



INTERNATIONAL CIVIL AVIATION ORGANIZATION
Western and Central African Office

Establishment of the APIRG Information and Infrastructure Management
Sub-Group (IIM/SG)

Dakar, Senegal, 28 – 30 November 2016

Agenda Item 2: General and Regional Framework for Air Navigation Services

2.3 AFI Air Navigation Priorities and Targets

AFI Air Navigation Priorities and Targets

(Presented by the Secretariat)

| SUMMARY | |
|---|--|
| <p>This Working Papers outlines the regional agreement concluded since the Special AFI RAN Meeting held in Durban South Africa from 24 to 29 November 2008 on the necessity to develop regional performances objectives together with a set of targets and indicators in the ANS area for the AFI Region.</p> <p>The APIRG 20th Meeting held in Yamoussoukro, Cote d'Ivoire from 30th November to 2nd December adopted a list of identified Air Navigation Priorities and Targets for the AFI Region.</p> <p>The action by the Meeting is in paragraph 4.</p> | |
| Reference | Report on the AFI/RAN 8 Sp Meeting Report on APIRG/20 meeting |
| Strategic Objectives: | This working paper relates to Strategic Objectives A, B and C . |
| ASBU Modules | This Working Paper is related to all ASBU Modules applicable in the AFI Region |

1. INTRODUCTION

1.1 The AFI/RAN SP 8 Meeting held in Durban, South Africa from 24 to 29 November 2008 formulated **Recommendation 3/3 — Performance-based approach and measurement**, calling upon APIRG and regional safety groups to develop indicators that are *specific, measurable, achievable, realistic and time bound* and attach them to the performance framework forms (PFFs) in the appropriate box, using the following metrics and/or others determined to be appropriate indicators for the African continent:

Safety

- a) Safety-1 : **Number of fatal accidents;**
- b) Safety-2 : **Number of fatalities;**
- c) Safety-3 : **Accident rate in the AFI Region as compared to the global average;** and
- d) Safety-4: **Number of accidents and serious incidents that are reported to ICAO** (as a percentage of the total number of reportable accidents and incidents known to ICAO).

Efficiency

- a) Cost-effectiveness-1 : **Total operating cost plus cost of capital divided by the number of IFR flights;**
- b) Capacity-1 : **Average daily airport capacity for a group of thirty-five airports measured as a five-year moving average;**
- c) Efficiency-1 : **Estimated fuel savings (based on 2000 as baseline);**
- d) Efficiency-2 : **Number of PBN routes/number of APV approaches to runway ends;**
- e) Environment-1 : **CO2 burn;**

1.2 The meeting, under **Recommendation 6/1—Regional performance framework** called upon APIRG to adopt the performance-based framework for air navigation systems planning, identifying regional performance objectives and utilizing the performance framework forms (PFFs) and update CNS/ATM Implementation Plan for the AFI Region (Doc 003) with additional PFFs developed to meet new performance objectives as necessary

1.3 AFI sates were invited under **Recommendation 6/2—National performance framework** to adopt a national performance-based framework for air navigation systems planning, identifying national performance objectives, aligned with the regional performance objectives, utilizing the performance framework forms.

1.4 **Recommendation 6/3 — Re-organization of the regional air navigation plan** invited ICAO to review, at the global level and in coordination with regional offices, the regional air navigation plans and propose changes to their structure, organization and format to ensure alignment of the regional air navigation plans with the Global Air Navigation Plan and the performance-based approach to air navigation planning and therefore called upon APIRG under **Recommendation 6/4 — Re-organization of APIRG** to review its working methods and organization and consider making adjustments to better support the ICAO performance framework in its planning and implementation activities.

2. DISCUSSION

2.1 In consideration of the above deliberations of the AFI/RAN SP 8 meeting, APIRG/20 meeting Yamoussoukro, Cote d'Ivoire 30 November 02 December 2015 was reminded that a performance-based approach to planning of air navigation services and aviation safety offered an opportunity to strengthen a continent wide commitment to improving safety and efficiency, toward resolving deficiencies and addressing critical issues and that the objective should be to develop a comprehensive report which would contain a set of proposed work programmes based on performance objectives with measurable outcomes and metrics.

2.2 It was also recalled that the performance-based approach to planning stemmed from requirements associated with the results based environment that ICAO, industry and States had been steadily moving toward. Doc 9854 provides a clear statement of the expectations of the ATM Community. Eleven of these expectations, also referred to as key performance areas (KPA's), had been identified in the operational concept. To support this approach, the *Manual on Global Performance of the Air Navigation System* (Doc 9883) was developed. Doc 9883 provides a step-by-step approach to performance-based planning on the basis of the KPA's.

