COMPREHENSIVE REGIONAL IMPLEMENTATION PLAN FOR AVIATION SAFETY IN AFRICA
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1 EXECUTIVE SUMMARY

The International Civil Aviation Organization (ICAO) is recognized as the organization responsible for ensuring that Contracting States apply harmonized civil aviation Standards and Recommended Practices (SARPs) to facilitate the continued growth of aviation. Safety is essential for the existence of civil aviation, which is one of the key enablers of the rapidly developing global economy. Recognizing the critical importance of this mandate, the 35th Session of the ICAO Assembly resolved that ICAO should lead a Unified Strategy to resolve safety-related deficiencies that threaten the viability of civil aviation and the economies that depend on its safety and regularity.

Despite this mandate, ICAO and Contracting States have struggled to meet the challenges posed by civil aviation difficulties in the African Region. The details of the many challenges facing aviation in the Africa-Indian Ocean (AFI) Region can be found in numerous ICAO working papers, Safety Oversight Audit Reports and meeting reports, as well as in the notes and meetings of other multinational bodies, such as the African Civil Aviation Commission (AFCAC).

The problems facing the States in the AFI Region and many other States are similar in nature; however, the acute economic and political issues influencing the situation in the AFI Region pose a complex challenge that truly demand a new approach, resulting in a comprehensive regional plan.

The Council therefore agreed that a Comprehensive Regional Implementation Plan for Africa should be developed and presented to a high-level meeting to be convened immediately prior to the 36th Session of the Assembly. Thereafter, the regional air navigation (RAN) meeting to be convened early in the 2008-2009-2010 triennium should be a checkpoint for assessing progress in implementation.

The sustained improvement in the level of flight safety in the AFI Region requires ICAO to exert increased leadership in civil aviation issues. ICAO must integrate the regional office activities with the global ICAO Business Plan, positioning the regional office as the primary focal point for ICAO activities. The shift of ICAO’s activity from the development of Standards to a broader activity relating to Standards implementation will require a shift in focus. In the AFI Region, this calls for the creation of a comprehensive regional implementation plan that is endorsed by all stakeholders and supported with adequate funding and staffing. The Plan involves the regional offices in a leading role in its development and implementation.

The global framework to support the Strategic Objectives of ICAO is based on the Global Aviation Safety Plan (GASP) and the Global Air Navigation Plan (GANP). Action plans derived from the present exercise, including the gap analysis, should be based on the principles and procedures set out by these plans, especially the GASP.

The Plan has been developed to address the concerns expressed by Council and emphasizes a heightened leadership role by ICAO and accountability, supported by strong programme management and coordination activity. The Plan therefore adopts a programme management approach that emphasizes accountability through metrics development and reporting and is carefully integrated with other programmes in the region. This approach is also supported by the ICAO Business Plan. The senior Regional Director in Africa will be primarily responsible and accountable for the implementation of the Plan. He will be assisted by a dedicated Programme Manager with the required skill set to ensure sustainability.

The Plan will draw on expertise available in ICAO Headquarters and Regional Offices in Africa, the AFI Planning and Implementation Regional Group (APIRG), regional and sub-regional safety oversight
organizations, other Contracting States, ICAO partners such as the International Air Transport Association (IATA), the International Federation of Air Line Pilots’ Associations (IFALPA), the International Federation of Air Traffic Controllers’ Associations (IFATCA), Airports Council International (ACI), the Civil Air Navigation Services Organisation (CANSO) and other stakeholders, including international funding agencies such as the World Bank. The Plan will also be integrated with ongoing cooperative development of operational safety and continuing airworthiness programme (COSCAP) and Unified Implementation Support and Development activities.

Under ICAO’s leadership, the Plan calls for collaboration between regulatory agencies and industry in the implementation of initiatives aimed at rectifying safety deficiencies. Development and implementation of the plan will follow the methodology and process contained in the Global Aviation Safety Plan (GASP).

The initial implementation phase of the Plan is expected to cover a period of four years. Through an initial gap analysis, the near-term priorities listed under the objectives of the Plan will be validated and prioritized. It is expected that the near-term priority issues will be addressed during this period. Successful completion of the initial implementation phase will then enable the plan to subsequently address medium- and longer-term objectives in its later phases. Progress with respect to the satisfactory completion of activities will be monitored using metrics similar to those provided by the Global Aviation Safety Roadmap.

From a political point of view, the Plan will be implemented in close coordination with the African Civil Aviation Commission, APIRG, the African Union and regional bodies. Administrative support and facilities for the Plan will be provided by the Regional Offices in Africa.
BACKGROUND AND CONTEXT

An Overview of Operational Constraints

1.1 Level of air transport activity

Several reports have shown that, although the potential for growth of air transport in the AFI Region is high, the actual demand for air transport is low. Demand is constrained by the lack of political will to open the markets and benefit from economies of scale within the context of the Yamoussoukro Decision. There are only about five intra-Africa routes where the level of air transport activity could be described as mature. In addition, not all the cities are connected by direct flights, making travel within Africa difficult and expensive. There is also a worsening vicious cycle effect between dwindling demand, diminishing revenue ratios and compensatory higher fares, which continuously plunges the industry into further difficulties.

Consequently, the industry fails to generate enough revenue to meet its operating and infrastructure development cost, which forces its dependence on foreign aid or direct subsidy from governments that can hardly afford it. Superficially, governments that opt out of subsidizing the industry can be seen as lacking the political will to address their safety problems, but the reality is that they just cannot support the industry from their meager resources.

1.2 Air transport liberalization efforts

Liberalization of the industry has been cited as the key to breaking the abovementioned vicious cycle, to turn many routes into profit-centers, to fund operations and to finance infrastructure development and maintain the industry.

Unfortunately, despite several efforts, including the current Yamoussoukro Decision strategy, there is obvious reluctance to engage in this undertaking. However, there has been a proliferation of meetings, spanning a period of over six years to date, to devise competition rules; those meetings have resulted in no tangible results. There is an obvious lack of political will in this area and the only way ICAO can help is to cultivate that political will among the States concerned with clear leadership, guidance and financial support, if necessary. This requires sensitizing the highest authorities in the States to the benefits of implementing the Yamoussoukro Decision.

1.3 Economies of scale

The need for the industry to grow to critical mass levels is fundamental for the effective and sustainable development of the civil aviation industry in Africa in all its facets: infrastructure development and maintenance, efficient and effective air traffic management, aviation safety and adequate human resources. This can be achieved through a combination of solutions to operational problems. Cooperation is essential for effective implementation of market growth strategies, such as the liberalization approach captured by the Yamoussoukro Decision.

However, given the poor economic status of many of the States in Africa, liberalization alone is not enough. States with few operators and light activity may benefit from pooling expert resources with other similarly situated States. This relieves the pressure on training investment and the ongoing maintenance of compensation necessary to retain experienced personnel. Further efforts are required to group together equal-minded States to pool their resources into regional institutions to benefit from economies of scale.
Fortunately, there are already efforts and existing institutions to that end. It is necessary for ICAO to take the lead in helping these groups realize their goals. Areas that could be targeted for collaborative ventures and joint use include air traffic and navigation services for which there are already efforts to establish upper airspace control centers (UACC) in the Southern African Development Community (SADC), East African Cooperation (EAC) and Common Market for Eastern and Southern Africa (COMESA) sub-regions.

