GLOBAL AIR NAVIGATION PLAN
ASBU FRAMEWORK

ICAO Workshop on the new version of the Global Air Navigation Plan (GANP)
(Mexico City, Mexico, from 17 to 21 February 2020)

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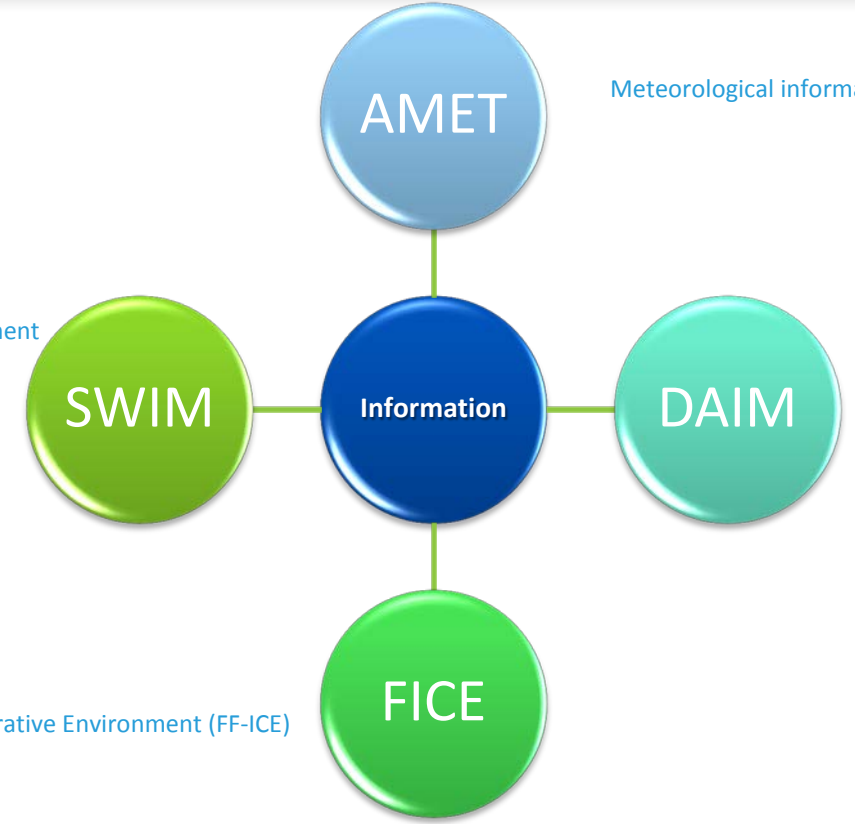
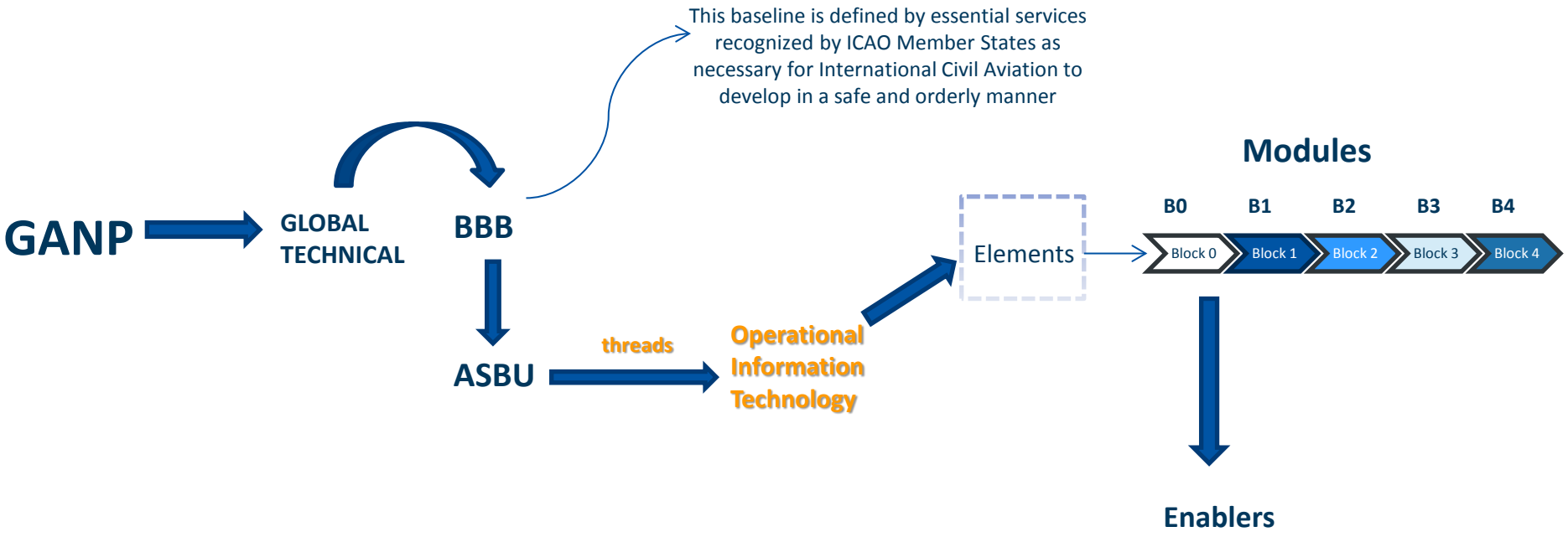
AGENDA

