INTERNATIONAL CIVIL AVIATION ORGANIZATION

**AFI PLANNING AND IMPLEMENTATION REGIONAL GROUP
EIGHTEENTH MEETING (APIRG/18)
Kampala, Uganda (27 – 30 March 2012)**

Agenda Item 3.1:   Aerodrome Operational Planning (AOP)

**REVIEW OF THE REPORT OF THE NINTH MEETING OF THE
AERODROME OPERATIONAL PLANNING SUB-GROUP (AOP/SG/9**

(Presented by the Secretariat)

SUMMARY
This paper presents the report of the ninth meeting of the Aerodromes Operational Planning Sub-Group (AOP/SG/9). The Sub-Group received and reviewed the follow-up action taken on the APIRG /17 meeting Conclusions and Decisions approved by the Council. Whilst reviewing the list of deficiencies in the AOP field, the meeting acknowledged the concerns of the Council with regard to the slow progress of the removal of these deficiencies in some States. It noted that Corrective Action Plans (CAPs) developed by the States after completion of safety audits to remove the findings observed were not being fully implemented. The meeting noted the AOP issues of major concerns raised in the safety audits in particular the requirements for aerodrome certification, State Safety Programme, Safety Management Systems and Runway Safety   Action Required by APIRG/18 is at paragraph 9.
REFERENCES: Special AFI RAN Meeting Report Doc 9930   APIRG 17 Report   AOP/SG/Report
Related ICAO Strategic Objective(s): A

1.   **INTRODUCTION**

1.1   The ninth meeting of the Aerodromes Operational Planning (AOP/SG/9) was held in Dakar, Senegal from 28 to 30 September 2011 and was attended by 26 participants from 9 States and 2 Internmational Organizations of ASECNA and IATA.

Follow up of APIRG/17 Meeting Conclusions and Decisions related to AOP Field

1.2   **Review of the progress of the AFI Plan (former AFI Comprehensive Implementation Plan (ACIP)) in as far as AOP is concerned**

1.2.1   The meeting appreciated the progress achieved by AFI plan with respect to the conduct of training activities and the gap analysis exercises conducted in almost all the AFI States. The meeting noted that, in many States, the implementation of the activities of the Corrective Action Plan is increasingly being managed by recipients of such AFI plan training activities. The meeting observed that there was still more demand for more training and that in some cases tailor made activities were more desirable. In this regard, the meeting formulated the following draft conclusions:-

DRAFT CONCLUSION 18/XX: THE CONDUCT OF COURSES EARLIER DELIVERED BY THE AFI PLAN

> **That States who may wish to get more training which were conducted by AFI Plan should send request to ICAO regional offices, and where possible to coordinate such requests with neighbouring States for region wide benefit.**

1.2.2   The meeting further took note of the ongoing programme to inter-connect all the aviation training institutions in AFI for purposes of better utilization, common use of training curricula and ensuring the quality of the training provided meets the requirements for the AFI Region in implementing the requirements. With respect to on-the-job training, within the framework of the Regional Safety Oversight Organizations (RSOO), it is expected better opportunities will be made available.

1.2.3   The meeting was informed that both ESAF and WACAF Regional Offices have established Regional Office Safety Teams (ROSTs) to assist States to implement activities of the CAP. After specific agreement by States through its acceptance of ICAO Action Plans, Regional Office Safety Teams (ROST) missions are conducted to provide assistance on specific corrective actions whilst coordinating with other stakeholders providing assistance to that State in order to ensure complimentarity of assistance.

1.3   Wildlife Strike hazard reduction

1.3.1   On the issue of reporting of the bird strikes to ICAO bird strike information system (IBIS), it was noted that States still don't report as required and the meeting urged the States to improve in reporting any occurrences of bird strike and suggested that the Regional Safety Oversight Organizations and various COSCAPS established in various parts of Africa be used as additional means for the collection and dissemination of data to IBIS.

