



INTERNATIONAL CIVIL AVIATION ORGANIZATION

Meeting of the 1st APIRG Infrastructure and Information Management Sub-Group (IIM/SG)
(Nairobi, Kenya, 27 to 30 June 2017)

Agenda Item 5: Identification of the linkage between AFI IIM Projects
5.3: CNS-AIM-MET-ATM projects links

(Presented by the Secretariat)

SUMMARY

This paper presents an over view of factors leading to the establishment of the APIRG Infrastructure and Information Management Sub-Group (IIM/SG) and associated projects. It also provides the linkage between CNS,AIM,MET and ATM Projects.

Action by the meeting is at **paragraph 3.**

REFERENCES

- GANP 4th edition
- APIRG/20 Report
- APCC/1 Report

This Working Paper is related to Strategic Objective: **A**

1. Introduction

- 1.1 The alignment of the Regional Air Navigation System Implementation Plan with the ASBU Methodology was discussed in the APIRG/19 Meeting, held in Dakar, Senegal from 28 to 31 October 2013. In considering the implications for APIRG under the new ICAO Global Air Navigation Plan (GANP) and being mindful of the outcome of the SP AFI/08 RAN Meeting, APIRG/19 decided, amongst others, to review its working methods and organization using project management principles and other methodologies as and when necessary, and consider making adjustments to better support the ICAO performance framework in its planning and implementation activities aligned with the aviation system Upgrades.
- 1.2 In its 20th meeting, APIRG adopted a new structure comprising two groups, namely; the Airspace and Aerodrome Operations Sub-Group (AAO/SG) and the Infrastructure and Information Sub-Group (IIM/SG). The AAO/SG comprises ATM and AGA technical Areas whereas the IIM/SG comprises MET, AIM and CNS technical areas.

Discussion

- 2.1 Through APIRG Conclusion 20/49, the set of projects identified by previous APIRG sub groups including AOP and ATM were adopted and made applicable to the AAO and IIM Sub-Groups by the APIRG Projects and Coordination Committee in its first meeting held in Nairobi from 30-31 January 2017 which also formally dissolved the previous sub-groups through its Decision 1/01.
- 2.2 The APIRG Projects Coordination Committee (APCC), in its first meeting held in Nairobi, Kenya from 30 to 31 January, directed that the APIRG Sub-groups should establish linkage between Projects to be undertaken by the Sub-groups to enhance coordination, eliminate duplication and create synergies.
- 2.3 In response to the APCC directive, this working paper attempts to establish linkages that may exist between projects under IIM Sub-Group and those of ATM under the AAO sub-Group.
- 2.4 All Projects identified are listed in **attachment 1** to this working paper as well as the linkage between APIRG projects under the two APIRG sub –groups.

Action by the Meeting

- 3.1 The meeting is invited to:
 - a) Note the information provided in this working paper;
 - b) Review the Linkage between projects to be undertaken by the APIRG sub-groups.

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APPENDIX IIM PROJECTS

AIM₊ –Projects

1. AIM₁ -Assessment and development of QMS applied to AIM in AFI States
2. AIM₂ -Implementation of Aeronautical Information Exchange Systems (AIXM)
3. AIM₃ -Implementation of the provision of electronic terrain and obstacle data (e-TOD) (in the AFI Region)

CNS –Projects

1. Identification of development of CNS-Communications projects
 - a. CNS_{1a}-G/G coordination
 - b. CNS_{1b}-Aeronautical and MET data flow
 - c. CNS_{1c}-Air/Ground Communication
 - d. CNS_{1d} - Maintain an acceptable QoS
2. Navigation and others
 - a. CNS_{2a}- Effective implementation of Aeronautical radio navigation Systems
 - b. CNS_{2b}.Protection of Aeronautical spectrum
 - c. CNS_{2c}.CNS Data collection
 - d. CNS_{2d}.Security of CNS Infrastructures
 - e. CNS_{2e}-Contingency and backup
3. Surveillance
 - a. CNS_{3a}- Implementation of Surveillance systems
 - b. CNS_{3b} -Interconnection/ Interoperability of surveillance system
 - c. CNS_{3c} -Establishment of Surveillance Requirements and Optimization Parameters

MET –Projects

1. MET₁. Implementation of information concerning en-route weather phenomena which may affect the safety of aircraft operations (SIGMET), Quality Management System for aeronautical meteorology (QMS/MET) service, in the AFI Region
2. MET₂. Implementation of Terminal Area Warnings and Forecasts, Provision of WAFS Forecasts and Optimization of OPMET data exchanges in the AFI Region.

~~ATM~~—ATM—Projects

1. ATM₁ PBN Airspace Concept (Airspace Design)
2. ATM₂ AFI Optimized Route Trajectories and Airspace (AORTA)
3. ATM₃ AFI SSR Code Allocation and Assignment Review (ASCAA)
4. ATM₄ ATS Competency Study
5. ATM₅ Contingency Planning and Operational Coordination (CPOC)
6. ATM₆ Assistance on State Safety Programme Implementation (ASSPI)
7. ATM₇ Operational Requirements for CNS (OPREC)
8. ATM₈ NAVSPEC and Separation Minima Transition (NASMIT)
9. ATM₉ Civil/Military Cooperation & FUA Seminar/Workshops
10. ATM₁₀ RVSM & Operational Safety in ATS

	AIM1	AIM2	AIM3	CNS1a	CNS1B	CNS1C	CNS1D	CNS2a	CNS2B	CNS2C	CNS2D	CNS2E	CNS3a	CNS3b	CNS3c	CNS3d	MET1	MET2	ATM1	ATM2	ATM3	ATM4	ATM5	ATM6	ATM7	ATM8	ATM9	ATM10	
AIM ₁																													
AIM ₂																													
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CNS _{3a}																													
CNS _{3b}																													
CNS _{3c}																													
MET ₁		X			X	X							X	X	X				X	X			X	X			X	X	
MET ₂	X	X			X	X			X				X	X	X				X	X			X	X			X	X	
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AIM/MET and CNS/MET Project are described in WPs/17 and 18.

- ATM1/MET Project:** will use all MET forecasts (significant weather forecasts (SIGMET), high level forecasts of wind and temperatures, aerodrome forecasts (TAF), etc..for PBN implementation.
- ATM2/MET Project:** will address flexible routes by using significant weather forecasts (SIGMET) and high level forecasts of wind and temperatures.
- ATM5/MET Project:** will address volcanic ash contingency planning and other MET related contingencies.
- ATM6/MET Project:** will address MET related SSP implementation
- ATM9/MET Project:** will address ATM/MET coordination issues
- ATM10/MET Project:** will address MET related RVSM implementation