



INTERNATIONAL CIVIL AVIATION ORGANIZATION

**AFI PLANNING AND IMPLEMENTATION REGIONAL GROUP
THIRTEENTH MEETING (APIRG/13)
(Sal, Cape Verde, 25-29 June 2001)****Agenda Item 4 : Air Navigation issues
CNS/ATM Planning/Implementation****AIS Automation Progress in Spain**

(Presented by Spain)

SUMMARY

Spain has been doing big effort in AIS automation matters. This paper presents main issues related with AIS automation that have been made following mandates in the framework of ICAO and EUROCONTROL programs.

1. INTRODUCTION

- 1.1 AIS-España, under the framework of the Public Entity Aena, acts on behalf of the Spanish Civil Aviation Authority (Dirección General de Aviación Civil) as the responsible for the collection and provision of aeronautical information relative to the entire territory of Spain and airspace of its responsibility..
- 1.2 The objective is to provide users with the information they require, in a swift, simple, efficient and customised way.
- 1.3 There is a web server to allow access to publications and services offered by the AIS Division of Aena.
- 1.4 Aeronautical Information Service Division (AIS-España) Quality System has got the UNE-EN-ISO 9002:1994 certification for the following activities:

Compilation, verification, processing and publication of all information contained in AIP, NOTAM, VFR Manual, Aeronautical Charts and Technical Handbooks.

2. AIS AUTOMATION ACTIVITIES

- 2.1 In as much as automation, the main priority was the automation of dynamic data (NOTAM, FPL). For this purpose, it was designed the COM/AIS Automated System, then it began the automation of static data processing (AIP).
- 2.2 COM/AIS Automated System. Operational since 1994. It processes the NOTAM information and the Central Level Flight Plans (NOF) as well as the Local Level Flight Plans (AIS/ARO Offices in the airports and ACCs).

- 2.3 Operations: Consultation of Information Bulletins prior to Flight (PIB), consultation of NOTAM, presentation and transaction of Flight Plans and related messages, processing of Repetitive Flight Plans (RPL), and consultation and processing of global messages and flow control in Europe (ATFM).
- 2.4 The field of data processing is universal since Spain, France, and Germany signed the EGIP agreement. We have distributed the workload among these three countries: conversion to system NOTAM format, translation into the english language, correction of syntax and data in obvious errors and text editing for clarification. This service is offered in the ECAC area in the general framework of agreement with Eurocontrol and it is available for users outside the ECAC area through bilateral agreements.
- 2.5 MADESA System. Operational since 1998. It process the aeronautical information/data that constitute the Spain-AIP, and other setting data needed for validation, coherence, check, and control of data quality. It has also been included information/data requested by internal Air Navigation users needed for the specific utilities and tools that have been designed in the system.
- 2.6 Operations: Management and update of static data. It includes specific tools for the making of the Spain-AIP, as well as aeronautical cartography. It has also been included several applications for specific users who can work with the data contained in the Data Base from their workstations connected to the system. Some of these tools are: PANS-OPS for manoeuvring design, obstacle reckoning, study of radioelectric and broadcasting air coverage, writing of aeronautical letters, etc.

3. NEW AIP FORMAT

- 3.1 The Spain-AIP was published on June 1996 according to the new format established by the OACI. The transformation project lasted one year approximately and involved the following proceedings:
 - a) Study of the contents of the new format
 - b) Adaptation of the ICAO format for its bilingual publication
 - c) Analysis of the transposition of information from the old to the new format
 - d) Study of weaknesses/lack of data
 - e) Preparation of publication
 - f) Update and publication
- 3.2 Consultation to the information producers had to be done about information that was not possible in the new format. Consultation to the ICAO also took place about the possible placing of the necessary data that were not included in the Doc. 8126 model (e.g. TMA area letters with more than one airdrome).

4. ELECTRONIC DISTRIBUTION OF THE INFORMATION VIA INTERNET

- 4.1 Once the automation has been updated, the distribution process through electronic systems was not a big difficulty; for that reason we decided to face the distribution of the information via Internet.
- 4.2 Internet Project. Operational 1997, the service is provided from a web server that is installed in the Central Offices of the Spain-AIS. This server is connected via local network to the current systems of the AIS Division, it receives information/data and, after a specific handling, they are ready to be used by the web users.
- 4.3 The information is always updated in real time so, when someone access the page, the updated information is always obtained.

4.4 The Internet Project covers the following applications:

- a) Consultation of the Spain-AIP, Supplements, Aeronautical Information Bulletins, and the current NOTAM Summary. It is in working order since December 1997.
- b) Consultation of Information Bulletins prior to Flight (PIB) and consultation of NOTAM at an international level. It is intended to be in working order on October 2001.

5. ACTION BY THE MEETING

The meeting is invited to:

- a) Note and comment the information presented;
- b) Contact the AIS for any question or co-operation request;
- c) Visit the Spanish AIS WEB page.

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