2.3 APIRG/20 meeting recognized the challenge faced by the Secretariat in collecting relevant information on the status of implementation of the elements supporting the adopted ASBU Block 0 modules, and called upon States to provide the required information on a regular basis, or as part of surveys conducted from time to time by the ICAO Regional Offices. The meeting requested the Secretariat to expedite the on-going work on the development of appropriate targets for ASBU Block 0 modules and regional performance objectives KPIs for adoption by APIRG. It also requested the APIRG Projects Coordination Committee (APCC) to oversee this important work aimed at establishing an effective AFI performance monitoring and reporting mechanism.

2.4 It was clarified that, in addition to the ASBU Block 0 modules, the work programme of the APIRG and its auxiliary bodies also includes the regional performance objectives which are reflected in the performance framework forms (PFFs) developed and amended from time to time by APIRG, cover areas such as:

2.5 RVSM Implementation

- ***PBN Implementation for en-route, terminal and approach operations***
- ***Enhancement of CNS Infrastructure***
- ***Search and Rescue,***
- ***Transition from AIS to AIM***
- ***Improvement of the provision of Meteorological Services***
- ***Improvement of Aerodrome Operations***

2.6 The implementation of ASBU Block 0 modules and agreed regional performance objectives should be addressed under the projects to be developed by the Group as identified by APIRG/20.

2.7 In consideration of the above the meeting discussed and approved a list of Air Navigation Services (ANS) Key Performance Indicators and Targets comprising operational and institutional targets at the national and regional levels. The list of AFI Air Navigation Services (ANS) Key Performance Indicators and Targets is attached at Appendix to this working Paper.

2.8 For the monitoring of these Performance Indicators and Targets the following drafts conclusions is proposed to the approval of the meeting:

Draft Conclusion IIM-E/XXXX: Monitoring of the AFI ANS Key Performance Indicators and Targets

That:

- a) In the framework of the project approach mechanisms and when implementing Air Navigation services States/Organization identify relevant indicators aligned with the performance objectives defined by APIRG;
- b) These indicators should serve as assessment tools used to measure the progress made to attain the performance objectives in the provision of air navigation service in the AFI Region.

Draft Conclusion IIM-E/XXXX: Collection of AFI ANS Key Performance Indicators

That:

- a) States endeavour to collect and report through the Air Navigation Reporting Forms (ANRFs) to the Secretariat of APIRG, the Key Performance Indicators as approved by APIRG/20.
- b) ICAO continue to support State assess the pace of attainment of the regional ANS Targets agreed by APIRG

3. ACTION BY THE MEETING

The Meeting is invited to:

- a) note the information provide in this Working Paper
- b) Align the identified IIM projects with the AFI regional performance objectives

AFI Air Navigation Services (ANS) Key Performance Indicators and Targets adopted by APIRG/20 Meeting

| Targets | 2016 | 2017 | 2018 | 2019 | 2020 |
|--|------|------|------|------|------|
| Operational Targets by 31 December 2020 | | | | | |
| 1. Reduce the number of loss of separation occurrences due to ANS infrastructure deficiencies by 50% | x | x | x | x | x |
| 2. Reduce the number of aircraft accidents related to ATM safety by 50% | x | x | x | x | x |
| 3. Reduce the number of uncoordinated flights by 50% | x | x | x | x | x |
| Institutional Targets 100% by 31 December 2018 | | | | | |
| <i>At national level</i> | | | | | |
| 4. Implement ICAO Aviation System Block Upgrades (ASBUs) | | | | | |



| Targets | 2016 | 2017 | 2018 | 2019 | 2020 |
|--|------|------|------|------|------|
| • Implement Priority ASBU Block-0 Modules by 2018 | x | x | x | | |
| • Establish and update national PBN plans by 2016 | x | | | | |
| • Implement all applicable elements of PBN by 2018 | X | X | X | | |
| • Implement Continuous Descent Operations/Continuous Climb Operations (CDO/CCO) by 2018 | X | X | X | | |
| 5. Reduce CO ₂ Emissions | | | | | |
| • Establish CO ₂ emissions reduction action plans by December 2016 | | | | | |
| • Implement mitigation measures | | | | | |
| 6. Assess and manage risks | | | | | |
| • Establish effective and operational Search and Rescue (SAR) organization by 31 December 2016 | X | | | | |
| • Establish aerodrome emergency plans | | | | | |
| • Establish wildlife management systems | X | X | X | X | X |
| • Establish ANS human resource management system | X | X | X | X | X |
| <i>At regional level</i> | | | | | |
| 7. Integrate ANS systems by 31 December 2018 | | | | | |
| • Implement digital ATS coordination | X | X | X | | |
| • Implement en-route data link applications | X | X | X | | |
| • Implement ANS Quality Management Systems (QMS) | X | X | X | | |
| 8. Increase harmonization between ANS operations and regulations by 31 December 2016 | | | | | |