

INTERNATIONAL CIVIL AVIATION ORGANIZATION

Western and Central African Office AFI Planning and Implementation Regional Group (APIRG) Communications, Navigation and Surveillance Sub-Group Fourth Meeting (CNS/SG/4)

(Dakar, Senegal, 25-29 July 2011)

(Presented by the Secretariat)

Agenda Item 7: AERONAUTICAL SURVEILLANCE

Review of the report on the Second Meeting of the AFI Aeronautical Surveillance Implementation Task Force AFI /ASI TF/2

(Presented by the Secretariat)

SUMMARY

This working paper presents the report on the second meeting of AFI Aeronautical Surveillance Implementation Task Force (AFI/ASI/TF/2) and outlines the outstanding Tasks needed to be done.

Action by the meeting is at paragraph 3.

References:

Reports on AFI RAN/6, 7 & Sp AFI/RAN /Meetings;

Reports on APIRG/16 & 17 Meetings

Report on the first meeting of the AFI Aeronautical Surveillance Implementation Task Force

Report on the second meeting of the AFI Aeronautical Surveillance Implementation Task Force

Report on the second meeting of the AFI Regional Aeronautical Surveillance Workshop

ICAO Annex 10 —Volume III-Communication Systems & IV— Surveillance and Collision Avoidance Systems

ICAO Doc 9924 — Aeronautical Surveillance Manual;

ICAO Doc 9684 — Manual of the Secondary Surveillance Radar (SSR) Systems

ICAO Doc 9688 — Manual on Mode S Specific Services

Note: AFI References can be downloaded from www.icao.int/wacaf.

Related ICAO Strategic Objective A: *Safety* and C: *Environmental Protection and Sustainable* Development of Air Transport.

1. INTRODUCTION

1.1 The second meeting of the AFI Aeronautical Surveillance Implementation Task Force (AFI/ASI/TF/2) established by APIRG/16 (Conclusion 16/27) was held in the Conference Room of the Agence pour la Securite de la Navigation Aerienne en Afrique et à Madagascar (ASECNA) Dakar, Senegal from, from 22 to 24 June 2011. The meeting was attended by 28 participants from thirtenn (13) Contracting States, two (02) Air Navigation Service Providers (ASECNA acting behalf AFI 17 Contracting States & ATNS) a representative of airlines (IATA)

and two Aeronautical Surveillance facilities manufacturers/Vendors, namely Thales and Selex respectively from France and Italy.

1.2 The meeting nominated Mr. **Carel Gersbach from ATNS**, South Africa as the Chairperson and Rapporteur of the Task Force.

2. DISCUSSION

- 2.1 The second meeting of AFI Aeronautical Surveillance Implementation Task Force was preceded by a regional Aeronautical Surveillance Workshop which took place from 20 to 21st June 2011. The meeting considered the Terms of Reference of AFI ASI/TF, the status of implementation of the conclusions of AFI ASI/TF/1, the relevant activities of ICAO Aeronautical Surveillance Panel.
- 2.2 The meeting reviewed the status of implementation of CNSG/3 and APIRG/17 Conclusions pertaining to Aeronautical surveillance, endorsed the report on the AFI second regional Workshop on Aeronautical Surveillance and updated the draft strategy and the implementation plan of AFI Aeronautical Surveillance. The meeting drafted 07, Conclusions and 04 decisions as summarized in **Appendix A**; the entire report can be downloaded from WACAF and ESAF Websites.
- 2.3 Based on this the meeting accordingly updated the Future workprogramme of the Task Force as presented in Appendix B.

Appendix C is the draft AFI Surveillance plan proposed by the meeting.

The TMAs and Aerodromes data needed for their categorization are always missing; a very limited numbers of States have forwarded the required data to the Team Leaders (Seychelles for en route surveillance operation, ASECNA for Terminal Area).

The meeting urged States to complete the data collection by nominating contact person tasked to collect the data in the frame of the template presented in **Appendix D**.

3. ACTION TO BE TAKEN BY THE MEETING

The meeting is invited to:

- a) Take note of the above information.
- b) Comment and amend as necessary Appendixes A, B, C and D
- c) Set a deadline for the traffic data collection in order to finalize the AFI Aeronautical Surveillance Strategy for submission to APIRG/18.

APPENDIX A

Summary of Conclusions and Decisions the Second Meeting of the AFI Aeronautical Surveillance Implementation Task Force

The following conclusions and decisions were formulated by the second meeting of AFI ASI/ Task Force:

Agenda Item 1: Review of the Terms of Reference of AFI ASI/TF and election of Rapporteur for the Task Force

NIL: ToRs confirmed by the meeting with no proposal for change

Agenda Item 2: Review of the status of implementation of the conclusions of AFI ASI/TF/1

Conclusion 2/1: Collection of traffic data

That States/Organizations should provide the required traffic data to the Team Leaders (ASECNA and Seychelles) as per States letters no later than 15 July 2011.

Decision 2/2: Nomination of Contact persons

That States/Organizations provide as a matter of urgency the Team Leaders (ASECNA and Seychelles) and ICAO regional Offices (WACAF & ESAF) with the detailed information on their contact person (Address, E-Mail, Phone, Fax...) who will coordinate the traffic data collection.

Agenda Item 3: Review of the relevant activities of ICAO Aeronautical Surveillance Panel

Conclusion 2/3: Participation to the Global Air Navigation Technology Forum (GANTF)

That, AFI States/Organizations should endeavor to participate and /or contribute to the GANTF in September 2011 and develop relevant submissions to be presented to the 12th Air Navigation Conference.