1.4   **Rescue and Fire fighting**

1.4.1   The meeting discussed further the issue observed by APIRG/17 that there was a need for States to develop appropriate regulations and guidance material regarding RFFS staff selection criteria defining the minimum education background, minimum qualifications and skills at each level and the need for periodic medical examination and acknowledged that some States had made progress in this matter. The meeting therefore advised States still having problems to contact States with experience.

1.5   **Aerodrome Emergency Plans**

1.5.1   The meeting was appraised of the requirements of Ammendment 10 to Annex 14, Volume I including "Public Health Emergency" as one of the types of emergencies to be provided for in the Aerodrome Emergency Plans and noted that many States had not yet developed guidance material to enable aerodrome operators review their aerodrome emergency plans.

1.6   **Aerodrome Certification**

1.6.1   The meeting reviewed the problems associated with the lack of implementation of this requirement. These included the lack of legal framework to impose operating restrictions at international airports especially where the airports were wholly owned by government and act as major and usually the only gateway to the states; indequate training of Aerodrome Inspectors and the lack of   guidance materials and procedures. The meeting therefore formulated the following draft conclusion;

**DRAFT CONCLUSION 18/XX: TRAINING   COURSES   IN   AERODROME
                                    CERTIFICATION AND SMS/SP**

       That:

       a) **ICAO to continue conduct awareness campaigns on aerodrome certification for both the CAAs and Aerodrome Operators and;**
       b) **States to take full advantages of ICAO training courses in order to implement the SMS and SSP.**

2.   FOLLOW-UP OF THE COUNCIL DECISIONS STILL IN FORCE IN THE AOP FIELD

2.1   General

2.1.1   Under this agenda item, the meeting reviewed Council Decision still in force in the AOP field bearing in mind that the decisions were made subsequent to the fifteenth APIRG meeting. The decisions covered wildlife risk management and reduction, the rescue and fire fighting, the conduct of a full scale emergency exercise, the implementation of the aerodrome certification requirement and the continuity of participation at AOP/SG meeting.

2.1.2   The meeting acknowledged and encouraged the cooperation between some States in the process of aerodromes' certification, whilst emphasizing that certification should be carried out within the mandate specified by the State's regulatory framework. The meeting also required ICAO Regional Offices to follow up with States on the progress of implementation and offer appropriate guidance and assistance when necessary.

3.   REVIEW OF THE LIST OF INTERNATIONAL AERODROMES IN THE AFI ANP

3.1.   General

3.1.1   The AOP/SG/7 meeting, whilst discussing deficiencies which were seen to have remained unresolved for a long time, noted that the list of international aerodromes in the AFI ANP included a number of airports which were not being used for regular international flights. Such airports are not allocated adequate resources and were therefore poorly equipped and had minimal infrastructure and services. It was therefore agreed that States should make a review of the list of airports included in the AFI ANP and FASID and propose appropriate amendments for the removal from the Plan of such airports. In this regard, the meeting was appraised of the procedures adopted by Council for the ammendment of the AFI Plan Part I (Basic ANP) and Part II (FASID).

**DRAFT CONCLUSION 18/XX: AOP/9/   -   REVIEW   OF   THE   LIST   OF
                                    INTERNATIONAL AIRPORTS IN THE AFI ANP**

That States should make a thorough review of the list of airports included in the AFI ANP and propose appropriate amendments, including the removal from the Plan, airports not used or planned to be used for international operations.

4. REVIEW OF DEFICIENCIES IN THE AOP FIELD

4.1 General

4.1.1 The meeting agreed with APIRG that the methodology used to compile the list of deficiencies and the methodology adopted for the validation of the deficiencies reported by the users was not efficient. Bearing this in mind, the list of deficiencies cannot at any one time be considered as accurate.

