshops;
- e) Identification of candidate States willing to engage with the AIM Go-Team visit process (Phase II).

2.3 Phase II will include:

- a) Identification of and engagement with AFI State receiving assistance;
- b) in-depth analysis of their shortcomings with implementation;
- c) provision of tailored guidance to address those challenges;

- d) identification of follow-up actions after on-site visits;
- e) States executing the follow-up actions; and
- f) monitoring the **execution of those follow-up actions** through specific Key Performance Indicators (KPIs).
- 2.4 The team supporting Phase I of the process will be composed of:
 - a) ICAO Headquarters Technical Officer/s
 - b) ICAO relevant Regional Officer/s
 - c) Respective APIRG AIM Project Coordinators
 - d) Recipient States Focal Points
 - e) Partner organizations/States
- 2.5 The team supporting Phase II of the process will be composed of:
 - a) ICAO Headquarters Technical Officer/s (only the first visit/s in the Region)
 - b) ICAO relevant Regional Officer/s
 - c) Respective APIRG AIM Project Coordinators
 - d) Recipient State Focal Point
 - e) Partner organizations/States
- 2.6 The key element of the RBIS Concept is the Go-Team support and the associated follow-up actions. This is where the implementation support significantly differs from the standard seminars/workshops support.
- 2.7 The AIM Go-Team outreaches to one State and provides tailored support. The Go-Team is composed of stakeholders covering the key roles and responsibilities to support the aeronautical data process, from origination to distribution. The AIM Go-Team composition will be adapted to the specific needs of the recipient State.
- 2.8 The AIM Go-Team follow-up actions imply that:
 - a) States/ANSP are expected to develop a detailed AIM Implementation Action Plan, based on the Go-Team Recommendations, within 6 months after the on-site visit;
 - b) the Go-Team is expected to monitor States` implementation as well as the operational benefits achieved, through effective feedback mechanisms.
 - c) The Go-Team will also engage with the regulatory authorities and the service providers to ensure that implementation is executed as planned.
 - d) The ICAO Regional Offices, based on the Recommendations and the feedback provided by the Go-Team will guide States closely in their implementation efforts (additional States` visits).
- 2.9 The follow-up actions will monitor and guide implementation. The AIM Go-Team does not have direct control over the implementation process within a State; decisions relating to the implementation of Aeronautical Information Services enhancements rests with the State and its designated ANSP. However, an active engagement from States, all the

concerned stakeholders within the States and the Go-Team members in the execution of the follow-up actions is the key to success.

2.10 By the end of the project, AIM implementation will be strengthened not only within the States receiving support, but also within the region which will be verified through the future USOAP CMA activities. States will benefit from receiving ad-hoc guidance; regions will benefit because the successful AIM Go-Team experiences will be shared with all the other States in the region, as best practices. This will also encourage coordination among States in the region. Furthermore, the awareness on AIM will be increased, generating more resources that could be made available for AIM.

3. SCOPE OF ACTIVITIES

PHASE I:

Phase 1	1 – Regional workshop
Activiti	as
1.1	Description Description
1.1	-
	Assessment of the activities undertaken under AFI AIM Project /2019/001,
	analysis of the Protocol Questions, preparation and submission of States
	Questionnaire. This is used to identify States' major roadblocks with
	implementation of QMS-provisions.
	Responsible entity
	ICAO Headquarters Technical Officer/s, ICAO relevant Regional Officer/s,
	Respective APIRG AIM Project Coordinators, Recipient States Focal Points,
	Partner organizations/States
	Deliverables
	High-level gap-analysis of the AFI Region status of implementation of AIM
	provisions
1.2	Description
	Preparation of the AIM regional workshops programmes, based on the
	outcome of 1.1
	Responsible entity
	ICAO Headquarters Technical Officer/s, ICAO relevant Regional Officer/s
	Recipient States Focal Points, Respective APIRG AIM Project Coordinators
	Partner organizations/States
	Deliverables
	Regional workshop programmes
1.3	Description
	AIM Regional workshops
	Responsible entity
	ICAO Headquarters Technical Officer/s, ICAO relevant Regional Officer/s
	Respective APIRG AIM Project Coordinators, Recipient States Focal Points
	Partner organizations/States
	Deliverables
	Regional workshop, whose main expected outcomes are:
	1) Effective sharing of knowledge, practices and technologies in suppor

- of the implementation of AIM Provisions;
- 2) Better understanding of regional challenges to tailor ICAO implementation support;
- 3) Identification of candidate States engaging with the Go-Team visit process.