To address air traffic service (ATS) issues, ICAO convened the First Meeting of the AFI Air Traffic Services Providers in Dakar, Senegal from 26 to 28 November 2002. The meeting was held in cooperation with the Agency for the Safety of Aerial Navigation in Africa and Madagascar (ASECNA) and the Air Traffic and Navigation Services Company Limited (ATNS) of South Africa.

The air traffic services providers undertook to cooperate within the framework of:

- the effective implementation of ICAO Standards and Recommended Practices and the AFI Air Navigation Plan;
- the elimination of deficiencies affecting air navigation and the implementation of communications, navigation and surveillance/air traffic management (CNS/ATM) systems;
- the development of training plans and retraining of human resources; and
- the upgrading of the quality of services provided as a result of joint strategies to be developed within a permanent institutional framework.

Furthermore, the air traffic services providers recognized the necessity for a Single African Sky. It was agreed that this matter will be the subject of an in-depth consideration at a later date.

The second meeting of the Africa-Indian Ocean Air Traffic Services Providers was held in South Africa from 3 to 5 November 2004 under the auspices of ATNS, ASECNA and ICAO.

The two main operational areas that were discussed during the meeting were air traffic management in the AFI Region and its impact on the relevant recommendations and conclusions of the Eleventh Air Navigation Conference (Montreal, 22 September to 3 October 2003) and the fourteenth meeting of APIRG (APIRG/14, Cameroon, 23 to 27 June 2003). The second major area of focus was again the implementation of air navigation systems by ATS providers within the AFI Region, including a Single Sky Concept for the provision of air traffic services.

1.4 Aircraft maintenance facilities

Many States still perform major maintenance outside the continent. This includes engine overhauls, despite the existence of a few facilities with such capability on the continent. There have been efforts dating back to 1988 to identify and assign specialized maintenance work to maintenance facilities in the COMESA States. The COMESA effort was part of a broader AFCAC initiative, through a feasibility study for the creation of a coordinated network of aircraft maintenance and an overhaul centre in Africa. Specific centres were identified in six States (Ethiopia, Kenya, Madagascar, Tanzania, Zambia and Zimbabwe). However, this collaborative effort could not be developed further due to rivalries among the States. This effort needs to be rekindled taking into consideration developments that have taken place since then.
1.5 Private airlines and cross-border ownership

There are private airlines in all States, which makes government influence in merging them into fewer large regional carriers more difficult than it would have been fourteen years ago when all airlines were 100 per cent government-owned. The Yamoussoukro Declaration of 1988 was intended to merge those individual airlines over an eight-year period but, even under their control and ownership, the governments failed to achieve this.

1.6 Sub-regional safety oversight operations

There are two common barriers to establishing flight safety organizations that are patterned after the model described in the Manual of Procedures for Operations Inspection, Certification and Continued Surveillance (Doc 8335) and the Airworthiness Manual (Doc 9760). First, most developing countries do not have an adequate basic air law and/or code of air navigation regulations. Second, and most difficult to overcome, is the inability of developing countries to recruit, train and retain suitably qualified inspectors.

Given the abovementioned barriers and the fact that the air transport industry in most developing States is usually small, the formation of a cooperative organization by a group of States for the provision or augmentation of certification and surveillance services in each State by a regional core of inspectors offers a practical and cost-effective solution to the problem.

There are existing examples of initiatives for the establishment of regional safety oversight systems (RSOOSs) in the region, such as the Banjul Accord Group Aviation Safety Organisation (BAGASO) and the African and Malagasy Civil Aviation Authorities (AAMAC). ICAO should continue to promote this cooperation initiative throughout the AFI Region.

1.7 Training schools

The lack of qualified staff poses a major constraint for the development of civil aviation in Africa. Due to inadequate financial resources and competing primary needs of the populations, the States, which are main stakeholders of civil aviation, do not have sufficient means to devote to the training of personnel in technical, management and leadership disciplines.

While a few key training resources are used by many States in the region, they vary in their financial capacity to invest in equipment and learning resources. Also, their small number has not contributed to specialization, exacerbating resource issues as aviation training increasingly demands significant infrastructure investment. If specialization could be coordinated among the existing and new institutions, the market may benefit from the economies of scale within the region. Resolving training constraints must also include the conduct of a detailed training analysis of the entire region.

1.8 Coordination

Different activities are being undertaken by various bodies in an uncoordinated manner in the AFI Region. ICAO’s current diminished leadership role exacerbates the situation. ICAO has the mandate, experience and capability to direct activities within the region with respect to coordinating and mobilizing capital investments from Contracting States and interested donor agencies, at the same time facilitating the sharing and exchange of safety-related information.
1.9 Aircraft accidents and identifying the accident rate in Africa

A review of the ICAO Accident/Incident Data Reporting (ADREP) data for a ten-year period, from 1997 to 2006, shows that there was an increase in the number of accidents in the AFI Region. However, precise numbers are hard to come by in view of the poor reporting culture of the region. That the reporting culture in the AFI Region remains weak is underscored by the fact that, on average, over the period of 1990 to 2006, about 70% of accidents had not been reported to ICAO.

The accident data for 2002 to 2006 shows that, for aircraft with a maximum take-off mass greater than 2 250 kg, the rate of fatal accidents in the AFI Region involving scheduled operations was 4.6 accidents per million departures, or over eight times the world average. For the same period, the rate of passenger fatalities per million departures was 270, or over eleven times the world average. This situation must be addressed to ensure the safe and orderly growth of air transport throughout the region; in order to achieve this, the AFI accident rate should be brought down to at least the world average.

1.10 Types of accidents

Analysis of the ICAO ADREP data for fatal accidents over the five-year period 2002 to 2006 and covering aircraft of a maximum take-off mass greater than 5 700 kg shows that power plant failure or malfunction, loss of control in flight, fire/smoke (post impact), controlled flight into terrain (CFIT) and runway incursions and excursions rank as the most significant types of accidents within the region.

Infrastructure deficiencies, such as the lack of appropriate aerodrome maintenance, especially regarding runway pavement and deficient aerodrome fencing, have already caused serious incidents. Although it appears that not all of these deficiencies are major contributors to accidents, a more in-depth assessment of these emerging hazards will need to be carried out to determine the level of threat posed. The assessment should include a detailed risk analysis conducted within the context of a safety management systems approach. In addition, obvious degradation of the ground infrastructure that can be observed in some places must be stopped before it contributes to an accident. In the en-route phase, the quality of air traffic services is often below global standards and communication is sometimes impossible, to a point that crews often claim that they have crossed entire flight information regions (FIRs) without any radio contact with ATS. Again, this does not seem to have caused accidents so far. However, even with the use of the airborne collision avoidance system (ACAS) and the wide-spread use of the in-flight broadcast by pilots (IFBP) frequency, the constant growth in traffic may result in the situation changing in the future. Therefore, as in the case of infrastructure deficiencies, a proper risk analysis must be carried out to determine the threat posed and safety interventions required.