1. Basic Building Block (BBB)
2. ASBU Framework

THE ASBU FRAMEWORK


AMET
Meteorological information
System Wide Information Management
SWIM
Information
DAIM
Digital Aeronautical Information Mangement
FICE
Flight and Flow Information for a Collaborative Environment (FF-ICE) Information


This baseline is defined by essential services recognized by ICAO Member States as necessary for International Civil Aviation to develop in a safe and orderly manner
GANP
GLOBAL TECHNICAL
BBB
ASBU
threads
Operational Information Technology
Elements
Modules
B0
B1
B2
B3
B4
Block 0
Block 1
Block 2
Block 3
Block 4
Enablers

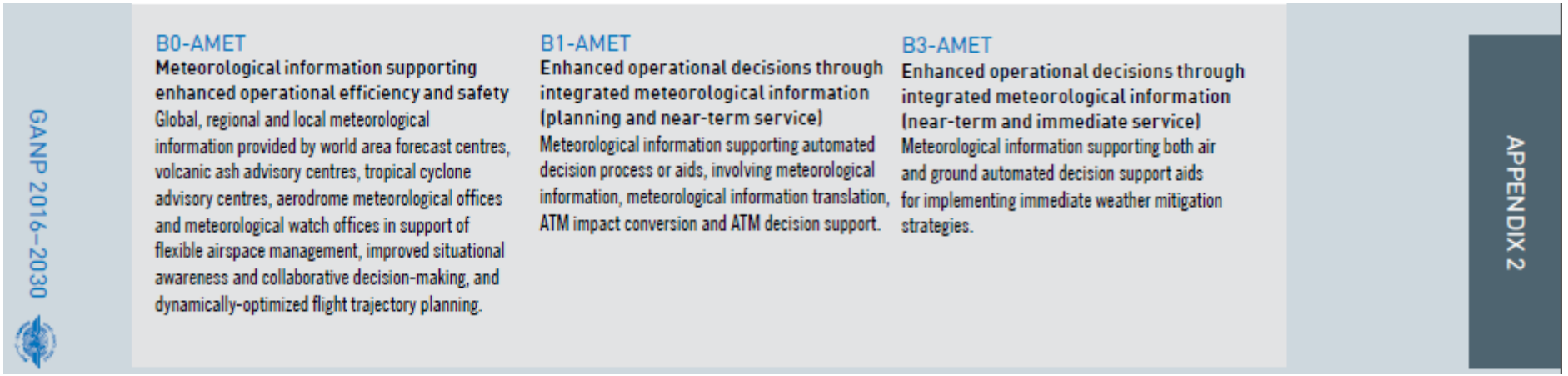
SEAMLESS GLOBAL MET

- The changes in MET are gathering pace, reflecting the changing needs of aviation
- Meet the challenges of tomorrow's aviation world
- MET information must be increasingly global and seamless in space and time
- Some important global MET systems and products already available:
  - World Area Forecast System (WAFS)
  - International Airways Volcano Watch System (IAVWS)
- MET initiatives in implementation:
  - Space Weather Warning system (SPW)
- MET initiatives under consideration and development:
  - Hazardous Weather Advisory Centre System

SEAMLESS GLOBAL MET

- Aeronautical meteorology remains a key enabler to the realization of a globally interoperable, harmonized air traffic management (ATM) system, in particular through the information management domain/system-wide information management (SWIM)

- Product-centric to data-centric:
  - Traditional alphanumeric coded (TAC) products to GML/XML data streams - IWXXM data.
  - Regional OPMET to a system wide information management environment (SWIM).



