INTERNATIONAL CIVIL AVIATION ORGANIZATION

AFI PLANNING AND IMPLEMENTATION REGIONAL GROUP
TWENTEENTH MEETING (APIRG/20)
Yamoussoukro, Cote d'Ivoire (27 November – 2nd December 2015)

Agenda Item 2: Performance Framework for Regional Air Navigation Planning and Implementation

2.4 Communications, Navigation and Surveillance (CNS)

AERONAUTICAL SURVEILLANCE SYSTEMS

(Presented by the Secretariat)

SUMMARY	
This working paper presents the report of the Sixth Meeting of APIRG Communications, Navigation and Surveillance Sub-group (CNS/SG/6, Dakar, Senegal, 18-22 May 2015) on Surveillance Systems for consideration by APIRG/20.	
Action by the meeting is at **paragraph 3.**	
REFERENCES : ▪ ICAO SP AFI RAN 2008, Report (Doc 9930) ▪ APIRG/19 Report ▪ APIRG Extraordinary Report ▪ CNS/SG/6 Report	
Strategic Objective(s)	This working paper related to the Strategic Objectives **A and *B.*** Related to **ICAO ASBU Performance Improvement Areas and Block0 Modules**: **PIA2 (*B0-FICE*); PIA3 (*B0-FRTO, B0-NOPS, B0-ASEP, B0-OPF*); PIA4 (*B0-CDO, B0-CCO*).**

1. INTRODUCTION

1.1 The Sixth Meeting of the APIRG Communications, Navigation and Surveillance Sub-group (CNS/SG/6) was held in Dakar, Senegal from 18 to 22 May 2015. It was attended by fifty two (52) participants from Seventeen (17) Contracting States, three international organizations namely AFCAC, ASECNA and the Roberts FIR.

1.2 This working paper presents the report of the APIRG Communications on Aeronautical Surveillance systems.

2. DISCUSSION

2.1 The CNS/SG/6 meeting reviewed the status of implementation of Aeronautical Surveillance systems and noted the progress made by AFI States in this field.

2.2 Based on SSR Mode S data made available to the meeting, the Sub-group reviewed the status of the radar coverage in the western part of the AFI Region. Accordingly, the meeting recognized the need to enhance surveillance coverage to support efficient and effective provision of Air Traffic Management in this area. The following draft conclusion was formulated:

DRAFT CONCLUSION 20/XX: INTERCONNECTION OF SURVEILLANCE SYSTEMS

That;

States/Organizations endeavor to interconnect their surveillance systems in order to increase surveillance capability along the Area of Routing and provide seamless surveillance service.

2.3 The Secretariat informed the meeting on the ongoing implementation of SSR Mode S stations in the AFI Region and underlined difficulties encountered to assign SSR Mode S Interrogator Identifier (II) Codes due to lack of coordinates of SSR Mode S stations. The meeting was informed on the ongoing development by ICAO of the software aiming to facilitating the automation of this assignment.

2.4 In order to prevent conflicts in SSR Mode S operation in the overlapping coverage airspaces SSR Mode S II codes assignment needs to be coordinated in a regional level.
The following draft conclusion was formulated:

DRAFT CONCLUSION 20/XX: ASSIGNMENT OF SSR MODE S INTERROGATOR IDENTIFIER (II) CODES

That;

In order to prevent conflicts in SSR Mode S operation in the overlapping coverage airspaces:

1) **Administrations/Organizations send to the Secretariat, not later than 31/12/2015, the coordinates of their SSR Mode S stations and refer to their respective accredited ICAO Regional Office for the assignment of SSR Mode S Interrogator Identifier (II) code; and**
2) **ICAO finalize the data base and the software for SSR Mode S Interrogator Identifier (II) code assignment.**

2.5 The meeting also applauded the draft AFI II code assignment planning criteria presented by the Secretariat and it was agreed that this draft should be finalized and completed by a regional procedure for the assignment of II code and submitted to APIRG/20 for approval. The draft AFI II code assignment Criteria and the AFI Assignment Manual are presented at **Appendices 1 & 2** to this working Paper. The following draft conclusion was formulated:

DRAFT CONCLUSION 20/XX: AFI INTERROGATOR IDENTIFIER (II) CODE ASSIGNEMENT PLANNING CRITERIA AND PROCEDURE

That;
The draft AFI II code planning criteria and procedures be finalized by the Secretariat and submitted to APIRG/20 for adoption.

2.6 In order to apply the planning criteria at a Regional level, these needs to be incorporated in the Regional Air Navigation Plan. This can be done along the following lines:

a) In the AFI Regional Air Navigation Plan (FASID), the section addressing Aeronautical Surveillance (re. Doc 7474, first edition, 2001, Part IV) the section on aeronautical surveillance may be amended to include the following provisions:

A1 The principles and criteria to be used for the international coordination and assignment of SSR Mode S II-codes are in **Appendix YY** (Appendix to Part IV of Doc 7474, Volume II).

A2 Include in a (new) **Appendix YY** the complete planning criteria for II codes as in the Appendix to this paper).

A3 The internationally agreed SSR Mode S II code assignments should be published separately from the FASD for the AFI Region. One way is to publish them through a relevant ICAO website in the format of the table of internationally agreed SSR Mode S II-codes.

3. CONCLUSION

3.1 The meeting is invited to:

a) Note the information presented in this working paper;

b) Review and adopt the draft AFI II Code Assignment planning criteria and procedure attached to this working paper; and

c) Urge States to provide the Secretariat with the surveillance data including the coordinates (WGS84) of the Mode S SSR stations for the assignment of II codes.

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