The AFI ATS Incidents Analysis Group is composed of ICAO, IATA, IFALPA, IFATCA and States/air navigation services providers (ANSPs), also reviews incidents with a view to identifying causes, trends and remedial actions that may prevent recurrence.

1.11 Safety oversight deficiencies

The key safety oversight issues identified in the AFI Region include the following:

- ICAO safety oversight audits and other ICAO missions have shown that many Contracting States in the AFI Region have not established effective safety oversight systems within the Civil Aviation Administration (CAA);
- States lack expertise, thereby creating a situation for unsafe conditions that could contribute to the high accident rate in the AFI Region;
the lack of expertise, the lack of empowerment and the lack of appropriate delegation and authority to the operational level within the civil aviation administrations;

a large group of States are still dependent exclusively on their State budget, as opposed to being autonomous civil aviation authorities, and thus face financial limitations. As a consequence, many administrations lack the necessary qualified technical and administrative staff to carry out their safety oversight obligations, as adequate training policies and programmes have not been put in place;

some States in the region have achieved good progress, but the progress is not homogeneous;

the absence of an appropriate system for the certification and the continued surveillance of air operators results in the conduct of air transport operations without the existence of an operations manual, a training programme or an accident prevention programme;

in many cases, air operator certificates (AOCs) have been issued virtually on request without requiring applicants to demonstrate their capability and without prior inspections and controls to ensure that the prospective operator is capable of ensuring the conduct of air transport operations with an adequate level of safety;

not many States in the AFI Region have the resources and the volume of air operations that can justify the maintenance of a national safety oversight workforce;

slow progress by States in the implementation of action plans to resolve the ICAO Universal Safety Oversight Audit Programme (USOAP) audit findings; and

the need for AFI States to commit to the implementation of ICAO provisions.

1.12 Infrastructure deficiencies identified by APIRG

In order to enable APIRG to make detailed assessments of deficiencies, States and appropriate international organizations, including IATA and IFALPA, provide the information to the ICAO Regional Office for action as appropriate, including action at meetings of planning and implementation regional groups (PIRGs). The information usually includes a description of the deficiency, risk assessment, possible solution, time lines, responsible party, agreed action to be taken and action already taken.

1.13 Major safety issues identified by APIRG include the following:

- Poor communication links;
- Inadequate aerodrome fencing;
- Poor response from States in correcting the deficiencies identified;
- Non-implementation of air routes;
- Non-provision of area control service; and
- Training of staff.

1.14 Culture change actions and a leadership role for ICAO

Despite the numerous challenges that exist in the AFI Region with respect to improved air safety and efficiency, ICAO recognizes that experiences rooted in history and observations of the current situation can be contrasted with outcomes in other regions which face many of the same constraints, albeit in different combinations. In view of the denominators that are common not only to all problem areas in the
region, but also to many other regions, ICAO needs to focus on these issues as part of the emerging global strategy that emphasizes the implementation of SARPs over the creation of new ones.

Coupled with the transition of ICAO’s role to include greater emphasis on the implementation of SARPs is the need to address the Organization’s recent reduction in field resources involved with States at the regional office level. ICAO has to balance tendencies to centralize the ICAO Secretariat and consolidate resources to meet existing funding constraints with the ability to maintain close contact with States that require the Organization’s assistance and leadership. This cultural change is necessary if ICAO is to establish a strong international leadership position, not just with regard to determining standards and practices for a safe and efficient aviation industry, but also in the operational implementation of such standards and practices.

Specifically, the Air Navigation Commission, as a result of its visit to the AFI Region in August 2006, determined that the ICAO Regional Offices must increase their leadership role in assuring stakeholder involvement in SARP development, evaluating the safety/cost impact of new SARPs, developing implementing schedules for SARPs, evaluating the progress made in the implementation of SARPs and providing feedback to ICAO Headquarters on the corrective action needed. This initiative will serve as a catalyst for the commitment of all partners, States, industry, financial institutions and other donors.

To date, assistance to States in the AFI Region in the air transport sector has largely been characterized by independent initiatives of donor States and agencies that focus on identified components of the air transport sector. There are, for example, many important programmes that have been executed through ICAO, the World Bank, IATA and various other international, regional and bilateral donors. However, given the continuing problems that plague African air transport, a growing number of donor governments and lending institutions are calling for a coordinated assistance effort which will commit to a coordinated approach, allowing policy makers and the donor community to work within a common strategic framework of identified priorities and goals under the ICAO umbrella.

The Plan addresses this issue, while strengthening the various safety aspects such as organizational, managerial, institutional, economical, educational and political factors in the AFI Region.

1.15 Other projects that complement the AFI plan

1.15.1 The Global Aviation Safety Roadmap

The Global Safety Aviation Roadmap is the backbone of the Global Aviation Safety Plan and was developed by the Industry Safety Strategy Group (ISSG), in collaboration with ICAO, to address aviation safety through a process that would best prioritize safety initiatives and ensure their proper coordination throughout the world. Part I of the roadmap was handed over to ICAO in December 2005 and presented to the Directors General of Civil Aviation Conference on a Global Strategy for Aviation Safety (DGCA/06, Montreal, March 2006). Part II of the roadmap was presented to the Air Navigation Commission in December 2006. The Council, acting on a DGCA/06 recommendation, agreed that “ICAO, in collaboration with all States and other stakeholders, should continue the development of an integrated approach to safety initiatives based on the Global Aviation Safety Roadmap which would provide a global framework for the coordination of safety policies and initiatives.”

The GASP provides a means to ensure that safety initiatives throughout the world deliver improved safety by the coordination of effort, thus reducing inconsistency and duplication. The primary objective of the GASP is to provide a common frame of reference for all stakeholders, including States, regulators, airline operators, airports, aircraft manufacturers, pilot associations, safety organizations and air traffic service providers. The GASP will coordinate and guide safety policies and initiatives globally, thus reducing the
accident risk for commercial aviation. There are three essential areas of action required: action by States, action by industry and regional actions. The roadmap contains a methodology and process for its development and implementation in different regions of the world.

The GASP, together with the Global Air Navigation Plan, constitutes the framework under which regional, sub-regional and national implementation plans, including the present exercise, should be developed.

A group of aviation experts from several African Governments, the United States (US) Government, the World Bank, the African Civil Aviation Commission, the International Air Transport Association, Boeing, Airbus and the European Union and ICAO convened an informal think tank meeting (Washington DC, 25 to 26 January 2007) on implementing the Global Aviation Safety Roadmap in Africa. The meeting was organized by the Director General of Civil Aviation of the Netherlands and the Flight Safety Foundation.

1.15.2 Safe Skies for Africa

The Safe Skies for Africa programme was launched by the United States in 1998 to increase the number of African States that meet ICAO Standards for aviation safety and to improve security at airports in the region. The Safe Skies for Africa initiative focuses on conducting safety assessments and security surveys in select countries, and formulating action plans, together with African Civil Aviation Authorities, to raise aviation safety and security practices in Africa to accepted world standards.