PHASE II:

Phase 2 –	Go-Team visits
Part 1 – S	Selection of the Candidate State
Activities	
2.1	Description
	Identification by ICAO Headquarters, in coordination with ICAO Regional Offices and eventual partner organizations of the State receiving assistance, based on outcome of the regional workshops.
	Responsible entity
	ICAO Headquarters Technical Officer/s , ICAO relevant Regional Officer/s, Respective APIRG AIM Project Coordinators , Partner organizations/States
	Deliverables
	Selection of the candidate State
2.2	Description
	Co-ordination between ICAO Headquarters, ICAO Regional offices, and eventual partner organizations on the suitability of the State selected.
	Responsible entity
	ICAO Headquarters Technical Officer/s, ICAO relevant Regional Officer/s, Respective APIRG AIM Project Coordinators, Partner organizations/States
	Deliverables
	Suitability of the candidate State
2.3	Description
	Send State letters to brief DGs and high-level officials for acceptance.
	Responsible entity
	ICAO Headquarters/ICAO Regional offices
	Deliverables
	State letter
Part 2 – (Go-Team Composition
Activities	
2.4	Description
	Initial assessment by ICAO Headquarters, ICAO Regional Offices, Respective
	APIRG AIM Project Coordinators, and eventual partner organizations on the
	potential Go-Team composition
	Responsible entity
	ICAO Headquarters Technical Officer/s, ICAO relevant Regional Officer/s,
	Respective APIRG AIM Project Coordinators, Partner organizations/States
	Deliverables
	Identification of Go-team members
2.5	Description

	Contact potential Go-Team members and engage them in the process.					
	Responsible entity					
	ICAO Headquarters Technical Officer/s, ICAO relevant Regional Officer/s,					
	Respective APIRG AIM Project Coordinators, Partner organizations/States					
	Deliverables					
	Confirmation from Go-Team members					
Part 3 - Da	ata collection					
Activities						
2.6	Description					
	The established Go-Team to engage with the recipient State to collect data or					
	refine the data collected within the scope of the AFI AIM Project /2019/001					
	and during Phase I activities.					
	Responsible entity					
	ICAO Headquarters Technical Officer/s, ICAO relevant Regional Officer/s,					
	Respective APIRG AIM Project Coordinators, Recipient States Focal Points,					
	Partner organizations/States					
	Deliverables					
	Quantitative and qualitative data collection methods					
2.7	1					
2.7	Description Description					
	Perform a gap analysis, based on the collected data, on AIM implementation,					
	knowledge and experience so as to develop a programme tailored to the State.					
	Responsible entity					
	ICAO Headquarters Technical Officer/s, ICAO relevant Regional Officer/s Respective APIRG AIM Project Coordinators, Recipient States Focal Point					
	Partner organizations/States Deliverables					
	Detailed gap-analysis of the receiving State status of implementation of AIM-					
	provisions					
2.8	Description					
	Develop a report of the initial gap-analysis.					
	Responsible entity					
	ICAO Headquarters Technical Officer/s, ICAO relevant Regional Officer/s,					
	Respective APIRG AIM Project Coordinators, Partner organizations/States					
	Deliverables					
	Gap-analysis report					
Part 4 - Co	oordination					
Activities						
2.9	Description					
	Co-ordination with State and Go-Team members on the On-site visit					
	programme, including logistics.					
	Responsible entity					
	ICAO Headquarters Technical Officer/s , ICAO relevant Regional Officer/s,					
	Respective APIRG AIM Project Coordinators, Recipient States Focal Points,					
	Partner organizations/States					
	Deliverables					
2.10	Go-team visit logistics					
2.10	Description					