Agenda Item 4: Review of CNSG/3 and APIRG/17 Conclusions pertaining to Aeronautical surveillance

Decision 2/4: States ADS-C Performance data collection

That States should start collecting ADS-C Performance data in anticipation of IATA future survey.

Conclusion 2/5: Establishment of a Surveillance Performance data assessment

Working Group.

That a Surveillance performance data assessment Working Group be established in order to analyze the performance of surveillance systems and propose corrective actions aiming to reinforce the Quality of Service.

Conclusion 2/6: Inclusion of ADS-C Performance data collection in IATA surveys
That IATA should include ADS-C performances data collection into his future AFI
CNS systems surveys

Agenda Item 5: Report on the AFI Aeronautical Surveillance Workshop

Decision 2/7: Adoption of the Report of the AFI Regional Surveillance Workshop

That the AFI Regional Surveillance Workshop report is adopted with its conclusions attached in Appendix B.

Agenda Item 6: Updating the draft strategy and the implementation plan of AFI Aeronautical Surveillance

Conclusion 2/8: Surveillance data distribution and exchange

That AFI States/Organizations, develop and harmonize scheme for aeronautical surveillance data distribution and exchange in order to ensure surveillance systems interconnection and interoperability within AFI region and between AFI region and it ICAO neighboring Regions.

Decision 2/9: ASI/TF Basic Documentation review

That the secretariat circulate the existing documentation (draft strategy, Data sharing agreement, Data exchange Format) to members with feedback prior to submission to the CNS /SG on 15Th July 2011.

Conclusion 2/10: Trials on Surveillance Systems

That in order to ensure interoperability and interconnection of surveillance systems Sates /Organization should conduct trials based on Memorandum of Understanding (MoU) and share the results for the update of AFI Surveillance Plan.

Agenda Item 7: Review of the Term of Reference and Future Work Programme of AFI ASI/TF

Agreed future activities and target dates

Agenda Item 8: Any other business

Conclusion 2/11: Regular fleet equipage review

That regular fleet equipage questionnaire should be completed to ensure informed implementation Decision making

APPENDIX B

Terms of Reference, Composition and Work Programme of AFI Aeronautical Surveillance Implementation Task Force

Term of Reference

The AFI Aeronautical Surveillance terms of reference are to:

- 1. Determine the operational performance requirements for aeronautical surveillance in the AFI Region, en-route, terminal areas (TMAs) and aerodromes operations.
- 2. Identify and quantify near term and long term benefits of relevant candidate surveillance systems.
- 3. Develop a draft AFI Surveillance plan including recommended target dates of implementation, taking into account:
- Availability of SARPs,
- Readiness of airspace users and air navigation service providers
- Relevant RAN and APIRG recommendations, conclusion and decisions pertaining to aeronautical surveillance.
- Work done by ICAO Surveillance Panel with the view to avoiding any duplication

Note: The Task Force should report to the next APIRG meeting with preliminary report to the ATS/AIS/SAR and CNS sub groups.

Composition

Core members: ATNS (South Africa), ASECNA, IATA, Algeria, Ghana, Kenya, Nigeria, Rwanda, Tanzania and IFALPA.

States with large oceanic FIRs interface with other ICAO Regions and large continental coverage to be added to the composition as core members. (Democratic Republic of Congo, Mauritius and Seychelles)

Working Groups:

Working Group for the development of the AFI ENROUTE Surveillance strategy

- Seychelles (Team Leader)
- South Africa
- Nigeria
- Ghana
- DRC
- IATA
- Mauritius
- Angola

Working Group for the development of the AFI TERMINAL AREA Surveillance strategy $% \left(1\right) =\left(1\right) \left(1\right)$

- ASECNA (Team Leader)
- Zambia
- South Africa
- IATA
- Tanzania

Future Work Programme

No.	Activity	Detailed requirements	Target dates	
1.		Review the draft strategy	CNS SG4, ATS/AIS/SAR SG	
2.		Complete table of TMAs, aerodromes and en routes movement statistics Considere data distribution format (Asterix)	All submission to be forwarded to ICAO WACAF & ESAF Offices no later than 15 July 2011	
		 Draft guidelines for data exchange agreement taking into consideration the current models in other regions 		
3.		Review and align with new ICAO Standards and guidance when development	On-going	
4.		Finalize the surveillance data distribution format	After CNS SG4	
5.		Draft updated implementation Plan	Task Force to report to APIRG/18	
6.		Update Doc. 003 and CNS Table 4A&B in FASID	On-going	

APPENDIX D

Basic Documentation for AFI Aeronautical Surveillance Implementation: *Draft data collection template*AFI Surveillance data Collection Template

A -Airspace configuration

UTA: Name (FLXXX-UNL) Sizes: xxx Class: xxx
TMAs: Name (FL YYY-FLZZZ) Size: xxx Class: xxx Number of civil and military airports within the TMA: Total annual number of movements at each type of airport: Vertical and lateral limits of the TMA: IFR and VFR traffic numbers: Restricted, prohibited and danger areas: Location & Size xxx:

B: Aerodrome data

Name of Aerodrome	Passengers embarked		Passengers disembarked		freight		Aicrafts movement	
	International	Domestic	International	Domestic	International	Domestic	International	Domestic

- Total annual number of movements for each of the following types of:.....
- Traffic: commercial, military and general aviation:.....
- IFR and VFR traffic numbers:.....