1.15.3 Libreville Plan of Action

The Libreville Plan of Action was approved by the Ministers Responsible for Air Transport at a meeting of Member States of the African Union held in May 2006 in Libreville, Gabon. Of main importance was the Ministers’ undertaking to reduce the rate of aircraft accidents in Africa to the world average by 2008 and to support and strengthen the African Civil Aviation Commission to enable it to play its role. The Ministers also decided to strengthen autonomous civil aviation authorities, create regional and sub-regional aviation oversight organizations and support the IATA Operational Safety Audit (IOSA) Partnership for Safety Programme for Africa.

1.15.4 AFI Safety Enhancement Team (ASET)

The African Ministers responsible for civil aviation, during their meeting in Sun City, South Africa (9 to 16 May 2005), agreed to the establishment of the AFI Safety Enhancement Team. IATA has led the establishment of ASET, which aims to correctly identify accident causes and trends and actively promote corrective actions. ASET brings together regulatory authorities, air navigation providers, airport operators, airlines and aircraft manufacturers.

1.15.5 ICAO/World Bank – Programme for Sustainable Air Transport in Africa

The objective of the World Bank Programme is to contribute significantly to the economic and social betterment of African countries and peoples through sustainable development of the African air transport industry. There is a clear need for strategic thinking and planning to define and elaborate concrete actions that must be carried out at national, regional, and continental levels in order to achieve the right conditions for the continued development of this crucial transportation sector. The implementation of this project will be coordinated in relation to the Comprehensive Regional Implementation Plan for Aviation Safety in Africa.
1.15.6 Cooperative Developments of Operational Safety and Continuing Airworthiness Programme (COSCAP) and other Technical Cooperation projects

In order to strengthen safety oversight capabilities within States, ICAO, through its Technical Cooperation Programme, has formulated intra-State (i.e. regional) programmes, known as the Cooperative Development of Operational Safety and Continuing Airworthiness Programmes (COSCAPs). These programmes are designed to achieve a level of regional cooperation that will ensure cost-effectiveness and optimization of human resources. The goal is to overcome financial and labour shortages that have adversely affected the effective implementation of State safety oversight obligations in the past and thus achieve regional harmonization of safety regulations, policies and procedures.

There are currently three COSCAP projects in ICAO’s Western and Central African (WACAF) area of accreditation: COSCAP-Banjul Accord Group, COSCAP-Union Economique et Monétaire Ouest Africaine (UEMOA), COSCAP-Communauté Économique et Monétaire de l’Afrique Centrale (CEMAC). Two projects are planned for the Eastern and Southern Africa (ESAF) area: COSCAP-Southern African Development Community (SADC) and COSCAP for a Common Market for Eastern and Southern Africa (COMESA). The projects are essentially funded by Member States and donor organizations.

There are other Technical Cooperation projects financed by the States and other stakeholders and covering a wide range of activities, including the provision of infrastructure and services, reinforcement of capacity of CAAs and air navigation service providers, etc. Some examples include the Civil Aviation Caretaker Authority for Somalia (CACAS), which provides flight information services in the Somalia FIR, the Airports/Airfields Rehabilitation project for the United Nations (UN) Mission in the Democratic Republic of Congo (MONUC), the establishment of a Civil Aviation Authority in Botswana and the reinforcement of the capacity of the Directorate General of Civil Aviation in Equatorial Guinea, among others.

1.15.7 AFI Planning and Implementation Regional Group (APIRG)

The AFI Planning and Implementation Regional Group was set up by the Council of ICAO, in 1980, as recommended by the Sixth AFI Regional Air Navigation Meeting (1979).

The objectives of APIRG are to ensure the continuous and coherent development of the AFI Regional Plan and identify specific problems in the air navigation field, as well as to propose actions aimed at solving these problems.

APIRG continually updates and maintains a list of deficiencies in the aerodrome operational planning (AOP), communications, navigation, and surveillance (CNS), air traffic management (ATM), meteorological (MET), search and rescue (SAR), and aeronautical information service (AIS) fields. These deficiencies should be addressed as a matter of urgency. The AFI Planning and Implementation Regional Group will not be responsible for the implementation of the Comprehensive Regional Implementation Plan for Aviation Safety in Africa, but will be a contributor to assist with its implementation.

The Secretariat of APIRG has proposed that the next meeting of the group be scheduled in the last quarter of 2007, six months later than the usual eighteen-month interval. This time-frame is considered ideal, as APIRG is the implementation arm in the region and the comprehensive implementation plan can be introduced. It will also be the first platform to address the technical elements and political outcome of the high-level meeting (Montreal, 17 September 2007). Furthermore, it is envisaged that the agenda for the special regional air navigation meeting could be introduced at that time.
The Comprehensive Regional Implementation Plan for Aviation Safety in Africa will be closely linked to the activities of APIRG.

1.15.8 Unified Strategy Programme

Assembly Resolution A35-7 (Unified strategy to resolve safety-related deficiencies) established the unified strategy to resolve safety-related deficiencies. In doing so, the Assembly recognized that not all Contracting States have the requisite human, technical and financial resources to adequately perform safety oversight activities. To this end, the Assembly directed the Council to adopt a flexible approach for the provision of assistance through the ICAO Regional Offices to support regional and sub-regional organizations. ICAO has undertaken a huge effort, through the unified strategy, aimed at correcting deficiencies and expert assistance in the Nairobi and Dakar areas of accreditation.

1.15.9 Directors General of Civil Aviation in Europe

The 126th Meeting of Directors General of Civil Aviation in Europe (Paris, 6 December 2006) recommended that the European Civil Aviation Conference (ECAC) continue to promote the transposition of European know-how to the global aviation system and, as a first step, formulate an agenda to support aviation safety in Africa. This is seen as a positive development and will significantly contribute to the efforts of ICAO.

1.15.10 IATA Operational Safety Audit (IOSA)

The IATA Operational Safety Audit Programme is an internationally recognized and accepted evaluation system designed to assess the operational management and control systems of an airline. Through IOSA, airlines’ structures and operational procedures are checked against ICAO Standards and Recommended Practices, as well as the industry’s best practices. By the end of 2007, all IATA Members will need to have successfully undergone the IOSA audit in order to achieve or maintain IATA Membership.

2 PLAN DESCRIPTION

2.1 Comprehensive Regional Implementation Plan for Africa

In order to address all the concerns expressed by the Air Navigation Commission as a result of its visit to the AFI Region, the Council agreed that, amongst other items, a Comprehensive Regional Implementation Plan for Africa, including resource requirements, should be developed within six months and that the report on the plan should be presented to the Council during its 181st Session. The Council also agreed that the Plan should be presented to a meeting to be convened on 17 September 2007. Thereafter, the special regional air navigation meeting scheduled early in the 2008-2009-2010 triennium should be a checkpoint for assessing progress in implementation. The Council also agreed that the Regional Offices should be charged with the follow-up of the Plan, with close support and guidance from Headquarters. The Secretary General was also invited to look into the possibility of preparing a draft Assembly resolution for consideration by the Council.

2.2 Elements requiring immediate actions

Through analysing data and information obtained from a variety of sources, including USOAP, APIRG, ICAO ADREP, IATA IOSA reports, etc., a determination will be made of the elements requiring immediate action. These might include airworthiness of aircraft, operations of aircraft, aerodrome
deficiencies, accident and incident reporting and investigation, communications deficiencies, inadequate trained staff, inadequate preparation and implementation of action plans, etc.

