

#### INTERNATIONAL CIVIL AVIATION ORGANIZATION

# Twenty-Second Meeting of the AFI Planning and Implementation Regional Group (APIRG/23)

(Virtual, 24 – 26 November 2020)

## Agenda Item 4: APIRG Air Navigation Report 2019/2020

### Development of APIRG Air Navigation Report 2019/2020 - Progress Report

(Presented by the Secretariat)

SUMMARY				
This working paper presents work in progress on the development of the APIRG Air Navigation Report 2019/2020, and the need for closer coordination of the Annual Reporting of the AFI Region.				
The Meeting is invited to take action at Paragraph 3.				
Strategic Objectives	This paper is related to all ICAO Strategic Objectives.			

#### 1. INTRODUCTION

- 1.1 A consolidated annual report on the progress and outcomes of the APIRG and RASG-AFI activities, as well as progress made in the regional implementation of GANP and GASP covering the previous year is to be presented to the Air Navigation Commission (ANC) and Council. The annual report not only focuses on the outcomes of APIRG and RASG-AFI meetings, but also on the regional safety and air navigation implementation progress and challenges.
- 1.2 In addition to the APIRG and RASG-AFI meeting reports, the RASG-AFI publishes a separate annual report on progress made in the implementation of GASP goals ad targets and regional safety priorities; and the APIRG has also initiated the publication of a separate annual report on progress made in the implementation of the ANP and GANP requirements, as well as regional air navigation targets and priorities.
- 1.3 This paper informs the meeting on the work in progress for the development of the APIRG Air Navigation Report for 2019/2020.

#### 2. DISCUSSION

2.1 The RASG-AFI Annual Safety Report Team (ASRT) was established by the RASG-AFI Steering Committee (RASC) in 2014 and assigned the task of producing annual safety reports on the RASG-AFI Region. The Team comprises representatives from IATA, ICAO, AFCAC, BOEING and AIRBUS. The RASG-AFI has been consistent in publishing a separate Annual Safety Report since 2014, through its Annual Safety Report Team (ASRT).

- 2.2 Similarly, the APIRG established an Annual Air Navigation Reporting Team (AANRT) tasked with developing the APIRG Annual Air Navigation Report based on available information, including the Air Navigation Deficiency Database, global/regional reports, survey results, studies, gap analyses, traffic forecast data, etc.
- 2.3 The core membership of the AANRT includes ASECNA, ATNS, AIRBUS, IATA, and CANSO, supported by the Chairperson, Vice-Chairpersons, the Secretariat of the APIRG, and representatives from States and relevant stakeholders, such air navigation service providers, airspace users, aircraft manufacturers, professional organizations, monitoring agencies, international/regional organizations, etc.
- Currently, the APIRG AANRT is in the process of developing an AFI Air Navigation Report for 2019/2020 based on the comprehensive information contained in the Consolidated Annual Report to Council on PIRGs and RASGs activities for 2019/2020 (AN-WP8416 refers) as shown in **Appendix A** to this working paper. The content is being complemented with the information contained in the RASG-AFI 2019 Annual Safety Report on common areas (WP07 refers), as well as the information provided by States and Industry on global/regional air navigation developments in 2019/2020, despite the challenges associated with the COVID-19 crisis.
- 2.5 **Appendix B** provides an outline of the draft APIRG Air Navigation Report 2019/2020, showing the proposed air navigation areas to be addressed, the coordinators and expected contributors.
- 2.6 The meeting may also wish to invite States and Organizations wishing to provide their contributions to the APIRG Air Navigation Report 2019/2020 to submit them to the Secretariat by 31 December 2020.
- 2.7 In this exercise, the AANRT would benefit from the experience gained by the RASG-AFI ASRT in the development of annual safety report. This will avoid duplication of efforts by optimizing the available resources while ensuring consistency of the information and data collected and published on APIRG/RASG-AFI common areas. In doing so, the release of the AFI Annual Air Navigation Report 2019/2020 during the first Quarter of 2021.

#### 3. CONCLUSION

- 3.1 The meeting is invited to:
  - 1) Note the on-going development of APIRG Air Navigation Report 2019/2020 for publication in the first quarter of 2021;
  - 2) Note the need for States and Organizations to form part of the core membership of the AANRT (ASECNA, ATNS, AIRBUS, IATA, and CANSO) and nominate representatives to the draft team,
  - 3) Urge States and Organizations wishing to provide their contributions to the APIRG Air Navigation Report 2019/2020 to submit them to the Secretariat by 31 December 2020; and
  - 4) Request the APIRG AANRT to coordinate its work with the RASG-AFI ASRT to ensure consistency of information and data to be provided on common areas.

