International Civil Aviation Organization
North American, Central American and Caribbean Office

WORKING PAPER

Seventh North American, Central American and Caribbean Working Group Meeting (NACC/WG/7)
ICAO NACC Regional Office, Mexico City, 29 August - 1 September 2022

Agenda Item 3: **Follow-up of the Activities of the NACC/WG Task Forces**
3.1 Progress of the NACC/WG on Aeronautical Information Management (AIM), Air Traffic Management (ATM) and Communications, Navigation and Surveillance (CNS)

NEW 7TH EDITION OF THE 8126 AERONAUTICAL INFORMATION SERVICES MANUAL

(Presented by the Secretariat)

EXECUTIVE SUMMARY
This Paper considers emphasizing the need for greater equity in airspace access, improved access to timely and meaningful information for decision support and more autonomy in decision-making, which relies on the data-centric and digital AIM. These requirements are organized such that data collection is decoupled from the definition of aeronautical products and will facilitate the modernization of the ATM environment according to the principles of SWIM.
The PANS-AIM, Doc 10066, contains operating practices that are too detailed for inclusion in the SARPs of Annex 15. The PANS-AIM provides a means for increased harmonization within the aeronautical information domain and accommodates emerging technical requirements.
This 8126 manual has been revised to provide guidance for the successful implementation of AIM. It explains the provisions contained in Annex 15 and PANS-AIM, provides background information on certain specifications, helps illustrate their meaning and exemplifies means by which these specifications can be met.

Action:	Suggested actions are presented in Section 3.
Strategic Objectives:	• Safety • Air Navigation Capacity and Efficiency
References:	• Annex 15 • PANS AIM • Doc. 8126

1. Introduction

1.1 This new 7th. Edition of the 8126 Manual is divided into four parts and its objective is to continue to provide guidance not only on legacy aeronautical information service (AIS) processes, but more important on new Aeronautical Information Management (AIM) practices, and to accommodate future technological developments within the context of System wide information management (SWIM). The target main audience of this Manual comprises AIM/AIS operational personnel, management bodies and regulatory authorities.
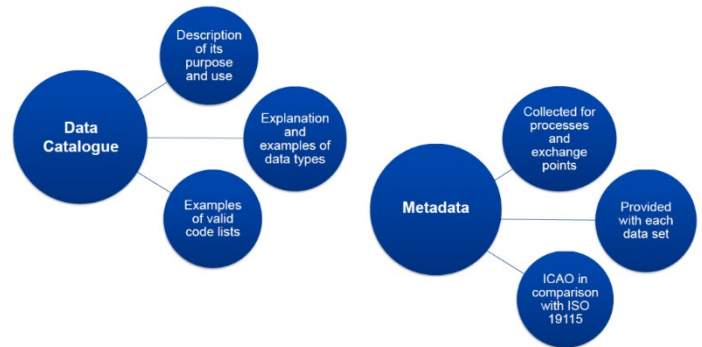
1.2   The four parts are described below:

- **Part I** — <u>Regulatory Framework</u> for Aeronautical Information Services explains AIS responsibilities and functions and provides guidance for the organizational development of AIS including the transition to AIM (see the Roadmap for the Transition from AIS to AIM – ICAO);
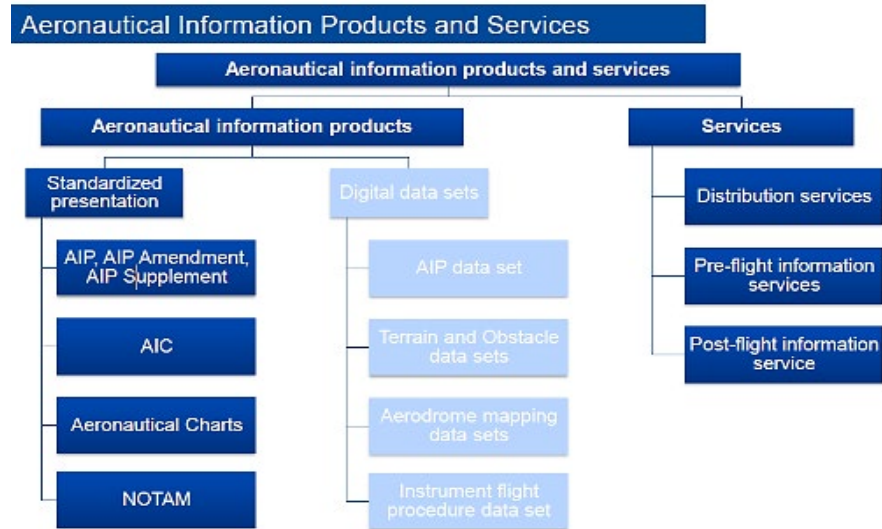
  AIS Responsibilities and Functions:
  a. Purpose, responsibilities and functions of AIM
  b. AIS Competencies
  c. Exchange of aeronautical data and aeronautical information
  d. Aeronautical Information Management
  e. Organisation of an Aeronautical Information Service
  f. Separation of regulatory functions and provisions of service
  g. Annex 15 compliance checklist
  h. PANS-AIM compliance checklist

