

# Agenda Item 2: AIS MANUAL (DOC 8126) Restructuring

---

Jodi Brainard

CAR/SAM Seminar / Workshop on DOC 8126,  
Part I and PANS-IM

11-14 March 2024

# Outline

---

## Background

## Part II

Processing Aeronautical Data

## Part IV

Digital Aeronautical Information  
Products and Related Services

## Part I

Regulatory Framework for Aeronautical  
Information Services

## Part III

Aeronautical Information in a  
Standardized Presentation and Related  
Services

---

## Background

- Increased the demands on airspace capacity and efficiency
- Integrated, responsive global air traffic management (ATM) system
- Migration of paper-based to data-centric
- Updates to Annex 15 — Aeronautical Information Services
  - Restructured and amended to clarify the scope, role, main functions, products and services of AIM and the associated update mechanisms
- Data collection is decoupled from the defined aeronautical products
- Facilitate the modernization of the ATM environment with use of System Wide Information Management (SWIM)

01

# DOC 8126: Part I

## Regulatory Framework for Aeronautical Information Services



Doc 8126

Aeronautical Information Services Manual

Seventh Edition, 2022



Approved by and published under the authority of the Secretary General.

INTERNATIONAL CIVIL AVIATION ORGANIZATION

# What does Part I cover?



States' responsibilities and functions



Aeronautical information service providers' responsibilities and functions



Aeronautical data originators' responsibilities



Aeronautical information management

02

## DOC 8126: Part II

# Processing Aeronautical Data



Doc 8126

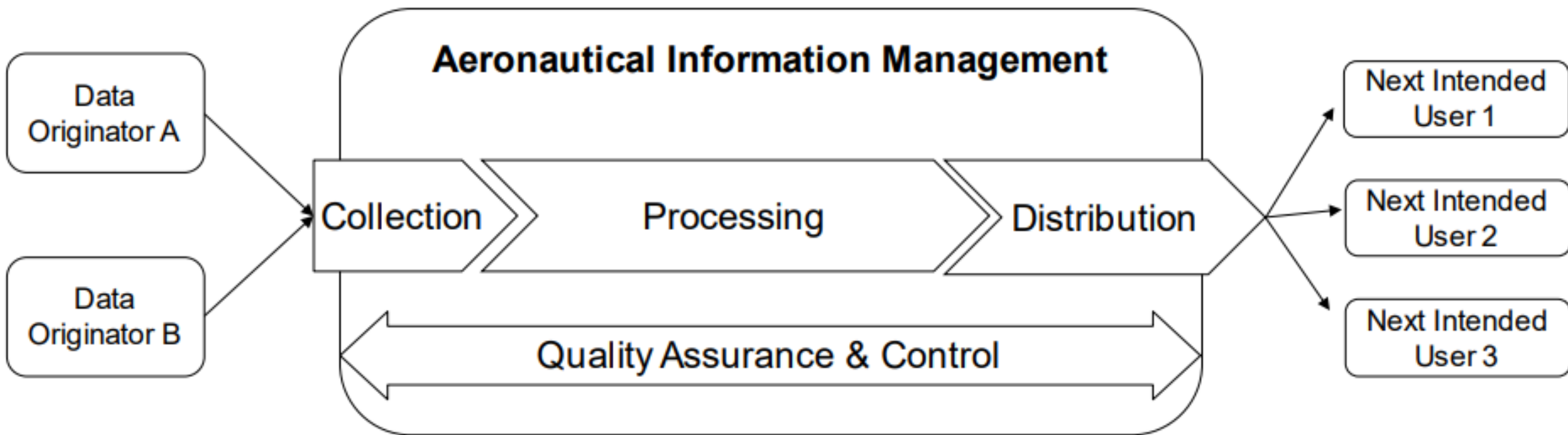
Aeronautical Information Services Manual