2.3 Objectives of the Plan

Near-term objectives

- Finalize the Comprehensive Regional Implementation Plan for Aviation Safety in Africa after additional guidance from the ANC and Council through the approval process, and further refine the resource requirements and mission travel based on the findings of a gap analysis;
- Increase ICAO leadership and accountability in programme coordination and management across the AFI Region;
- Establish implementation modalities applying the methodology of the Global Aviation Safety Roadmap;
- Effective implementation of the Plan with respect to rectifying deficiencies identified by USOAP, IATA IOSA and other similar auditing tools, as well as those in the infrastructure area identified by APIRG, which are considered as requiring urgent action;
- Ensure efficient management of the Plan.

Medium-term objectives

- To strengthen civil aviation authorities with respect to their safety oversight capabilities;
- To increase compliance with ICAO SARPs and industry’s best practice;
- To increase the number of qualified personnel at the industry and oversight levels;
- To improve the quality of inspectors and other civil aviation staff through training;
- To ensure impartial and unimpeachable investigation and reporting of serious accidents and incidents;
- To enhance regional cooperation;
- To enhance capacity of regional and sub-regional safety oversight systems;
- To ensure expeditious implementation of aviation safety management systems for airports, air navigation services providers and airlines;
- To improve assistance in oversight to least developed States;
- To provide expert aviation knowledge within the reach of the targeted States via the web.

Long-term objectives

- To increase credibility of States and regional organizations, attracting investors and customers for the industry;
- To increase relevance of the global SARPs development and implementation process to the region, as well as the participation of States in the SARPs development process;
- To heighten transparency into the region’s aviation oversight activity, enabling more rapid problem resolution and regionally prioritized action;
- To provide a structured and coordinated approach for participation of all stakeholders active in the effort to increase aviation safety in the Africa-Indian Ocean Region, allowing efforts to be driven not only to States but also to all stakeholders involved in the air transport system;
• To establish coordination and cooperation in training activities undertaken in the AFI Region.

2.4 Link between the AFI Plan and ICAO’s Strategic Objectives

The objectives of the Plan are closely linked to Strategic Objective A: Safety – Enhance global civil aviation safety and Strategic Objective D: – Enhance the efficiency of aviation operations as included in the ICAO Business Plan. The AFI Implementation Plan will also be closely tracked by the Air Navigation Integrated Programme (ANIP).

2.5 Expected results of the Plan

The results of the Plan will, to the extent possible, be measured against the performance indicators/metrics contained in the GASP and Roadmap, as well as other metrics derived from ICAO Standards. They include:

• improved aviation safety record for the whole region;
• coordinated implementation actions linked to other high-level decisions and action plans e.g. Libreville Plan of Action and the ICAO World Bank for Sustainable Air Transport in Africa.
• coordinated actions of all stakeholders providing assistance to States in the AFI Region; and
• more efficient and safer air transport system for the general public in the AFI Region.

The Plan will also lead to:

• a new business approach within ICAO to empower the regional offices to carry out ICAO’s mandate in a sustainable way;
• empowerment of the ICAO Regional Directors to take on the challenge to implement the Plan — and hold them accountable for their efforts;
• improved coordination and collaboration with industry; and
• a structured programme management approach to activities undertaken by ICAO and other role players in the AFI Region.

3 PROGRAMME MANAGEMENT AND IMPLEMENTATION

3.1 Management of the Plan

Under the Plan, every action taken within the AFI Region will benefit from a disciplined, metrics-based programme management approach. Although ICAO will not be directly responsible for implementing all activities in the region, it is ideally suited to serve as the coordinating and programme management focal point for change. Regional Office personnel will therefore need to be extensively trained in programme management disciplines, and their activities must be aligned with and guided by the global planning activities of ICAO Headquarters. In order to facilitate this process, the Air Navigation Implementation Plan and other Headquarters Business Planning tools will be extended to the Regional Offices.

The Plan will be managed under the supervision of the Senior Regional Director, who will report to a Steering Committee (SC). The SC will establish a work programme in the form of preliminary annual work plans for the four years of the Plan and a detailed work plan for the first year of operation, identifying objectives, outputs and activities to be undertaken. The SC will monitor the progress of
activities undertaken under the Plan; membership of the Committee will ensure representation of all stakeholders and interested parties.

3.2 Development and implementation

The Comprehensive Regional Implementation Plan for Aviation Safety in Africa has been developed following the steps outlined in the Global Aviation Safety Plan, to include identification of key stakeholders, determination of the safety strength enablers, identification of risks, performance of a gap analysis and development of prioritized recommended actions. The Plan will be implemented through the application of a programme management process with clearly defined objectives, outputs, activities and metrics. This process will also include continuous monitoring and evaluation.

The following table outlines the management and implementation of the Plan in terms of its immediate objectives outputs and activities. Performance indicators (metrics) are included for the purpose of measuring outputs.
### 3.3 Management, implementation and evaluation (objectives, outputs and activities)

<table>
<thead>
<tr>
<th>Programme phase</th>
<th>Objectives</th>
<th>Output</th>
<th>Activities (To be established through gap analysis)</th>
<th>Time-frame</th>
<th>Responsibility</th>
<th>Performance indicators/ metrics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan initiation and assessment</td>
<td>Develop a comprehensive regional implementation plan for aviation safety in Africa, including resource requirements</td>
<td>Comprehensive Regional Implementation Plan for Aviation Safety in Africa</td>
<td>Identify key stakeholders</td>
<td>D+2 Months</td>
<td>ICAO Secretariat</td>
<td>Fifth meeting of the 181st Session of the ICAO Council</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Determine safety strengths and enablers, e.g. ICAO Regional Offices</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Identify risks</td>
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<td></td>
<td></td>
<td></td>
<td>Coordinate with APIRG</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>Plan high-level meeting prior to Assembly and Assembly</td>
<td></td>
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</tr>
<tr>
<td>Programme planning</td>
<td>Establish Implementation modalities</td>
<td>Sufficient funds</td>
<td>Establish Programme budget</td>
<td>D+5 months</td>
<td>Council</td>
<td>Proper funding</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Establish funding mechanism</td>
<td></td>
<td>Secretariat</td>
<td>Job descriptions</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Establish Programme Steering Committee</td>
<td></td>
<td>Secretariat</td>
<td>USOAP/IOSA/APIRG</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Appoint PM and Programme Team Members</td>
<td></td>
<td>PM/PT/ANC</td>
<td>Global Aviation Safety Plan</td>
</tr>
<tr>
<td>Programme phase</td>
<td>Objectives</td>
<td>Output</td>
<td>Activities (To be established through gap analysis)</td>
<td>Time-frame</td>
<td>Responsibility</td>
<td>Performance indicators/ metrics</td>
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</tr>
<tr>
<td>Programme Office</td>
<td>Perform a gap analysis</td>
<td>Decreased number of deficiencies identified through audits</td>
<td>Conduct fact-finding missions</td>
<td>D^*+3 years and 6 months</td>
<td>PM/Secretariat/ANC</td>
<td>USOAP results/IOSA</td>
</tr>
<tr>
<td>Programme Office</td>
<td>Develop prioritized recommended actions</td>
<td>Decreased number of deficiencies identified through audits</td>
<td>Conduct assistance missions</td>
<td>PM/Secretariat/ANC</td>
<td>RAN coordinator</td>
<td>ICAO SARPs &amp; Guidance Material</td>
</tr>
<tr>
<td>Programme Office</td>
<td>Provide office space, procure office equipment, deploy administrative staff</td>
<td>Conduct assistance missions</td>
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</tr>
<tr>
<td>Programme Office</td>
<td>Work Programme</td>
<td>Special AFI RAN Meeting</td>
<td>Conduct assistance missions</td>
<td></td>
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<tr>
<td>Programme Office</td>
<td>Programme Office</td>
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<td>Develop regulatory requirements</td>
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</tbody>
</table>