APPENDIX 2

Block 0

B0-AMET Meteorological information supporting enhanced operational efficiency and safety

Global, regional and local meteorological information:

a. forecasts provided by world area forecast centres (WAFCs), volcanic ash advisory centres (VAACs) and tropical cyclone advisory centres (TCAC);

b. aerodrome warnings to give concise information of meteorological conditions that could adversely affect all aircraft at an aerodrome, including wind shear; and

c. SIGMETs to provide information on occurrence or expected occurrence of specific en-route weather phenomena which may affect the safety of aircraft operations and other operational meteorological (OPMET) information, including METAR/SPECI and TAF, to provide routine and special observations and forecasts of meteorological conditions occurring or expected to occur at the aerodrome.

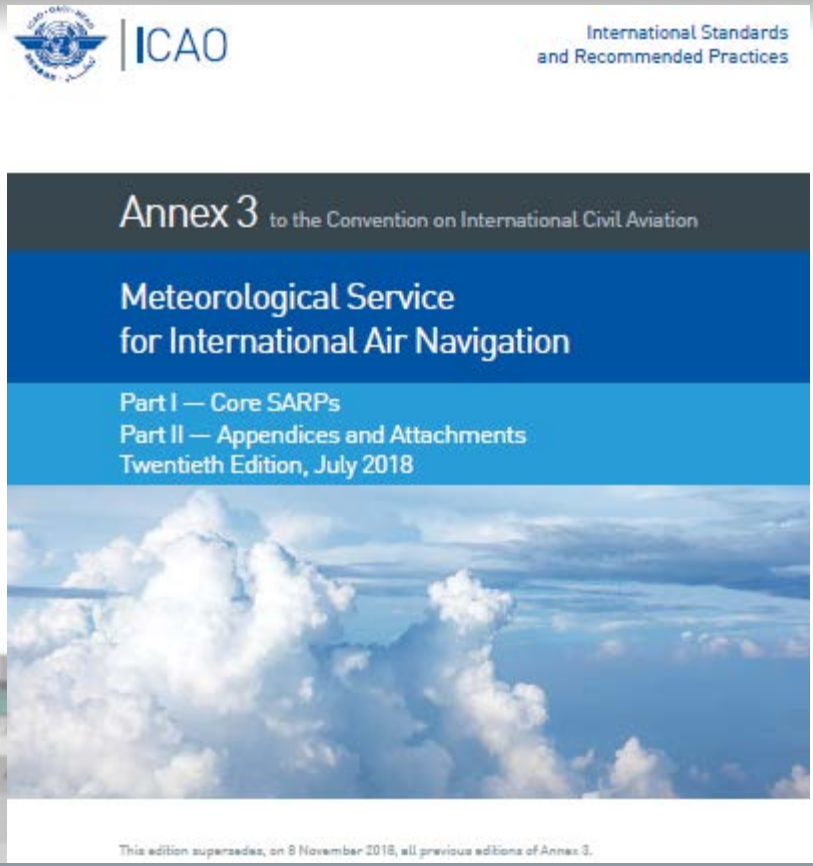
This information supports flexible airspace management, improved situational awareness and collaborative decision-making, and dynamically-optimized flight trajectory planning. This module includes elements which should be viewed as a subset of all available meteorological information that can be used to support enhanced operational efficiency and safety

AMET

AMET-B0/1	Meteorological observations products	Information
AMET-B0/2	Meteorological forecast and warning products	Information
AMET-B0/3	Climatological and historical meteorological products	Information
AMET-B0/4	Dissemination of meteorological products	Information
AMET-B1/1	Meteorological observations information	Information
AMET-B1/2	Meteorological forecast and warning information	Information
AMET-B1/3	Climatological and historical meteorological information	Information
AMET-B1/4	Dissemination of meteorological information	Information