Seventh Edition, 2022



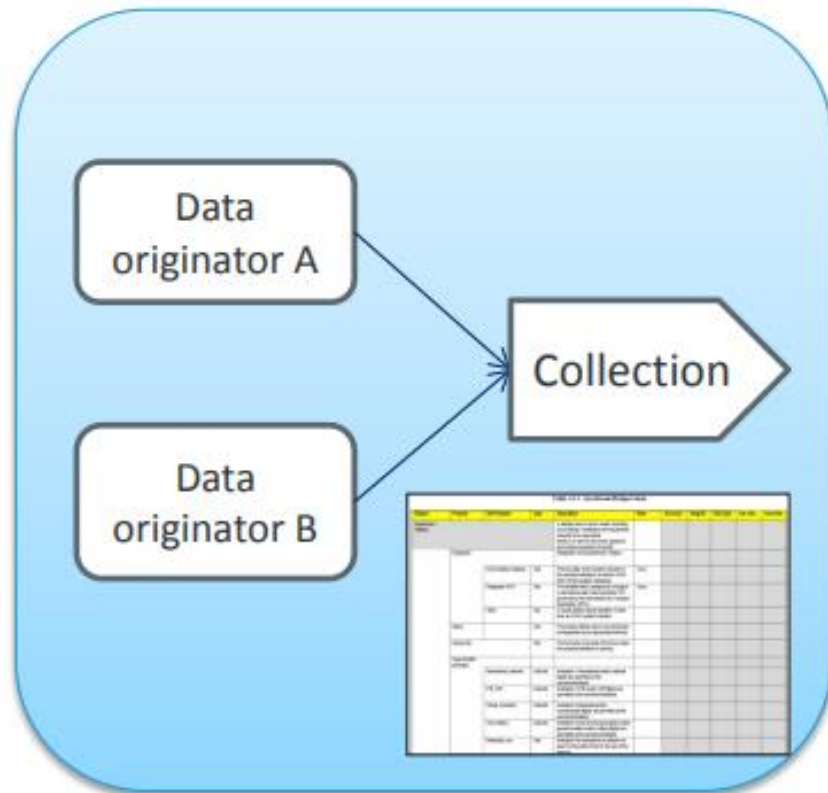
Approved by and published under the authority of the Secretary General.

INTERNATIONAL CIVIL AVIATION ORGANIZATION



How automation is applied to the aeronautical data process

# Collection



- High focus on the collection phase to ensure quality
- Clear roles, resources, metadata
- Different constellations for data origination
- Aeronautical Data Catalogue
- Content of a formal arrangement and template

# Data Processing



- Difference between validation and verification
- Validation and verification as critical components of the Quality Management System
- Validation, examples of techniques:
  - Validation based on metadata
  - Plausibility check of the data
- Verification, examples of techniques:
  - Digital data error detection
  - Feedback testing
  - Independent redundancy

# Quality Assurance and Control



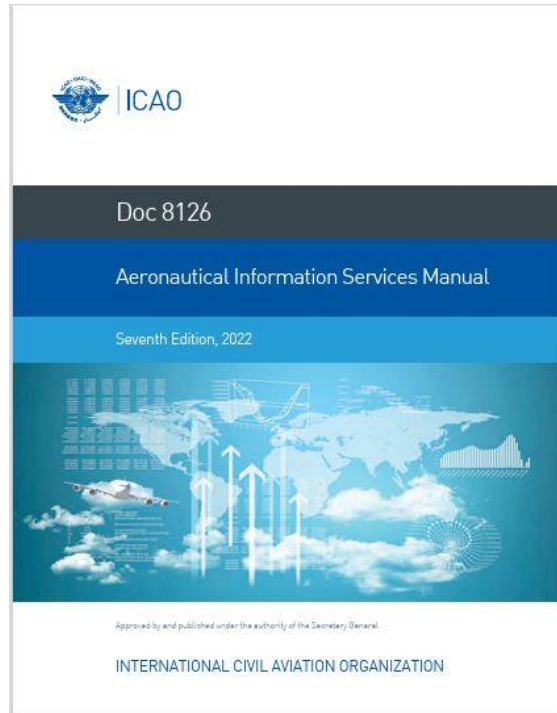
## Quality Assurance (PROCESS)