4.1.2 IATA reported that it regularly organizes Technical Missions for the purpose of identifying infrastructural deficiencies of concern to airline's operations, priorities for remedial action, possibilities for cooperation between IATA and the authorities to effect remedial action and opportunities for future development plans. Such Missions usually include discussion with the authorities on practical timelines for remedial action and the information is usually reported to ICAO and occassionaly finds its way to the list of deficiencies albeit only when ICAO is able to validate the information in accordance to the Council guidelines.

4.1.3 IFALPA reported that it continues to compile a database of deficiencies at airports based on operating pilots' reports. Nevertheless this database is internal and is not shared even though upon request certain information can be exchanged.

4.1.4 In order to improve on the collation of all this information, an AFI Air Navigation Deficiencies Database (AFDD) has been established the Global Centralized one is being established has b to assist in the enhancement of the process of identification, assessment, reporting and elimination of deficiencies. This online facility will provide a secure and effective way to ensure all stakeholders have an opportunity to provide on-time status. This will provide a suitable follow up mechanism including a validation. Once this site is adequately populated, it will be possible to better make evaluations of status and trends.

5. THE ICAO UNIVERSAL SAFETY OVERSIGHT AUDIT PROGRAMME: LESSONS LEARNT IN THE AOP FIELD

5.1 General

5.1.1 The Universal Safety Oversight Audit Programme (USOAP) has unquestionably contributed towards improving the safety of international civil aviation by promoting the systematic implementation by States of ICAO safety-related Standards and Recommended Practices. The fundamental and time-tested process of identifying deficiencies through the safety oversight audits, encouraging States to develop and implement corrective action plans and using the audit results to create a guide for future improvements is the cornerstone for the success of USOAP. The transparency and the sharing of information associated with the evolution of the audit programme have likewise contributed to improving safety.

5.1.2 The USOAP is evolving to a Continuous Monitoring Approach (CMA) which will monitor the safety oversight capabilities of ICAO Member States on an ongoing basis and carry out various USOAP activities based on an analysis of safety risks. Even as USOAP evolves to CMA, a number of AFI States have been referred to MARB because they either have Significant Safety Concerns (SSCs) or have been found to have had a significantly high level of lack of implementation. Of the 39 States currently under MARB, 26 States (67%) are AFI States

5.1.3   The meeting noted that evaluation of the USOAP results indicate that in **ALL THE CRITICAL AREAS** the percentage lack of implementation in AFI is more than the global average and that the Critical Element with the highest lack of implementation is CE 4 – Qualification and Training of Technical Personnel.

5.1.4.   The meeting noted that in order to assist States referred to the MARB, ICAO, through the Regional Offices, is developing State specific action plans to identifying priority areas where ICAO can offer and/or coordinate technical assistance after some discussion on the challenges these States are facing in implementation of the CAP. Further; in collaboration with African Civil Aviation Commission (AFCAC), ICAO is assisting MARB States through the AFI Comprehensive Inspectorate Scheme (AFI-CIS) where a pool of inspectors can be made available to assist other AFI States in conducting certification and surveillance. The pool is established and is accessible through a Memorandum of Understanding (MoU).

5.1.5.   The meeting formulated the following draft recommendation:

DRAFT CONCLUSION 18/XX: AOP/9/ - ACTION BY STATES TO ENHANCE IMPLEMENTATION OF THE CORRECTIVE ACTION PLANS

> **That:**
> a) **State, in particular those referred to the MARB, are urged to participate effectively in the efforts by the Regional Offices to develop State specific action plans for coordinated assistance;**
> b) **States are urged to support the ICAO efforts to coordinate the establishment of Regional Safety Oversight Organizations (RSOO);**
> c) **States who are able to sign the MoU with AFCAC, are encouraged to support the AFI-CIS and offer their inspectors to join the pool to assist other States; and**
> d) **States are encouraged to include participants from both the Regulator and the Airport Operators when identifying candidates for ICAO training activities**

6.   **GLOBAL AVIATION SAFETY PLAN (GASP) – LESSONS LEARNT SO FAR**

6.1.   General

6.1.1   The meeting was appraised of the fundamentals of the ICAO Global Aviation Safety Plan which were:-

> a) that all stakeholders of the aviation system need to be involved;
> b) that the roles played by the regulatory and industry elements while emphasizing their complementary nature, promote a proactive approach to safety and provides a means to ensure that safety initiatives throughout the world deliver improved safety by the coordination of effort, thus reducing inconsistency and duplication; and
> c) that high-level principles that had been accepted by all aviation stakeholders are vital to the enhancement of safety levels within the global commercial aviation.