	Definition of a tailored agenda for the Go-Team Visit.			
	Responsible entity			
	ICAO Headquarters Technical Officer/s, ICAO relevant Regional Officer/s, Respective APIRG AIM Project Coordinators, Recipient States Focal Points,			
	Partner organizations/States			
	Deliverables			
	Go-Team visit agenda			
Part 5 – C	on site visit			
Activities				
2.11	Description			
2.11	Description Execution of the on-site visit			
	Responsible entity			
	ICAO Headquarters Technical Officer/s, ICAO relevant Regional Officer/s, Respective APIRG AIM Project Coordinators, Recipient States Focal Points, Partner organizations/States			
	Deliverables			
	Go-Team visit, whose main expected outcomes are:			
	Tailored support to implementation;			
	Identification of action items to drive the follow-up activities			
2.12	Description			
	The Go-Team to deliver a draft report at the end of the visit			
	Responsible entity			
	ICAO Headquarters Technical Officer/s, ICAO relevant Regional Officer/s, Respective APIRG AIM Project Coordinators, Partner organizations/States			
Deliverables Go-Team visit draft report				
				Part 6 – F
Activities				
2.13	Description			
	The Go-Team to deliver a final report development within 1 month from the visit, in coordination with the recipient State.			
	Responsible entity			
	ICAO Headquarters Technical Officer/s, ICAO relevant Regional Officer/s, Respective APIRG AIM Project Coordinators, Recipient States Focal Points, Partner organizations/States			
	Deliverables			
	Go-Team visit final report			
2.14	Description			
2.14	State to develop action plan, based on the report, within 6 months from the visit.			
	Responsible entity Desirient State			
	Recipient State Deliverables			
2.15	State action plan			
2.15	Description The Co. The state of the state o			
	The Go-Team to work with regulatory authority to ensure regulatory approval			
	process is in place			
	Responsible entity			

	ICAO relevant Regional Officer/s, Recipient States Focal Points, Respective			
	APIRG AIM Project Coordinators, Partner organizations/States			
	Deliverables			
0.16	Implementation actions as per Go-Team final report			
2.16	Description			
	The Go-Team to work with ANSP to ensure implementation is executed			
	Responsible entity			
	ICAO relevant Regional Officer/s, Recipient States Focal Points, Respective			
	APIRG AIM Project Coordinators, Partner organizations/States			
	Deliverables			
	Implementation actions as per Go-Team final report			
2.17	Description			
	The Go-Team to perform baseline measurement - comparison between pre- and			
	post-implementation			
	Responsible entity			
	ICAO relevant Regional Officer/s, Recipient States Focal Points, Respective			
	APIRG AIM Project Coordinators, Partner organizations/States			
	Deliverables			
	Baseline implementation measurement			
2.18	Description			
	The Go-Team to perform an annual performance measurement assessment of			
	the operational benefits achieved.			
	Responsible entity			
	ICAO relevant Regional Officer/s, Recipient States Focal Points, Respective			
	APIRG AIM Project Coordinators, Partner organizations/States			
	Deliverables			
	Annual performance measurement assessment			
	1 *			

Summary of Planned Schedule

3.1 The proposed project builds upon the existing AFI AIM Project /2019/001 and happens in conjunction with the other AFI AIM Projects (**AFI AIM Project** /2019/003 and **AFI AIM/**Project /2019/002). Therefore, the starting date will be adapted, taking into consideration the three projects all together. The timeframe of the project will be 18 months.

4. ESTIMATED COSTS

4.1 In order to proceed with this project, it is therefore crucial to receive an initial investment of 22K USD for 2019 and 68K USD for 2020 to support the following activities.