- Data traceability
- Assurance of data integrity along the process

## Quality Control (PRODUCT)

- Data error detection and reporting
- Quality checks to ensure compliance with product specifications
- Consistency checks across the information products

# Automation



- Objectives and basic principles of automation
- Different levels of automation:
  - LEVEL 0: Manual
  - LEVEL 1: Data centric
  - LEVEL 2: Automated workflow
  - LEVEL 3: Full AIM environment

---

# Service Level Agreement Template

## DATA PROVISION AGREEMENT

between

*[the name of the entity receiving the aeronautical data or  
aeronautical information];*  
(hereinafter “The Data Receiver”)

and

*[the name of the entity providing the aeronautical data or  
aeronautical information]*  
(hereinafter “The Data Provider”)



03

## DOC 8126: Part III

Aeronautical Information in  
a Standardized Presentation  
and Related Services



Doc 8126

Aeronautical Information Services Manual

Seventh Edition, 2022

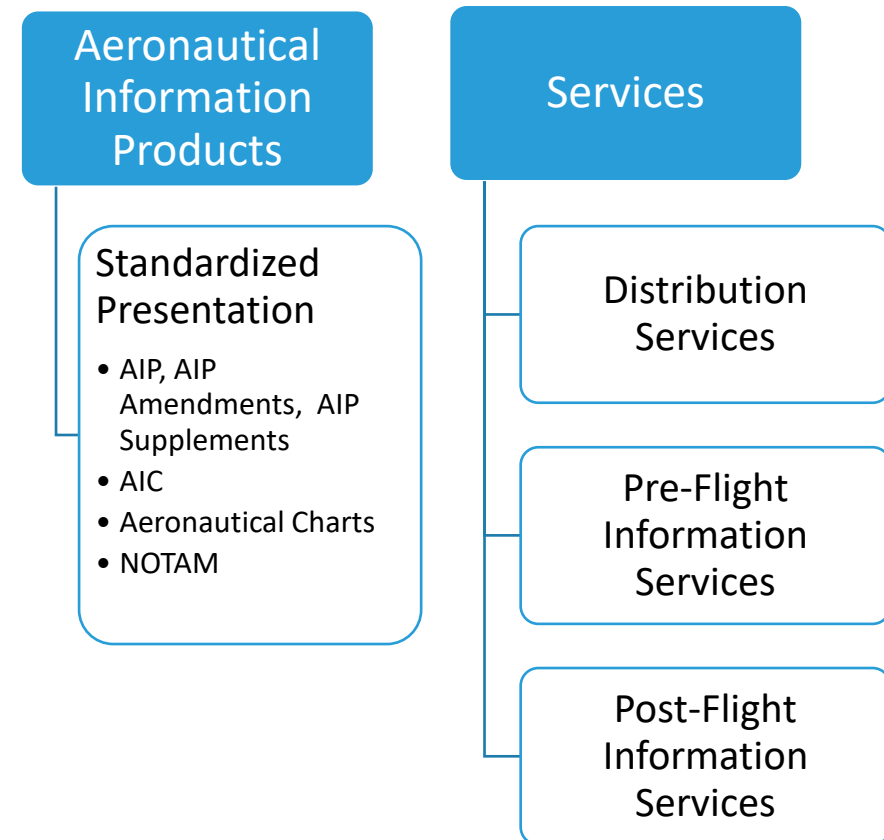


Approved by and published under the authority of the Secretary General.