## APPENDIX A

REPORT ITEM	APIRG			
Regional action plan for GANP/GASP implementation	<ul> <li>Assisted States with planning and implementation related to global and regional plans and priorities, including the Global Air Navigation Plan (GANP), Aviation System Block Upgrades (ASBUs) and the APIRG identified regional priorities including the Regional ATM Contingency Plan.</li> <li>Reviewed States' progress and proposed actions.</li> </ul>			
	<ul> <li>a) User preferred routing, implementation of Free Routing Airspace in the AFI region; improved implementation of PBN CCO/CDO routes;</li> <li>b) Improved implementation of national SAR programmes/plans;</li> <li>c) Elimination of duplicated 5-LNCs and the harmonization of the State AIPs and</li> <li>d) Reduction of ATS incidents and AIRPROX.</li> <li>e) Improvement of safety in RVSM airspace.</li> </ul>			
	AIM:  a) Implementation of QMS in AIS b) Transition from AIS to AIM			
	AGA: a) 32 AFI International Aerodromes certified.			
Key PIRG/RASG	GENERAL:			
Achievements in 2019	<ul> <li>a) Developed the AFI Regional ATM Contingency Plan and harmonization of national Contingency Plans with the Regional Plan.</li> <li>b) Developed 30 new PBN routes in preference to existing conventional routes resulting in reduction distance of 1,844.7 NM, fuel savings of 9,123 Kgs, and carbon savings of 28,660 Kgs.</li> <li>c) Reviewed the AFI regional route network and coordinated the implementation of all pending approved routes.</li> <li>d) Trained 24 technical officers from 7 states and 2 international organizations on the management of the ICARD and reviewed the duplicated 5 Letter Naming Codes (5-LNC) for the AFI states.</li> <li>e) Reviewed the AFI SSR Code management plan and updated the Doc 7474.</li> <li>f) 103 technical staff from the States participated and were trained on the understanding of CCO/CDO: giving guidance with regards to PBN and CCO/CDO provisions in the AFI Air Navigation Plan;</li> <li>g) Coordinated inter-regional Search and Rescue (SAR) workshop with MID region; developed coordination procedures for SAR inter-region activities.</li> <li>h) Conducted technical missions to the following states to assist in the determination of the gap analysis in SAR and the development of the SAR plans: Liberia, Carbo Verde, Cote d'Ivoire, Equatorial Guinea and Niger.</li> <li>i) Reviewed and updated the minimum Reporting Areas for the management of the AFI</li> </ul>			
	<ul> <li>ANS Deficiency database.</li> <li>j) Coordinated a special ATM coordination meeting between the Eastern African states to address the high level of coordination failures reported in horn of Africa region.</li> <li>k) Coordination with EUR NAT and SAM regions for ATS improvements and flight level optimization in the high seas over the Atlantic Ocean;</li> <li>l) Coordinated PBCS implementation activities including adoption of RCP 240/ RSP 180 and expanded the functions of the ARMA to include PBCS monitoring.</li> </ul>			

REPORT ITEM	APIRG		
	m) Coordinated with ARMA to obtain the relevant data for conducting RSVM airspace Collision Risk Assessment/13.		
	<ul> <li>CNS:</li> <li>a) Completed upgrade of NAFISAT and SADC VSAT2 networks and most of missing flights resoled</li> <li>b) Improved interoperability between AFI VSAT networks</li> <li>c) Readiness of the networks to support the new added services (IP based Space Based ADS-B data and AIM system).</li> <li>d) ICAO GNSS Policy, AFI GNSS strategy and SBAS implementation criteria highlighted and Terms of Reference (ToRs) of the CBA related to the implementation of the GNSS/SBAS project in Africa developed</li> <li>e) ICAO Position for the ITU WRC-19 promoted as result all ICAO issues and concerns addressed and dealt with successfully.</li> <li>f) Implementation of AMHS and ADS-C/CPDLC increased</li> <li>g) Workshop on Cyber Safety and Resilience for Air Navigation Systems organized and as result participants recognized that cybersecurity encompasses cyber safety and resilience</li> <li>AIM:</li> <li>a) 76 participants from 21 ICAO Contracting States, and 5 International Aviation Organizations were trained on the importance of timely and quality of aeronautical information data; participants identified and resolved to eliminate the common AIM</li> </ul>		
	AGA:  a) Coordination and continuous assistance to 5 States/airports (Burkina Faso, Bénin, Congo, Cameroun and Equatorial Guinea) for aerodromes certification in the AFI Plan framework  b) Conduct 2 Regional workshop on aerodrome certification and USOAP-CMA tools (Brazzaville and Ouagadougou)  c) Conduct of 2 workshops (Dakar and Accra) and assistance to States for the implementation of the GRF  d) Coordination of 4 APEX reviews (Conakry, Monrovia, Praia and Sal)  e) Technical assistance mission to 6 States  f) Continuous support to APIRG and its Sub Groups activities  g) Coordination and support to Regional Projects (PASTACO, China funded project for Congo)  h) Support the ICAO-WHO CAPSCA training in Johannesburg (South Africa)  i) Conduct of a CAPSCA assistance visit to Senegal  j) Monitoring of the ongoing Ebola outbreak in DRC  k) Conducted Aerodrome Certification incorporating PANS-Aerodromes Workshop for East and Southern African Region in Lusaka Zambia.  l) Conducted two Global Format for Reporting of Runway Surface Conditions (GRF) Workshops in Nairobi and Johannesburg for East and Southern African Region.  m) Conducted technical assistance mission to Seychelles to assist in certification of Aerodromes.  n) Conducted APEX Assistance mission to Malawi together with ACI  o) Conducted Runway Safety Team Assistance mission to Botswana together with ACI and IATA		