6.1.2   The meeting was reminded of the objectives of the plan which were:

> a) to reduce the number of fatal accidents and fatalities worldwide irrespective of the volume of air traffic;
> b) To achieve a significant decrease in accident rates, particularly in regions where these remain high; and
> c) To ensure that no single ICAO region shall have an accident rate (based on a five-year sliding average) more than twice the worldwide rate by the end of 2011

6.1.3   Whilst the meeting noted that it did not have sufficient data to measure the success of the plan, it appreciated the results of the gap analyses which helped identify the areas where best practices were not being implemented sufficiently. It is as a result of implementation of the GASP that ICAO through its AFI Comprehensive Implementation Plan (ACIP) currently known as AFI Plan has been able to assist States in training its staff and in offering support towards establishment of Regional Safety Oversight Organizations (RSOO) and Regional Accident Investigation Agencies (RAIA).

6.1.4   During the gap analysis exercises, the following shortcomings were identified:-

a)   States have not been able to establish structures and frameworks necessary for an effective and sustainable national safety oversight system;

b)   States lack the capability and resources to recertify authorization holders (air operators, airworthiness organizations, airports, etc.) in accordance with current set of regulations;

c)   Independent accident investigation offices have not been established in the majority of the States and where it is established appropriate training and familiarization with the ECCAIRS system has not been provided to the staff members;

d)   ADREP/ECCAIRS system has not been implemented in States.

e)   States and service providers in most of the States have not developed safety management systems;

f)   SMS programme integration for effective and regular communication and to ensure that risk assessment of change takes place in an integrated manner, has not been developed.

6.1.5   In order to rectify the shortcomings, given the high rate of non-implementation in the AFI Region in 7 of the 8 critical elements and the indicative relationship to accident rates, the meeting proposed the following draft conclusion:

DRAFT CONCLUSION 18/XX: AOP/SG9 - LESSONS LEARNT FROM GASP

That States:

a)   Commit to improvements in the overall level of implementation of the eight critical elements;

b)   Conduct effective surveillance over their aviation industry, including the ability to identify and resolve safety-related deficiencies;

c)   Strive to effectively implement CE 4, (qualifications and training of technical staff) which is an important prerequisite for the implementation of the other CEs and ;

d)   Ensure that personnel and organizations performing aviation activities meet established requirements before they are allowed to exercise the privileges of a license, certificate, authorization and/or approval

7.   RUNWAY SAFETY

7.1   The meeting was advised that since 2001, the ICAO Air Navigation Commission (ANC) took action to address the increasing problem of runway incursions (RI) incidents and accidents. Several critical issues were identified to have a bearing to the overall runway safety, including the radiotelephony phraseology, language proficiency, equipment, aerodrome lighting and markings, aerodrome charts, operational aspects, situational awareness and human factors. Subsequently ICAO conducted a series of Runway Safety Seminars in the ICAO Regional Offices with the aim of disseminating information on runway incursions. The seminars were followed-up

with the distribution of two RI mitigation instruments: the ICAO Runway Safety Toolkit (2005, CD-ROM); and Doc 9870 —Manual on the Prevention of Runway Incursions (2007). ICAO introduced a RI definition into PANS-ATM (Doc 4444) to standardize related terminology and data collection. Amendment 12 to Annex 13 also included the classification of RIs with severity A as serious incidents, subject to reporting and investigation. Additionally, Amendment 2 to PANS-ATM has introduced new RI reporting requirements for both ATS and flight crew along with new RI reporting forms contained in the Manual on the Prevention of Runway Incursions (Doc 9870).