2019:

3 day AIM Regional workshop in the ESAF Region	15 K
3 day AIM Regional workshop in the WACAF Region	15 K
TOTAL	30 K

4.2 The costs have been calculated considering the following elements:

- a) Travel costs for 1 AIM Technical Officer from the ICAO Headquarters
- b) Travel costs for 1 AIM Regional Officer
- c) Travel cost for 1Respective APIRG AIM Project Coordinator
- d) Interpretation Costs for 3days (WACAF and ESAF)
- e) Miscellaneous costs coffee/tea and ESAF Conference Hall rental

2020:

1 AIM Go-Team Visit – ESAF (with ICAO HQ Support)	19 K
1 AIM Go-Team Visits – WACAF (with ICAO HQ Support)	19 K
2 AIM Go-Team Visits – ESAF (only APIRG Project Coordinator)	15 K
2 AIM Go-Team Visits – WACAF (only APIRG Project Coordinator)	15 K
TOTAL	68 K

4.3 The costs have been calculated considering the following elements:

One AIM Go-Team in the ESAF Region (with ICAO HQ Support):

- a) Travel costs for 1 AIM Technical Officer from the ICAO Headquarters
- b) Travel costs for Respective APIRG AIM Project Coordinator
- c) Follow-up activities:
 - i). Travel costs for Respective APIRG AIM Project Coordinator
 - ii). 7 work days of Respective APIRG AIM Project Coordinators

One AIM Go-Team in the WACAF Region (with ICAO HQ Support):

- a) Travel costs for 1 AIM Technical Officer from the ICAO Headquarters
- b) Travel costs for 1 Respective APIRG AIM Project Coordinator
- c) Follow-up activities:
 - i). Additional Travel costs for 1 Respective APIRG AIM Project Coordinator
 - ii). 7 work days of 1 Respective APIRG AIM Project Coordinator

Two AIM Go-Team Visits – ESAF (only ICAO RO):

- a) Travel costs for Respective APIRG AIM Project Coordinator
- b) Follow-up activities:
 - i). Additional Travel costs for 1 Respective APIRG AIM Project Coordinator
 - ii). 7 work days of 1 Respective APIRG AIM Project Coordinator

Two AIM Go-Team Visits – ESAF (only ICAO RO):

- a) Travel costs for 1 Respective APIRG AIM Project Coordinator
- b) Follow-up activities:

- i). Additional Travel costs for 1 Respective APIRG AIM Project Coordinator
- ii). 7 work days of 1 Respective APIRG AIM Project Coordinator
- 4.4 Some miscellaneous expenditures have been considered as a contingency plan.

5. SELECTION OF CANDIDATE STATES FOR THE AIM GO-TEAM VISITS

5.1 Based on the USOAP-CMA Protocol question PQ 7.267 results, a list of potential candidate States for the AIM Go-Team is provided in the Table below for both the ESAF and WACAF Regions.

ESAF Region: the States that are highlighted in blue are potential candidate States.

State	Name	PQ 7.267: Does the State ensure that a properly organized quality management system in the AIS has been established?	Satisfactory
TCD	Chad	7.267	0
STP	Sao Tome and Principe	7.267	0
GIN	Guinea	7.267	0
UGA	Uganda	7.267	0
MRT	Mauritania	7.267	0
GNB	Guinea-Bissau	7.267	0
DJI	Djibouti	7.267	0
COM	Comoros	7.267	0
MWI	Malawi	7.267	0
CIV	Cote d'Ivoire	7.267	0
MUS	Mauritius	7.267	0
NAM	Namibia	7.267	0
LBY	Libya	7.267	0
COG	Congo	7.267	0
GAB	Gabon	7.267	0
AGO	Angola	7.267	0
BFA	Burkina Faso	7.267	0
NGA	Nigeria	7.267	0
LBR	Liberia	7.267	0
ETH	Ethiopia	7.267	0
SDN	Sudan	7.267	0
SWZ	Swaziland	7.267	0
CAF	Central African Republic	7.267	0
SYC	Seychelles	7.267	0
BWA	Botswana	7.267	0
GHA	Ghana	7.267	0
RWA	Rwanda	7.267	0
SEN	Senegal	7.267	0
COD	Democratic Republic of the Congo	7.267	0

ZWE	Zimbabwe	7.267	0
LSO	Lesotho	7.267	0
ERI	Eritrea	7.267	0
SLE	Sierra Leone	7.267	0
GMB	Gambia	7.267	0
TUN	Tunisia	7.267	1
ZMB	Zambia	7.267	1
KEN	Kenya	7.267	1
DZA	Algeria	7.267	1
MOZ	Mozambique	7.267	1
MLI	Mali	7.267	1
GNQ	Equatorial Guinea	7.267	1
BEN	Benin	7.267	1
MAR	Morocco	7.267	1
TZA	United Republic of	7.267	1
ZAE	Tanzania	7.267	1
ZAF	South Africa	7.267	1
TGO	Togo	7.267	1
MDG	Madagascar	7.267	1
CPV	Cabo Verde	7.267	1
CMR	Cameroon	7.267	1
EGY	Egypt	7.267	1
NER	Niger	7.267	1

WACAF Region: the States that are highlighted in blue are potential candidate States.