REPORT ITEM	APIRG		
Specific challenges faced by PIRGs/RASGs and States, for the regional implementation of SARPs and PANS	<ul> <li>METEOROLOGY: <ul> <li>a) Updated regional guidance material providing responsibilities and procedures to be followed for OPMET data exchange as well as guidance for the procedures and formats related to the preparation and issuance of SIGMETs.</li> <li>b) Coordinated and conducted an annual testing activity conducted to assist States in the preparation and issuance of SIGMET information</li> </ul> </li> <li>To improve States response to SLs</li> <li>To improve Active participation by States in ICAO Regional meetings and related APIRG programmes.</li> <li>To Improve coordination amongst States in areas of SAR</li> <li>Improve the level of implementation for ATS Inter-facility Data Communications (AIDC), Automatic Dependent surveillance- Broadcast (ADS-B) and Controller-pilot data link communications (CPDLC)</li> <li>Improve understanding of ATFM and A-CDM concepts</li> <li>Implement the agreed strategy to resolve the deficiencies related to: aeronautical cartography, eTOD, Quality Management System (QMS), Data inter-operability, etc.</li> <li>Improve States developments of National SAR Plans</li> <li>Improve the implementation of the transition from AIS to AIM (eTOD, eAIP, AIXM, etc.)</li> <li>Improve the Technical capacity of the ANS regulatory staff.</li> <li>Lack of resources and availability of experts for supporting projects activities</li> <li>Improvement in participation of State experts in Aerodrome Operations projects especially in RFFS and Aerodrome Data.</li> <li>Increased number of Aerodrome Certified under AFI Plan Aerodrome Certification project</li> </ul>		
Associated recommendati ons and actions taken regarding above	<ul> <li>Safety issues directly related to flight operations</li> <li>Accidents and Incidents Analysis</li> <li>Remotely Piloted Aircraft Systems (RPAS)</li> <li>Cyber-Threats and ANS Resilience</li> <li>Regional Safety Oversight Organizations (RSOOs)</li> <li>SMS implementation</li> <li>Runway Safety</li> <li>Unsatisfactory Condition Reports (UCRs)</li> </ul>		
	<ul> <li>RVSM airspace safety</li> <li>Airspace contingencies</li> <li>Public Health Emergencies</li> </ul>		

# APPENDIX B

# **APIRG Air Navigation Report – 2019/2020**

1. Executive Summary	Coordinators/ Focal Points	States & Organizations
1.1. Objective	RDs and DRDs	Organizations
1.2. Background		
1.3. Scope		
1.4. Organizational Structure of the APIRG		
1.5. Traffic Overview		
1.6. Structure of the Report		
2. Regional Targets and Achievements	1	
2.1. Aerodromes and Ground Aids (AGA)	ROs AGA	AFCAC
2.2. Air Traffic Management (ATM) and Performance-	ROs ATM/SAR	
Based Navigation (PBN)		
2.3. Communications, Navigation and Surveillance (CNS)	ROs CNS	
2.4. Aeronautical Information Management (AIM)	ROs CNS	
2.5. Aeronautical Meteorology (MET)	ROs MET	
2.6. Search and Rescue (SAR)	ROs ATM/SAR	
3. Regional Air Navigation Priorities		
3.1. Performance – Based Navigation (PBN)	AFPP	IATA, CANSO,
3.2. ASBU Block 0 Modules Categorization and	All ROs	ACI, ARMA, States, ANSPs
Prioritization	All ROs	
3.3. ASBU Implementation Status	ROs ATM/SAR	
3.4. RVSM Airspace Safety Monitoring	res ministra	
4. Environmental Protection		
4.1. Developments related to Environmental Protection	RO ENV	States
4.2. States' Action Plan on CO <sub>2</sub> Emission Reduction	RO ENV	
5. Coordination and Cooperation		
5.1. Interregional Coordination	RDs & DRDs	
5.2. Coordination between APIRG and RASG-AFI	RDs & DRDs	
5.3. Air Navigation Services Providers Peer Review	ROs CNS/ATM	ANSPs, CANSO
Programme		,
6. Industry Initiatives		
6.1. Air Navigation Services Providers	ROs ATM/SAR	ANSPs, IATA,
6.2. Airspace Users		CANSO
6.3. Airport Operators	ROs ATM/SAR	AFRAA, IATA
6.4. Aircraft Manufacturers	ROs AGA	ACI
	ROs FS	AIRBUS & BOEING
7. Challenges and Opportunities	All ROs	
8. Recommendations	All ROs	
Appendices		