7.2   The meeting noted that in addition to the existing Standards and Recommended Practices (SARPs) addressing the integrated use of visual aids to help prevent RIs, the recent Amendment 10-A to Annex 14, Volume I, introduced new provisions for enhanced taxiway centre line markings and mandatory instruction signs to further strengthen RI prevention through visual aids measures. Guidance material on visual aids for navigation is provided in Doc 9157— Aerodrome Design Manual, Part 4, Visual Aids.

7.3   The meeting noted that runway contamination and related issues represent major runway excursion risk factors and point to an urgent need for a common understanding of the complex interaction between factors that affect the use and performance of aircraft braking systems. This involves the reporting of runway conditions in a standardized manner such that flight crews are able to accurately determine aircraft take-off and landing performance. Other key factors include the competencies of personnel across all relevant operational areas to evaluate, communicate and apply data related to runway conditions, including: aerodromes personnel, air traffic controllers, aeronautical information officers, pilots and flight operations officers/flight dispatchers.

7.4   The meeting also considered that the layout of the manoeuvring area can be a contributory factor especially where there were insufficient taxiways leading to incidences. ICAO has on its part established a Friction Task Force to address shortcomings in current Standards and Recommended Practices (SARPs) related to methods used to assess and report runway friction characteristics, the use of measured friction values for flight operation purposes, and the removal of contaminants in a timely manner. Amendments to Annex 14 and 15 have been proposed and a draft circular on runway surface condition assessment, measurement and reporting has been delivered.

7.5   The meeting was informed that ICAO organized a Global Runway Safety Symposium in Montreal, Canada, 24-26 May 2011 with the aim to highlight the evolution towards a more integrated safety management approach in ICAO's runway safety programme, coordinate a global effort for improving runway safety by identifying what a State can do to improve runway safety, identifying a common framework for the enhancement of runway safety, promotion of commitment from partners to deliver regional runway safety workshops across the globe and identify content and format for subsequent runway safety workshops. In AFI, Regional Runway Safety Seminars are programmed to be held in Cape Town, South Africa (September 2012) and in Dakar, Senegal (2013).

7.6   The meeting appreciated the efforts being coordinated by ICAO and emphasized that in spite of the relatively low traffic volumes at most airports in AFI and the relatively simple airside layout, incidences of Runway Incursion (RI) and Runway Excursion (RE) were on the increase. The meeting also noted that this required effective input from many fields and expertise in order to deal effectively and efficiently with these issues. The establishment of Runway Safety Teams (RAST) at international aerodromes with specific terms of reference if given support and adequate resources (personnel, time, funds, etc) can be effective. A representative of IFALPA described his experience of the establishment of RAST in Morocco and indicated the achievements of such RASTs and confirmed willingness to share this experience if and when requested. The meeting formulated the following draft conclusion.

DRAFT CONCLUSION 18/XX: AOP/SG9 - RUNWAY SAFETY

That:

a) **States should plan to participate at the Regional Runway Safety Seminars to be conducted in the AFI Region; and**

b) **States should require all international aerodromes to establish Runway Safety Teams mandated to monitor the runway incursion and runway excursion incidences and accidents and propose mitigation measures proactively.**

8. **REVIEW OF THE AOP/SG TERMS OF REFERENCE IN SUPPORT OF THE ICAO STRATEGIC OBJECTIVES**

8.1.   Under this agenda item, the meeting reviewed its terms of reference and future work programmes with a view to incorporate the ICAO emphasis on ensuring all activities support the ICAO Strategic Objectives. In the terms of reference, the following amendments were made:

Delete "bird hazards" and replace with "wildlife hazard management"
Add item h) Obstruction surfaces control

8.2   The meeting noted that the table of the work programme should be amended to reflect these changes.

9.   ACTION BY THE MEETING

9.1   The meeting is invited to take note of the work of the AOP/SG and to make recommendations for further action as found necessary.

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