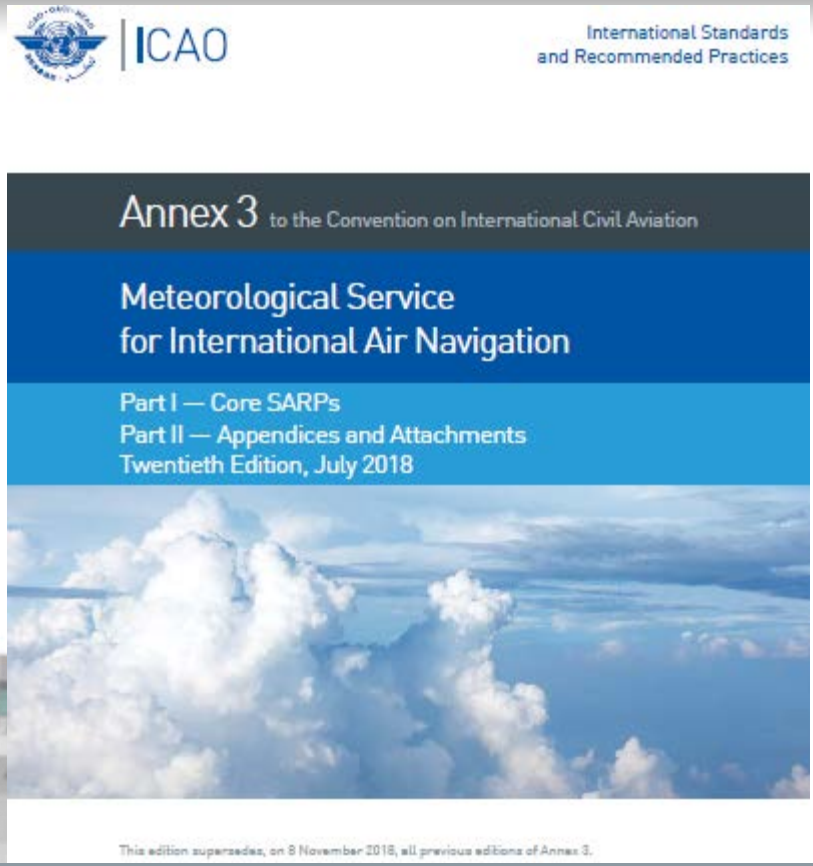
ICAO Meteorological Information Exchange Model (IWXXM)

- From November 2013, Amendment 76 to Annex 3 has enabled States (in a position to do so) to exchange specific meteorological information (METAR/SPECI, TAF and SIGMET) in digital (XML/GML) form



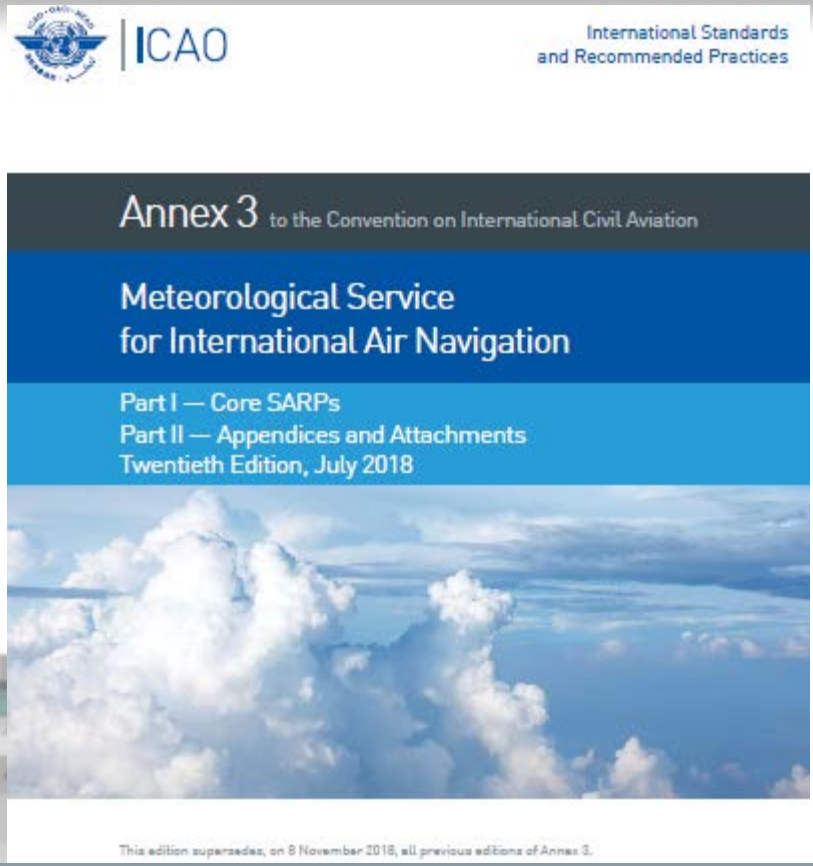
ICAO Meteorological Information Exchange Model (IWXXM)

- From November 2016, Amendment 77 to Annex 3 has required that States should disseminate specific meteorological information (METAR/SPECI, TAF, SIGMET, AIRMET and volcanic ash and tropical cyclone advisory information) in digital form.