**Programme implementation**

**Effective implementation of the Plan**

- Decreased number of deficiencies identified through audits
- Effectively implement USOAP Action Plans
- Conduct fact-finding missions
- Conduct assistance missions
- Develop regulatory requirements

**Performance indicators/ metrics**

- Relevant office and equipment specifications, job description
- Reduction of accident rate in the AFI Region
- Best industry practices
<table>
<thead>
<tr>
<th>Programme phase</th>
<th>Objectives</th>
<th>Output</th>
<th>Activities (To be established through gap analysis)</th>
<th>Time-frame</th>
<th>Responsibility</th>
<th>Performance indicators/metrics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Conduct training seminars and on-the-job training</td>
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<td>Global Aviation Safety Plan</td>
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<td></td>
<td></td>
<td></td>
<td>Provide on-line assistance to States</td>
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<td>Global Aviation Safety Roadmap</td>
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<td></td>
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<td></td>
<td>Develop effective incident reporting systems and ensure appropriate legislative and regulatory frameworks in place</td>
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<td>Doc 9734 A &amp; B</td>
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<td></td>
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<td>Conduct a continuous monitoring system (including assessments, audits, etc.)</td>
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<td>Develop effective aviation safety data collection and sharing systems</td>
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<td></td>
<td>Ensure effective incident and accident investigation</td>
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<td></td>
<td>Implement safety management systems expeditiously</td>
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<td></td>
<td>Establish Regional Safety Oversight Systems (RSOOS)</td>
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<tr>
<td>Programme phase</td>
<td>Objectives</td>
<td>Output</td>
<td>Activities</td>
<td>Time-frame</td>
<td>Responsibility</td>
<td>Performance indicators/metrics</td>
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<tr>
<td>On-going monitoring and end of programme evaluation</td>
<td>Ensure efficient management of the Plan, Programme Reports</td>
<td>Programme Reports</td>
<td>Coordinate the activities of African Union, AFCAC, APIRG and all other role players</td>
<td>D+4 years</td>
<td>Secretariat/ Council/ANC/PM/RD/SC</td>
<td>Audit Reports&lt;br&gt;Regional Office Manual, ICAO Financial Rules, TCB Field Operations Manual</td>
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<tr>
<td></td>
<td></td>
<td>Council and ANC reports</td>
<td>Plan the Special AFI RAN Meeting</td>
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<td>EAO Audit Reports</td>
<td>Management and Audit Review by EAO</td>
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<td>APIRG Reports</td>
<td>Technical review by ISD</td>
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<td>Report to Council and ANC</td>
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<td></td>
<td>Prepare end of programme reports</td>
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</tbody>
</table>
3.4 Financial requirements and management

The financial requirements and voluntary contributions associated with the Plan will be managed from Headquarters through the ICAO Enterprise Resource Planning (ERP) system. The overall management of the Plan will be the responsibility of the Programme Manager under the direction of the Steering Committee. Overall coordination of the AFI Plan with various stakeholders will be carried out by the ICAO Headquarters Secretariat and Regional Offices.

3.5 Timeline and schedule of activities

The initial phase of the Plan will run for four years. On the basis of the assessment of three-year progress, the Council will make a decision on subsequent phases and activities of the Plan.

3.6 Key milestones

A high-level meeting will be held on 17 September 2007 to discuss the AFI Plan, and, in particular, safety-related issues in the region. The meeting will allow for presentations by ICAO, AFCAC, IATA and other stakeholders to highlight the problems at the highest level. ICAO will present the Comprehensive Regional Implementation Plan for Aviation Safety in Africa for endorsement by the AFI States.

In line with the decision of the ICAO Council (179/14), the Special AFI Regional Air Navigation Meeting in the next triennium will serve as a checkpoint for implementation of elements of the Plan and will offer an opportunity to strengthen region-wide commitment at the political and technical levels. This forum will also serve as a platform bringing together States, service providers and users alike. It should be noted that the agenda for the RAN meeting is closely linked to the Comprehensive Regional Implementation Plan for Aviation Safety in Africa and will be developed in parallel with the implementation plan for Council approval. To this end, the Secretary General appointed an ICAO Coordinator for the RAN meeting to ensure harmonization and effectiveness.

Other key milestones will include the APIRG/16 Meeting (Kigali, Rwanda, 19 to 23 November 2007), bi-annual meetings of the Steering Committee and evaluation activities. Additional key milestones may be identified after the gap analysis is conducted. The need for the continuation of the Plan will be reviewed by the ANC and Council after the three-year progress report.

3.7 Stakeholder involvement

The Stakeholders in the civil aviation sector are States, ICAO, airlines/operators, airports, air navigation service providers, aircraft and equipment manufacturers, maintenance and repair organizations, regional organizations, international organizations and industry representatives.

The ICAO partners will work to achieve the objectives of the Plan and will be represented at each stage of its development and implementation. All stakeholders will be represented on the Steering Committee. A proposed list of stakeholders can be found at Appendix B.

3.8 Safety strengths and enablers

ICAO has the broad mandate, experience and capability to achieve long-term growth and stability within the region. Other strengths underpinning the effective implementation of the Plan may include those already suggested in the Global Aviation Safety Roadmap. In this respect, the ICAO Regional Offices in
Africa will be expected to play a major role as enablers of the Plan. The Regional Offices have direct contact with the States in their respective areas of accreditation and can therefore contribute to assistance at the regulatory level. To address the activities at the user level, IATA and the IOSA process will play a significant role. Other enablers may include: World Bank, African Airlines Association (AFRAA), IATA Partnership for Safety Initiative and Regional Economic Communities, etc.

3.9 Gap analysis

The Programme Manager will be responsible for performing a gap analysis, based on the Global Aviation Safety Plan and taking into consideration the USOAP and IOSA audit findings, ADREP reports and deficiencies identified by APIRG. When the initial assessment is complete, a detailed plan, including the actions to be taken, strategy to be employed and financial resources required, will be established prior to the Assembly. The gap analysis will be performed in close coordination and in partnership with industry and all other stakeholders through the Steering Committee. All activities resulting from the initial data review and gap analysis that require direct ICAO involvement will be put through the rigors of the ANIP entry process. The Air Navigation Commission will assist with the preparation and prioritization of the ANIP issue sheets.