INTERNATIONAL CIVIL AVIATION ORGANIZATION

# AERONAUTICAL INFORMATION IN A STANDARDIZED PRESENTATION AND RELATED SERVICES

- Mostly relocated text from the old AIS Manual
- Up to speed with the latest provisions (Annex 15, PANS-AIM)
- AIP (expanded guidance)
- NOTAM (expanded guidance)
- General improvements (clarification of material when needed)



04

# DOC 8126: Part IV

## Digital Aeronautical Information Products and Related Services



Doc 8126

Aeronautical Information Services Manual

Seventh Edition, 2022

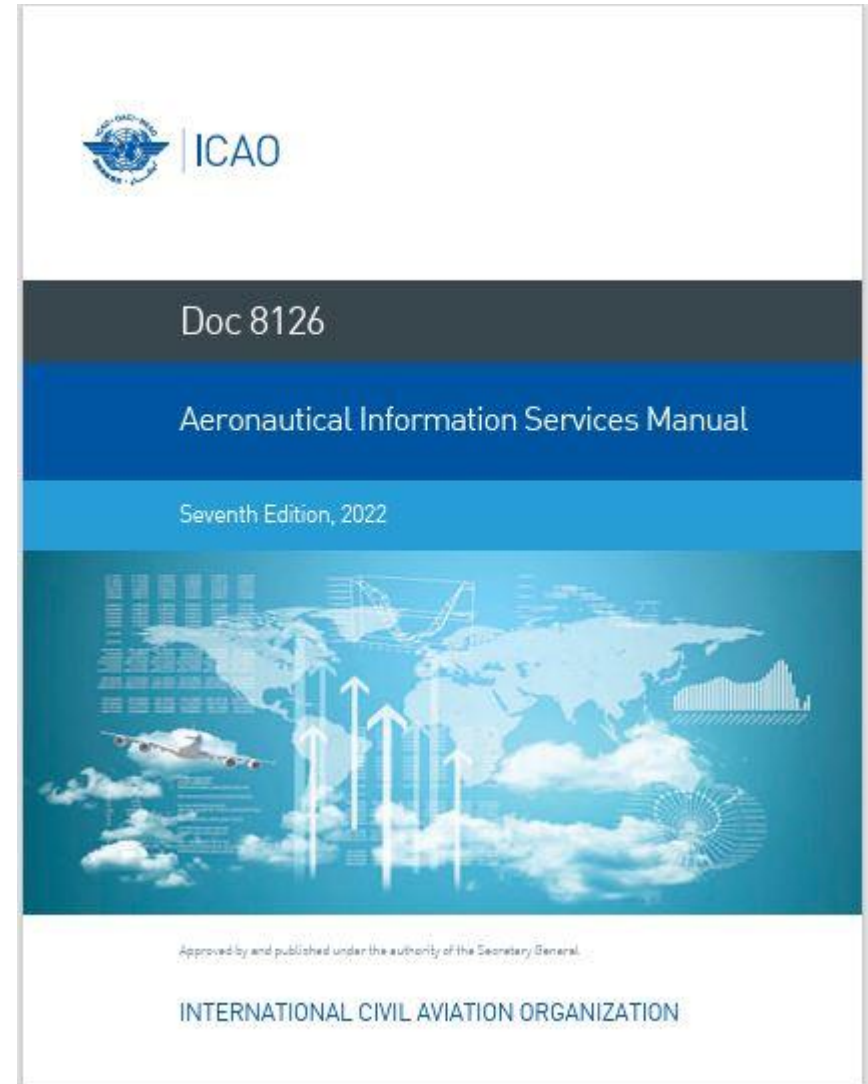


Approved by and published under the authority of the Secretary General.

INTERNATIONAL CIVIL AVIATION ORGANIZATION

# Digital Products and Services

- Intended use of the digital data sets
  - AIP data sets
  - Terrain and Obstacle data sets
  - Aerodrome Mapping data sets
  - Instrument Flight Procedures data sets
- General aspects of System Wide Information Management
- Coding of digital aeronautical data sets
- Data set provision services





ICAO  
Headquarters  
Montréal

European and  
North Atlantic  
(EUR/NAT) Office  
Paris

Asia and Pacific  
(APAC) Sub-office  
Beijing

Middle East  
(MID) Office  
Cairo

Western and  
Central African  
(WACAF) Office  
Dakar

North American  
Central American  
and Caribbean  
(NACC) Office  
Mexico City

Asia and Pacific  
(APAC) Office  
Bangkok

South American  
(SAM) Office  
Lima

Eastern and  
Southern African  
(ESAF) Office  
Nairobi

---

Thank You!