- **Part II** — <u>Processing Aeronautical Data</u> provides guidance for processing aeronautical data and aeronautical information while considering the operational provisions for the management of aeronautical information in a data-centric environments;
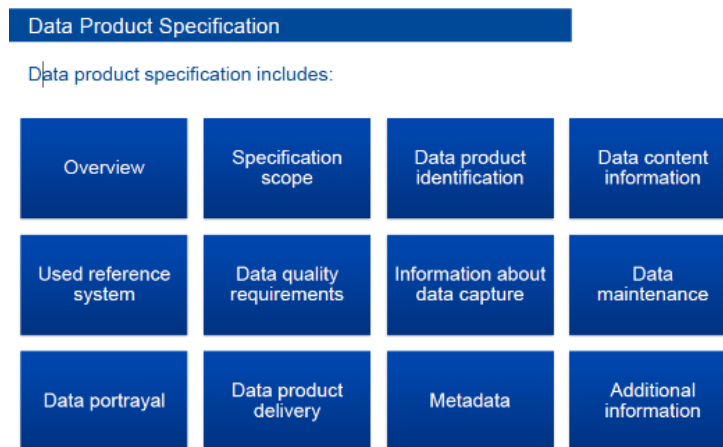
Aeronautical data scope:
- o Data catalogue
- o Data quality
  Requirements
- o Metadata
- o Reference systems
- Collection
- o Formal arrangements
- Processing
- o Verification and validation
- Distribution
- Quality assurance and control
- Automation

- **Part III** — <u>Aeronautical Information in a Standardized Presentation</u> and Related Services provides guidance for aeronautical information to be distributed in a standardized presentation; and

Aeronautical Information Products and Services

- **Part IV** — <u>Digital Aeronautical Information Products</u> and Related Services provides guidance for the distribution of digital products and services (under development)

Data Product Specification

2.   Discussion

2.1   The Meeting is invited to recall that the continued growth of aviation technologies has increased demands on airspace capacity and efficiency in information and data service delivery, and therefore emphasizes the need for greater equity and better access to airspace, to timely and meaningful information for decision support, and greater autonomy in decision-making.

2.2   The issuance of the 16th. Ed. of Annex 15, which was an important step towards the goal of improving the efficiency and towards an integrated responsive global ATM system, this new edition introduced high-level requirements and performance specifications for States. These requirements are organised in such a way that data collection is not related to the aeronautical product definition and will facilitate the modernisation of the digital ATM environment in accordance with SWIM principles.

2.3   Important step is the interrelation of the 8126 Manual with the PANS-AIM, Doc 10066, which contains operational practices that are very detailed for inclusion in the SARPs of Annex 15. PANS-AIM provides also a means for further harmonisation in the field of aeronautical information/data and accommodates emerging technological requirements.

2.4   ICAO, will continue restructuring Annex 15 and the issuance of the PANS-AIM. It was considered necessary to revise the AIS Manual to bring it in line with aeronautical information management concepts and requirements. The document is available to States, in a final format. The Manual has been revised to provide guidance for the successful implementation of AIM. It explains the provisions contained in Annex 15 and PANS-AIM, provides basic information on certain specifications, helps to illustrate their meaning, and exemplifies the means by which these specifications can be met.

2.5   The structure of Doc 8126, AIS Manual, contains four parts described in paragraph 1.2

2.6   States should promote to include courses in their training centres and develop workshops and seminars in the CAR Region for AIS/AIM personnel and others to disseminate the content of Doc 8126, AIS Manual, and its applicability.

3.   **Suggested actions**

3.1.   The Meeting is invited to:

a)   take note of the information presented in this working paper;

b)   consider the action recommended in paragraph 2.6; and

c)   consider any other action it may deem appropriate.

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