



Agenda Item 5: Development of the Technical Infrastructure and interoperability for ATS/ATM automated Systems

DEVELOPMENT OF THE TECHNICAL INFRASTRUCTURE AS A SUPPORT TO THE EVOLUTIONARY IMPLEMENTATION OF ATS/ATM AUTOMATED SYSTEMS IN THE EASTERN CARIBBEAN

(Presented by the Secretariat)

SUMMARY

This working paper presents proposals in order to develop the technical infrastructure as a support to the evolutionary implementation of ATS/ATM automated systems in the Eastern Caribbean.

References:

- Report of the 28TH Eastern Caribbean Working Group Meeting, Montserrat, 26 to 30 April 2004.
- Report of the GREPECAS/12 Meeting, Havana, Cuba, 7 – 11 June 2004.

1. Introduction

1.1 The 28th E/CAR Working Group Meeting, held in Old Towne, Montserrat, 26 – 29 April 2004, adopted Decision 28/10 requesting to the E/CAR ATM Committee to develop an action plan to establish ATS operational requirements for the integration of automated systems in the Eastern Caribbean, through the aforementioned strategy of the GREPECAS as shown in the Appendix D to the Agenda Item 3 of the 28th E/CAR WG Report.

1.2 The GREPECAS/12 Meeting, held in Havana, Cuba, on 3-7 June 2004, through Conclusion 12/31 formulated the “*Regional strategy for the integration of ATM automated systems*” contained in Appendix K to the Agenda Item 3 of the GREPECAS/12 Report.

2. Discussion

2.1 It is observed that during the evolution of the ATS/ATM automated systems implementation, the use and development of the technical infrastructure, including the communication systems as a mean of support, as well as the implementation of the operational applications are very important.

2.2 Likewise, a technical infrastructure should be available and necessary such as the AFTN and the use of the AFTN plus a Regional Interphase Control Document (ICD), in order to begin the evolutionary implementation of the ATS/ATM automated systems toward the final stages of the implementation of the ATN

sub-networks ground-to-ground and air-to-ground, as well as the ATN applications. Based on the above-mentioned and the strategy for the implementation of ATS/ATM automated systems approved by GREPECAS; it is suggested to take into account the following preliminary guidance on the technical infrastructure that should be available and necessary during the each phase of implementation:

PRELIMINARY GUIDANCE ON TECHNICAL INFRASTRUCTURE AS SUPPORT OF THE EVOLUTIONARY IMPLEMENTATION OF ATS/ATM AUTOMATED SYSTEMS		
Phase	Function	Technical Infrastructure available/ necessary
Phase I	Flight data processing (FDPS, FLP, RPL)	- AFTN
Phase II	ATS radar data processing system (RDPS); Mono-radar; Multi-radar/multitracking; Radar data sharing.	- AFTN - Communication circuit through the Frame Relay digital networks.
Phase III	Automated digital communication (Automated traffic hand off, AIDC, CPDLC and other.	- AFTN + Regional Interphase Control Document (ICD). - Communication circuit through the Frame Relay digital networks. - AMHS. - ATN Sub-networks ground-to-ground and air-to-ground, using some applications.
Phase IV	Implementation of CDM aspects.	- ATN Sub-networks ground-to-ground and air-to-ground.

3. **Suggested Action**

3.1 The Meeting is invited to:

- a) take note of the information in this working paper;
- b) review and recommend to take into account the “*Preliminary guidance on technical infrastructure as support of the evolutionary implementation of ATS/ATM automated systems*” that is shown under the paragraph 2.2 of this paper; and
- c) formulate other considerations deemed appropriate.