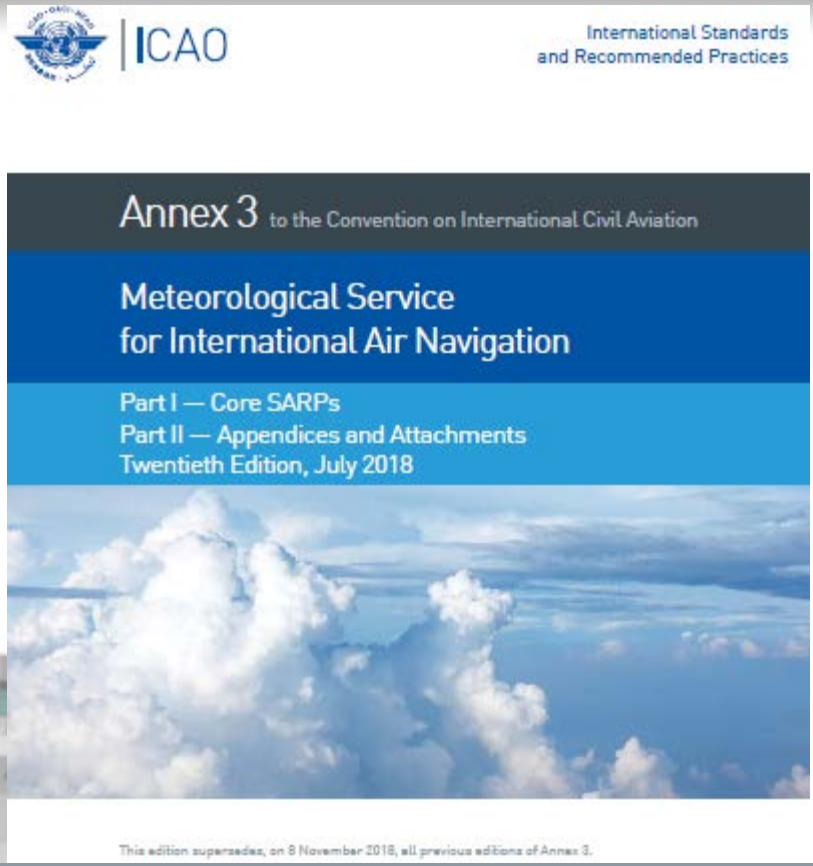
ICAO Meteorological Information Exchange Model (IWXXM)

- From November 2018, Amendment 78 to Annex 3 has required that States should disseminate the above specific meteorological information in IWXXM GML form; with the addition of space weather information from November 2019.



ICAO Meteorological Information Exchange Model (IWXXM)