State	Name	PQ 7.267: Does the State ensure that a properly organized quality management system in the AIS has been established?	Satisfactory
TCD	Chad	7.267	0
MRT	Mauritania	7.267	0
GIN	Guinea	7.267	0
GNB	Guinea-Bissau	7.267	0
STP	Sao Tome and Principe	7.267	0
CIV	Cote d'Ivoire	7.267	0
NGA	Nigeria	7.267	0
BFA	Burkina Faso	7.267	0
GMB	Gambia	7.267	0
GAB	Gabon	7.267	0
SEN	Senegal	7.267	0
COD	Democratic Republic of the Congo	7.267	0
LBR	Liberia	7.267	0
COG	Congo	7.267	0

SLE	Sierra Leone	7.267	0
CAF	Central African Republic	7.267	0
GHA	Ghana	7.267	0
CPV	Cabo Verde	7.267	1
BEN	Benin	7.267	1
MLI	Mali	7.267	1
NER	Niger	7.267	1
TGO	Togo	7.267	1
CMR	Cameroon	7.267	1
GNQ	Equatorial Guinea	7.267	1

- Among those States in the ESAF and WACAF Region that have a PQ 7.267 score equal to "1", a more in-depth analysis will be performed by ICAO (Headquarters and Regional Office) to identify those States eligible to receive the first Go-Team visits; these Go-Team visits will aim at helping them in finalizing an implementation process that had been already initiated.
- 5.3 Through the best practice examples of those States receiving the initial Go-Team support, additional Go-Team visits will be organized for those States that have a score equal to "0", in order to help them implementing quality management systems from scratch.

6. RESOURCES

- 6.1 The team supporting the RBIS Process should be composed of max 6 members, including experts, as part of in-kind contributions, from International Organizations, States and ANSPs that have proved to be successful in AIM implementations and Industry representatives, including representatives from the user community and AIM software development companies.
- 6.2 The team supporting the RBIS Process should include various types of expertise, encompassing the main roles and responsibilities needed to support the aeronautical data process. This includes:
 - a) experience and knowledge of international standards and recommend practices;
 - b) experience in the establishment of State regulatory framework that support the transition to AIM environments;
 - c) experience in AIS organizations that have transitioned to an AIM data-centric environment and that have an AIS organizational set-up based on processes;
 - d) experience in the collection of aeronautical data and information (data originator);
 - e) experience in facilitating AIM System and Infrastructure expert implementation;
 - f) experience in AIM Training.
- 6.3 The team supporting the RBIS Process does not represent the interest of any particular State, Region or Organization. Rather they act independently and utilize their expertise in the interest of the entire international civil aviation community.
- 7. PROJECT PROGRESS AND RESULTS INDICATORS AND IMPLEMENTATION RISKS AND MITIGATIONS

- 7.1 The indicators to be used to measure the effectiveness and the progress of the project are:
 - a) Number of State action plans received (based on the template defined by the Go-Team)
 - b) Fulfilment of the implementation milestones by States, based on the State action plan
- 7.2 The risks associated with this project may be:
 - a) The team supporting the RBIS Process work priorities are shifted: in order to mitigate this risk it is necessary to engage with other potential members that can offer the equivalent type of service;
 - b) The team supporting the RBIS Process does not show adequate competencies: in order to mitigate this risk it is necessary to engage potential members that can offer adequate support to the activities.
 - c) Go-Team visits are not happening or are shifted, due to issues associated with the State hosting the event: in order to mitigate this risk the ICAO Regional Offices might help in identifying other potential States to host the visit.