

**INTERNATIONAL CIVIL AVIATION ORGANIZATION
NORTH AMERICAN, CENTRAL AMERICAN AND CARIBBEAN OFFICE**

**TWENTY-SIXTH EASTERN CARIBBEAN INFORMAL WORKING GROUP MEETING
(26TH E/CARIWG)**

(Barbados, 3 to 7 June 2002)

Agenda Item 2: **AIS/MAP Developments**

**IMPLEMENTATION OF THE AIS/MAP AUTOMATION PLAN AND
AIS/MAP QUALITY ASSURANCE PLAN
(SAFETY IN CIVIL AVIATION)**

(Working Paper presented by the Secretariat)

SUMMARY

This Working Paper presents to the Meeting the importance on safety aspects to be considered on the Implementation of the AIS/MAP Automation Plan for the CAR Region as well as the AIS/MAP Quality Assurance Plan.

1 Introduction

1.1 Aeronautical Information Services and Aeronautical Charts (AIS/MAP) are based on Annex 15 and 4, Standards and Recommended Practices (SARPs), which define the provision by States of Operational Aeronautical Information and Data, that will have to be upgraded in order to be supplied by electronic means and thus, support CNS/ATM Systems.

1.2 Aeronautical Information/Data are used by Air Traffic Controllers in the Cockpit and Flight Planners, Flight Simulators, etc. Corrupt Data could have potential influence on the safe conduct of flights and its control. As consequence, high standards are required on the AIS/MAP providers. This will have to be done through an automated system that guarantees the quality and integrity of the supplied information from AIS/MAP Databases.

2. Discussion

2.1 The Meeting should recognize that, near future of Air Navigation and Control Systems would depend more and more on electronic aeronautical data and taking into consideration that such data would be interrogated and exchanged from different AIS/MAP Automated Databases, these systems should be considered and should focus on the safety aspects of information.

2.2 The AIS/MAP DB/AUTO Task Force/1 Meeting that was held in Mexico City from 30 July to 2 August 2001, under Agenda Item 2, examined several aspects regarding databases implementation and discussed some deficiencies that were found in the information supplied, which is still being manually developed. This situation has to change with the introduction of automated databases that will guarantee the quality, availability and safety of information/data.

2.3 One of the first and perhaps most important steps towards the Integrated Automated Aeronautical Information Systems is to develop databases as part of the ATN Network that will support GNSS Systems worldwide. This system will also harmonize AIS/MET information and will support all combined automated facilities that will provide pre-flight and in-flight information.

2.4 In this sense, clearly the role of the AIS/MAP is one of the main elements for the successful transition to a Global ATM System. At the core of these elements lies the Quality System that will provide not only quality but also timely aeronautical data and information to the International Aviation Community. The requirements are described in Annex 15 - Aeronautical Information Services, Chapter 3, and Recommendation in paragraph 3.2.2

“3.2.2 Recommendation. - The quality system established in accordance with 3.2.1 should be in conformity with the International Organization for Standardization (ISO) 9000 series of quality assurance standards, and certified by an approved organization.

Note.— International Organization for Standardization (ISO) 9000 series of quality assurance standards provide a basic framework for the development of a quality assurance programme. The details of a successful programme are to be formulated by each State and in most cases are unique to the State organization.”

2.5 In addition to the requirements for Quality System described in Annex 15 it is important to review ICAO Doc 9750-AN/963 - Global Air Navigation Plan for CNS/ATM Systems, Chapter 9, and paragraph 9.4:

“9.4 The role and importance of Aeronautical Information/data has changed significantly with the implementation of RNAV, RNP and airborne computer-based navigation systems. These systems are all data-dependent, and in that respect aeronautical data have become the crucial and critical components of the system. Consequently, corrupt or erroneous aeronautical information/data can potentially affect the safety of Air Navigation. In this respect, as of 1 January 1998, each Contracting State must take necessary measures to introduce a properly organized quality system containing procedures, processes and resources necessary to implement quality management at each functional stage of the data process. Established quality systems must provide users with the necessary assurance and confidence that distributed aeronautical information/data satisfy established requirements for data quality (accuracy, resolution and integrity) and timeliness.”

3. Conclusion

3.1 In regard to the aforementioned information, the following Conclusion is presented for the Meeting's consideration and adoption. Therefore, the Meeting is invited to agree to:

**CONCLUSION 26/XX AIS INTEGRATED AUTOMATION SYSTEM AND AIS
QUALITY ASSURANCE IMPLEMENTATION PLAN**

That E/CAR States/Territories:

- a) implement the AIS Automation Plan for the E/CAR Area;
- b) implement the AIS Quality Assurance Plan, developed from the plan mentioned
 in a) above; and
- c) present progress on the status of its implementation to the NACC Regional
 Office, by 30 October 2002 at the latest.

4. Suggested Action

4.1 The Meeting is invited to discuss and comment the advances accomplished on this matter
and to propose a date to comply, as required.
