



INTERNATIONAL CIVIL AVIATION ORGANIZATION

**SECOND MEETING OF THE APIRG COMMUNICATIONS, NAVIGATION AND
SURVEILLANCE SUB-GROUP (CNS/SG/2)**

(Dakar, 22-25 May 2007)

Agenda Item 10: Any other business**DEVELOPMENT OF REGIONAL PERFORMANCE OBJECTIVES IN THE CNS FIELD***(Presented by the Secretariat)*

Summary
This paper addresses the development of regional performance objectives in implementing the Global Plan Initiatives (GPIs) as described in ICAO Doc 9750 (second amendment).
Action by the meeting is at paragraph 3.
Reference: -ALLPIRG/5 Report

1. Introduction

1.1 The Meeting will recall that, in 1998, the Council accepted the Global Air Navigation Plan for communications, navigation, and surveillance/air traffic management (CNS/ATM) Systems (Doc 9750, Global Plan), which was followed by the first amendment in 2001. In light of the Eleventh Air Navigation Conference (AN-Conf/11) in 2003 and the sixth meeting of the Air Navigation Commission Consultation with Industry in May 2004, the second amendment to the Global Plan was prepared in January 2006.

1.2 Among other issues, the second amendment of the Global Air Navigation Plan notably addresses the work associated with achieving a global ATM system; the Global Plan Initiatives (GPIs); the performance-based approach to measuring success with implementation; and the process of carrying out regional integration and transition.

2. Discussion

2.1 The fifth meeting of the ALLPIRG/Advisory Group (ALLPIRG/5) was held at ICAO Headquarters in Montreal from 23 to 24 March 2006. When discussing issues related to the Global Plan under its Agenda Item 2, ALLPIRG/5 noted that for effective planning and implementation of GPIs, the Secretariat would reviewing the data presented in the tables contained in the regional air navigation plans (ANPs) so as to facilitate integration of the GPIs into the planning process and to maximize their usefulness as part of the ANP searchable database. Additionally, in light of the ATM operational concept and the GPIs, the Secretariat will revisit the Statement of Basic Operating Requirements and Planning Criteria (BORPC) contained in the regional ANPs. ALLPIRG/5 particularly discussed the efforts needed in maintaining consistent global harmonization through harmonized regional implementation of GPIs, and adopted the following conclusion as a way forward :

Conclusion 5/2: – Implementation of Global Plan Initiatives (GPIs)

That, recognizing that the evolution continues from a systems-based to a performance-based approach to planning and implementation of the air navigation infrastructure, the regional planning groups:

- a) Note that the Global Plan is a significant component in the development of regional and national plans and that, together with the global ATM operational concept, provide an effective architecture for achieving a harmonized and seamless Global ATM system;

- b) Identify GPIs that most closely align with the well established implementation plans of their respective regions;
- c) Select GPIs that would be most effective in achieving the objectives of the region while ensuring continuation of the work already accomplished;
- d) Implement GPIs that take into account the Initiatives across regions, to align work programmes and to develop national and regional plans that facilitate achieving a Global ATM system;
- e) Utilize the planning tools as the common planning and implementation mechanism, thereby ensuring proper coordination and global integration; and
- f) Review, at each PIRG meeting as a part of its regular agenda, the progress achieved and challenges identified in the implementation of GPIs using a common template.

2.2 This paper proposes to the CNS Sub-group a scheme to address the development of regional performance objectives (RPOs) pertaining to communications, navigation and surveillance (CNS) systems (See **Attachment**). As requested in ALLPIRG/5 Conclusion 5/2, part of CNS/SG work should include identification of GPIs that most closely align with the established regional implementation plans, and selection of those GPIs that would be most effective in achieving the objectives of the AFI Region while ensuring continuation of the work already accomplished.

2.3 There is a need for a clear statement of RPOs (*column 4*), together with a set of agreed regional performance indicators (RPIs) (*column 6*) consistent as much as possible with the key performance indicators being developed by ATMPRP (*column 3*). RPOs references may be contained in ICAO Annexes, Documents, AFI ANP/FASID, AFI RAN reports or APIRG reports (*column 5*). However, as part of its agenda and on a regular basis, APIRG will have to review the progress achieved and challenges identified in GPIs implementation. Also, ways of assessing and monitoring system performance and reporting procedures need to be determined (*column 7*).

2.4 The attached template contains some indicative inputs which are subject to further improvements, for consideration by the CNS Sub-group.

3. Action by the meeting

3.1 The CNS Sub-group is invited to:

- a) Note the information contained in this paper;
- b) Agree on the need to develop regional performance objectives and associated monitoring tools/parameters in addressing the Global Plan Initiatives of relevance to CNS implementation plans, and include this task in its future work programme; and
- c) Make proposals/suggestions (if any) to facilitate the development of the required regional performance objectives and associated monitoring tools/parameters.

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Attachment

GLOBAL LEVEL		REGIONAL LEVEL				Performance Assessment and Monitoring Tool /Reporting Procedure
G P I (ICAO Doc 9750)	Key Performance Indicator (KPI) (ICAO Doc 9750, ATMPRP)	Proposed AFI Regional Performance Objective (RPO)	Reference (SARPs, ANP, RAN, APIRG)	Proposed Regional Performance Indicator (RPI)		
1	2	3	4	5	6	7
GPI-5	Performance-based navigation		RNAV/RNP routes	ANP/FASID	Level of implementation of RNAV/RNP routes	
GPI-9	Situational awareness		Provision of surveillance systems for situational awareness	ANP/FASID	Level of implementation of ASP in FIRs and TMAs Maintenance performance	
GPI-17	Implementation of data link applications				AMHS AIDC ADS/CPDLC Service level agreements	
GPI-20	WGS-84					
GPI-21	Navigation systems		Provision of RNAV (GNSS) approach procedures	Annex 10 PANS Doc 8168 AFI/ANP	Level of implementation of GNSS/NPA at aerodromes Maintenance performance	
GPI-22	Communication network infrastructure		Improve performance of ground-to-ground communications	AFI/ANP	Availability rates of AFS circuits AFS Transit times VSAT performance Maintenance performance	
			Improve availability of air-ground communications	AFI/ANP	% of VHF coverage along ATS routes Maintenance performance	
GPI-23	Aeronautical spectrum		Protection of aeronautical spectrum	Annex 10 Doc 9378	Implementation of regional/national frequency management procedures	