3.10 Coordination with other relevant programmes and plans

As already indicated in this document, there are a number of other programmes and plans being implemented in the AFI Region. To avoid duplication of effort, all aviation initiatives in the region will be coordinated within the framework of the AFI Plan. Coordination will be effected at various levels to include ICAO Headquarters, Regional Offices and the Steering Committee.

4 RESOURCE REQUIREMENTS

The execution of the Comprehensive Regional Implementation Plan for Aviation Safety in Africa falls within the general mandate of the Dakar and Nairobi Regional Offices. However, it is clear that these offices do not have the resources required to effectively support the Plan and there is a need to complement the resources already provided under the Regular Programme due to the strict limit being imposed on the regular budget for the next triennium. The Secretariat’s immediate contribution would be through the involvement of staff, both at Headquarters and in the regions; this contribution has already begun. However, additional resources, such as a dedicated Programme Manager, will be required. The Council agreed that these additional resources may be obtained through an Assembly resolution calling for voluntary contributions.

4.1 Regular Programme resources allocated to the plan

To start, current resources of the Nairobi and Dakar Offices (Appendix A refers) allotted in the Regular Programme budget will be focused towards the implementation of the Comprehensive Regional Implementation Plan for Aviation Safety in Africa. This will include:

- general supervision and management of the implementation plan primarily by the Senior ICAO Regional Director in Africa; and
- assignment of three-quarters of the time of existing Regional Officers in the required fields to the implementation plan.
### 4.2 Additional resources required to support the plan

<table>
<thead>
<tr>
<th>Action</th>
<th>Estimated total cost for the first 4 years</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hiring of experts</td>
<td>US$ 2.6M*</td>
<td>Initial assessments indicate that there are additional requirements in the AFI Regional Offices for experts in the Flight Safety, Aerodrome, Air Routes and Ground Aids and ATM (RVSM) fields**, as well as for a dedicated Programme Manager.</td>
</tr>
<tr>
<td>Training requirement</td>
<td>US$ 50,000</td>
<td>Training in Programme Management principles are an essential requirement for all persons involved in the management of the Plan.</td>
</tr>
<tr>
<td>Missions</td>
<td>US$ 250,000</td>
<td>Sufficient resources should be provided to support mission travel undertaken to develop and implement the Plan.</td>
</tr>
<tr>
<td>Steering Committee meetings</td>
<td>US$ 120,000</td>
<td>Sufficient resources should be provided to support the organization of Steering Committee meetings. Where possible, information technology (IT) solutions will be used to reduce costs.</td>
</tr>
<tr>
<td>Seminars and workshops in States</td>
<td>US$ 200,000</td>
<td>Support of the convening of seminars and workshops in States.</td>
</tr>
<tr>
<td>Programme Office</td>
<td>US$ 100,000</td>
<td>Computer equipment for additional staff, office supplies, communications, furniture, etc.</td>
</tr>
<tr>
<td>Total</td>
<td>US$ 3,770,000</td>
<td>4-year period</td>
</tr>
</tbody>
</table>

The total amount required per annum is US$ 945,000

* Based on an assumption of 5 Professionals and 1 GS for administrative duties.
** The exact number of additional required experts in the various fields can only be determined after the execution of the gap analysis as described in paragraph 4.9.

### 5 TOTAL BUDGET ESTIMATE

In addition to current Regional Programme resources that will be allocated to the implementation of the initial phase of the Plan, the investment required is estimated at US$ 3.77 million for the four-year period. This amounts to a total of US$ 945,000 per year. A refined resource requirement, including mission travel, will be established after the completion of the gap analysis.

### 6 MONITORING AND EVALUATION

The Air Navigation Commission will monitor and evaluate the implementation of the Plan and report to Council on the results achieved. This will include the review of: deficiencies identified by APIRG, the APIRG/16 Report, and the agenda for the planned RAN meeting, as well as the report thereof.
6.1 Monitoring and reporting schedule and responsibilities

<table>
<thead>
<tr>
<th>Output</th>
<th>Individual responsible for reporting</th>
<th>Individual or group reported to</th>
<th>Reporting Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAP analysis</td>
<td>PM/RD</td>
<td>Steering Committee</td>
<td>First meeting</td>
</tr>
<tr>
<td>Reduction in accident rate in AFI to below the world average</td>
<td>PM/Regional Director</td>
<td>Steering Committee ANC and Council</td>
<td>Every six months</td>
</tr>
<tr>
<td>Increase the number of States in the AFI Region that meet ICAO Standards for aviation safety and industry best practice</td>
<td>PM/Regional Director</td>
<td>Steering Committee ANC and Council</td>
<td>Every six months</td>
</tr>
<tr>
<td>Adequate numbers of qualified inspectors and other CAA technical personnel</td>
<td>PM/Regional Director</td>
<td>Steering Committee ANC and Council</td>
<td>Every six months</td>
</tr>
<tr>
<td>Programme Reports Council &amp; ANC Reports Audit Reports</td>
<td>PM/RD PCO/ISD</td>
<td>Chairman of the Steering Committee</td>
<td>Every six months</td>
</tr>
<tr>
<td>Report to 37th Session of the ICAO Assembly</td>
<td>RD/PCO/ISD</td>
<td>Assembly</td>
<td>3 Years</td>
</tr>
<tr>
<td>APIRG Reports</td>
<td>Secretary of APIRG/PCO</td>
<td>ANC and Council</td>
<td>Annually</td>
</tr>
<tr>
<td>WEB-based question and answer system</td>
<td>PCO</td>
<td>ANC</td>
<td>September 2007</td>
</tr>
</tbody>
</table>

7 **BUDGET AND FUNDING ARRANGEMENTS**

Part of the initial Plan will be funded through the triennium budget for 2008-2010. The Secretary General and Council will establish the level of funding. However, additional resources will be required to implement the Plan over the four-year period.

7.1 Need for an Assembly resolution

It should be recalled that the Council invited the Secretary General to develop a draft Assembly resolution to support the implementation of the Comprehensive Regional Implementation Plan for Aviation Safety in Africa, and to request additional assistance from States and industry in this global effort. It is proposed that States and donors be approached to make voluntary financial and in-kind
contributions to fund the programme. On 30 May 2007, the Council agreed to the need for an Assembly resolution calling for voluntary contributions.