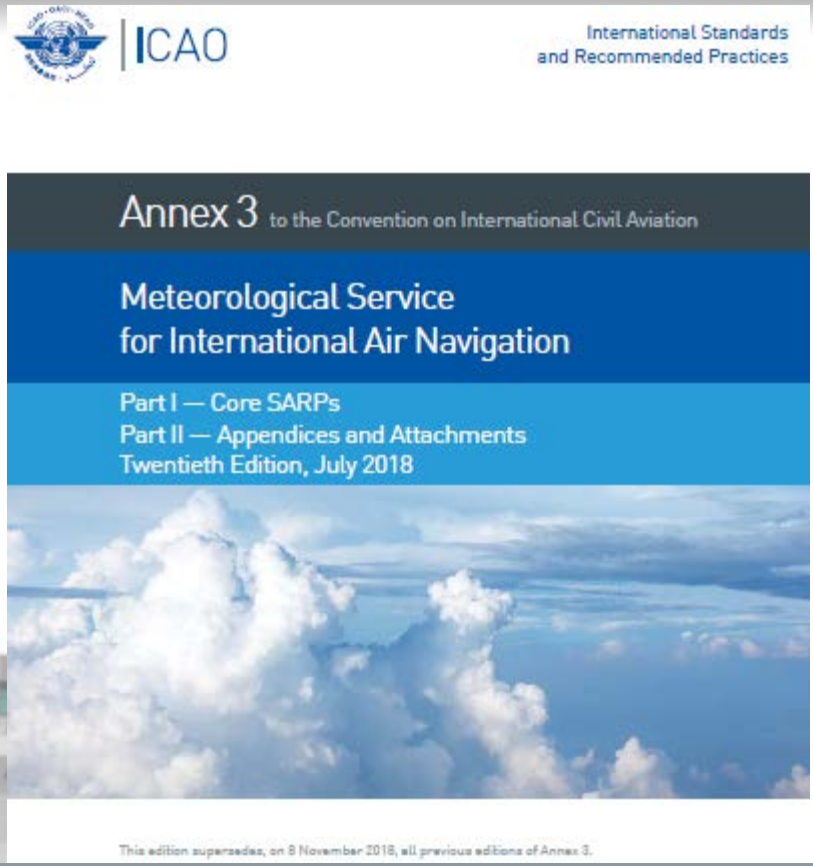
- From November 2020, Amendment 78 to Annex 3 also requires that States shall disseminate all the above specific meteorological information in IWXXM GML form.



ICAO UNITING AVIATION

ICAO Meteorological Information Exchange Model (IWXXM)

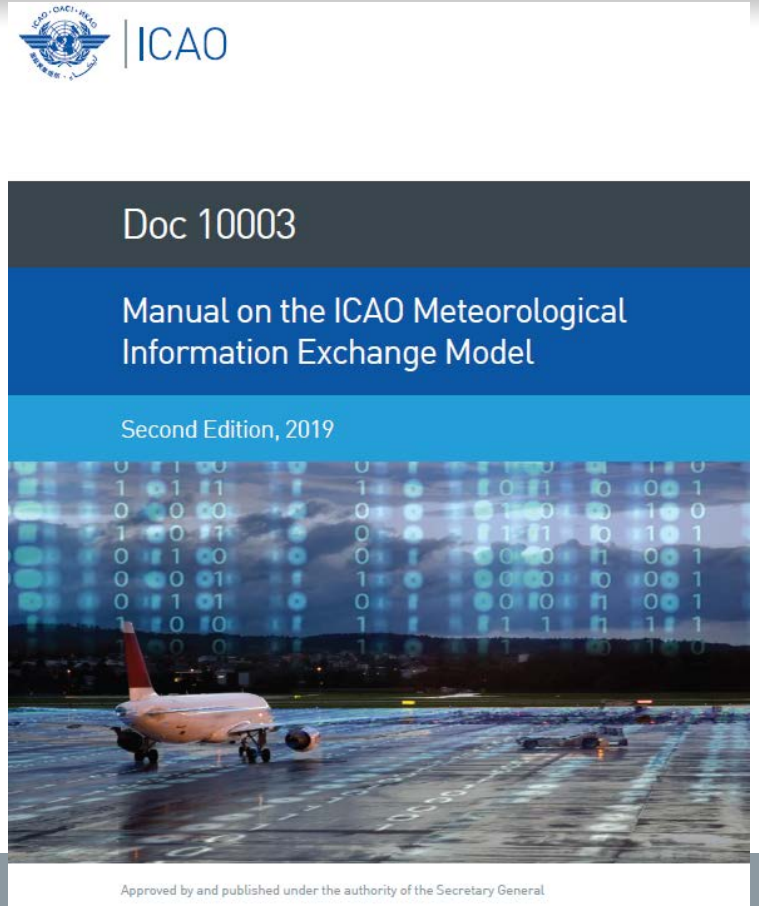
- Proposed Amendment 79
- 5 November 2020
- IWXXM as a Recommended Practice for SIGWX (4 November 2021)
- Template METAR and SPECI support IWXXM to handle missing/incorrect parameters when translating from TAC



ICAO Meteorological Information Exchange Model (IWXXM)

- Guidance material

- Doc 10003 - Manual on the Digital Exchange of Aeronautical Meteorological Information
- First Edition 2014
- Amendment No. 1 (29 September 2017)
- Second Edition 2019



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THANK YOU