IATA will be tasked with the mobilization of funds from industry. An application for funding will also be made to the International Financial Facility for Aviation Safety (IFFAS).
### 7.2 Planned budget and work plan

<table>
<thead>
<tr>
<th>Programme objective</th>
<th>Programme output</th>
<th>Time-frame</th>
<th>Responsible</th>
<th>Key activities</th>
<th>Resources required</th>
<th>Source of funds</th>
<th>Planned budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop a Comprehensive Regional Implementation Plan for Aviation Safety in Africa, including resource requirements</td>
<td>Implementation Plan for AFI</td>
<td>2 months</td>
<td>Secretariat</td>
<td>Identify key stakeholders, Determine safety strengths and enablers, e.g ICAO Regional Offices, Identify risks, Coordinate with APIRG, Plan high-level meeting prior to Assembly</td>
<td>5 P 1 GS</td>
<td>RP</td>
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<tr>
<td>Establish Implementation modalities</td>
<td>Sufficient funds</td>
<td>5 Months</td>
<td>Council Secretariat</td>
<td>Establish detailed Programme budget</td>
<td></td>
<td>RP</td>
<td></td>
</tr>
<tr>
<td>Steering Committee</td>
<td></td>
<td></td>
<td>Secretariat</td>
<td>Establish funding mechanism</td>
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<tr>
<td>Programme Manager</td>
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<td></td>
<td>PM/PT/Secretariat/ANC</td>
<td>Establish Programme Steering Committee</td>
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<tr>
<td>GAP Analysis</td>
<td></td>
<td></td>
<td>PM/RD/Secretariat/HRB</td>
<td>Apptoint team members</td>
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<tr>
<td>Work Program</td>
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<td></td>
<td>Perform a gap analysis</td>
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<tr>
<td>Programme Office</td>
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<td>Develop prioritized recommended actions</td>
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<td>Provide office space, procure office equipment, deploy Administrative staff</td>
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</table>

2007 US$:RP
2008 US$:RP
2009 US$:RP
2010 US$:RP
<table>
<thead>
<tr>
<th>Programme objective</th>
<th>Programme output</th>
<th>Time-frame</th>
<th>Responsible</th>
<th>Key activities</th>
<th>Resources required</th>
<th>Source of funds</th>
<th>Planned budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective implementation of the Plan</td>
<td>Decreased number of deficiencies identified through audits</td>
<td>3.5 years</td>
<td>PM</td>
<td>Effective implementation of USOAP Action Plans</td>
<td></td>
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<td>530 000</td>
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<td></td>
<td>Decreased number of deficiencies identified through APIRG</td>
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<td>Conduct fact-finding missions</td>
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<td>Develop regulatory requirements</td>
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<td>Conduct training seminars and on-the-job training</td>
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<td>Provide on-line assistance to States</td>
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<td>Develop effective incident reporting systems and ensure appropriate legislative and regulatory frameworks are in place</td>
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<td>Conduct a continuous monitoring system (including assessments, audits, etc.)</td>
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<td>Develop effective aviation safety data collection and sharing systems</td>
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<td>Ensure effective incident and accident investigation</td>
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<td>Implement safety management systems expeditiously</td>
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<td>Establish Regional Safety Oversight Systems (RSOOS)</td>
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<td>Coordinate the activities of the African Union, AFCAC, APIRG and all other role players</td>
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<td>Plan the Special AFI RAN Meeting</td>
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<tr>
<td>Programme objective</td>
<td>Programme output</td>
<td>Time-frame</td>
<td>Responsible</td>
<td>Key activities</td>
<td>Planned budget</td>
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<tr>
<td>Ensure efficient management of the Plan</td>
<td>Programme Reports</td>
<td></td>
<td>Secretariat/ Council/ ANC/PM/RD/Steering Committee (SC)</td>
<td>Conduct Steering Committee meetings</td>
<td>$30 000 $30 000 $30 000 $30 000</td>
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<td>Council and ANC Reports</td>
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<td>Management and Audit Review by EAO</td>
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<td></td>
<td>EAO Audit Reports</td>
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<td>Technical review by ISD</td>
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<td>APIRG Reports</td>
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<td>Report to Council and ANC</td>
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<td>Prepare end of programme reports</td>
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<td>Continue the Plan of the Plan after the initial four-year period</td>
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<td></td>
<td>ANC and Council</td>
<td>after 3 years</td>
<td>Secretariat/ ANC/ Council</td>
<td>Establish the need for the continuation of the Plan one year before the end of the four-year term</td>
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</tbody>
</table>
## APPENDIX A

**PROFESSIONAL CATEGORY RESOURCES OF THE WESTERN AND CENTRAL AFRICAN AND EASTERN AND SOUTHERN AFRICAN REGIONAL OFFICES**

### Western and Central African Office (Dakar)

Existing Professional-category staff:

<table>
<thead>
<tr>
<th>Field</th>
<th>Level</th>
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</thead>
<tbody>
<tr>
<td>1. Regional Director</td>
<td>P-O</td>
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<tr>
<td>2. Deputy Regional Director</td>
<td>P-5</td>
</tr>
<tr>
<td>3. CNS</td>
<td>P-4</td>
</tr>
<tr>
<td>4. CNS (Vacant)</td>
<td>P-3</td>
</tr>
<tr>
<td>5. ATM/SAR</td>
<td>P-4</td>
</tr>
<tr>
<td>6. MET</td>
<td>P-4</td>
</tr>
<tr>
<td>7. AIS/Charts</td>
<td>P-2</td>
</tr>
<tr>
<td>8. Administration</td>
<td>P-2</td>
</tr>
<tr>
<td>9. AGA</td>
<td>P-4</td>
</tr>
</tbody>
</table>

### Eastern and Southern African Office (Nairobi)

Existing Professional-category staff:

<table>
<thead>
<tr>
<th>Field</th>
<th>Level</th>
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</thead>
<tbody>
<tr>
<td>1. Regional Director</td>
<td>PO</td>
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<tr>
<td>2. Deputy Regional Director</td>
<td>P-5</td>
</tr>
<tr>
<td>3. CNS</td>
<td>P-4</td>
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<tr>
<td>4. ATM/SAR</td>
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<tr>
<td>5. MET</td>
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<tr>
<td>6. ATM/SAR</td>
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<tr>
<td>7. Administration</td>
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<tr>
<td>8. AGA</td>
<td>P-4</td>
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<tr>
<td>9. Flight Safety</td>
<td>P-4</td>
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</tbody>
</table>
APPENDIX B

KEY ROLE PLAYERS/PARTNERS

The following role players, in line with the Roadmap, have been identified.

International State Authorities / Organizations

- Aviation authorities / safety agencies (US FAA, French DGAC, Dutch CAA, etc.)
- World Bank
- African Development Bank
- European Union

Regional State Authorities / Organizations / Groups

- African Union (AU)
- ECOWAS – Economic Community of West African States
- SADC – Southern Africa Development Community
- UEMOA – Union Économique et Monétaire Ouest Africaine
- UNECA – United Nations Economic Commission for Africa

Regional Safety Organizations

- AAMAC—African and Malagasy Civil Aviation Authorities
- AFCAC – African Civil Aviation Commission (AFCAC is the civil aviation commission of the African Union)
- AFRASCO – African Airlines Safety Council
- ASET – Africa and Indian Ocean Safety Enhancement Team
- ASECNA – Agence pour la Sécurité de la Navigation Aérienne en Afrique et Madagascar
- BAGASO – Banjul Accord Group Aviation Safety Organization
- FSF – Flight Safety Foundation

Industry Organizations

- IATA – International Air Transport Association
- IFALPA – International Federation of Airline Pilots Associations
- Aircraft manufacturers: Airbus, Boeing, ATR, etc.
- AFRAA – African Airlines Association
- ACI-Africa – Airports Council International – Africa
- CANSO – Civil Air Navigation Services Organisation
- ISSG – Industry Safety Strategy Group