



ICAO Interregional APAC/EUR/MID Workshop
Service improvement through integration of
AIM, MET & ATM Information Services

Presentation on PIA 2 Block 0 Experience

2-4 October 2017, Brussels, Belgium



The International Coordinating Council of Aerospace Industries Associations - Background

- Vision

- To maximize civil aerospace manufacturing industry's contribution to a safe, secure, and efficient international air transportation system.

- Membership

- Our global membership consists of aerospace manufacturers and service providers. Of particular interest to this TF, our members design and manufacture UAS/RPAS of all sizes along with the infrastructure they require to be aligned with our vision.

- ICAO Engagement

- ICAO recognizes ICCAIA as an International Organization and ICCAIA has Members and Advisors contributing to a host of panels, high-level groups and other activities including: RPASP, ATMRPP, ASBU-PPT, CAEP, IHLG, GANP-MVT.



Purpose of the presentation

AI3-PIA 2 Block 0 Modules (B0-FICE / B0-DATM / B0-AMET) Organizations and Industry perspective

- what are the experiences with PIA 2 Modules in Block 0,
- assessment and validation of the expected benefits,
- could the benefits be identified during delivery,
- what was good,
- what was missing



PIA 2 Block 0 Overview

--	Blocks	0	1	2	3	--
--	--	2016	2018	2020	2022	Panel
PIA2	B0-FICE	X	X			ATMRPP
	B0-DATM	X	X	X		none active
	B0-SWIM		X	X		IMP
	B0-AMET	X	X			METP



B0-FICE

To improve coordination between air traffic service units (ATSUs) by using ATS interfacility data communication (AIDC) defined by ICAO's Manual of Air Traffic Services Data Link Applications (Doc 9694). An additional benefit is the improved efficiency of the transfer of communication in a data link environment.

- Latest FIXM release 4.0.0 is dated from August 2016 not backwards compatible
- Jumpstart Eurocontrol Demonstrator with FIXM 3.0
- Successful trials with SWIM global demo in 2016, lessons learned
- First FIXM used in FAA for Flight Data Publication Service (FDPS)



BO-DATM

The initial introduction of digital processing and management of information from origination to publication through, aeronautical information service (AIS)/aeronautical information management (AIM) implementation, use of aeronautical exchange model (AIXM), migration to electronic aeronautical information publication (AIP) and better quality and availability of data.

- Latest AIXM Release 5.1.1 is dated from April 2016
- AIXM 4.5 and AIXM 5.1 used in operation worldwide
- AIXM 5 being used for databases for AIP/Chart production
- Business rules are missing, not a real EXCHANGE format yet
- Missing backwards compatibility to AIXM 4.5 made cost higher



BO-AMET

Global, regional and local meteorological information:

- forecasts, volcanic ash and tropical cyclone;
 - aerodrome warnings including wind shear; and
 - SIGMETs to provide information on occurrence or expected occurrence of specific en-route weather phenomena and other operational meteorological (OPMET) information, including METAR/SPECI and TAF, to provide routine and special observations and forecasts at the aerodrome.
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- IWXXM 2.0 issue on May 2016
 - Successful Interoperability tests through AMHS conducted between several European states end of 2016
 - First operation from Belgocontrol (OPMET Databank) since 2017
 - IWXXM 3.1 will be available for Nov 2020 provision



Summary

- All Blocks where used for planning and sometimes mentioned in RfPs, all progressed in understanding
- Open questions remain, especially backwards compatibility for models must be achieved
- B0-FICE: FIXM model is used by demonstrators and large scale trials
- B0-DATM: AIXM model is commonly used in operation within systems, between systems still problems
- B0-AMET: IWXXM model is ready for operation, waiting for consumers
- For Block 1 more ICAO SARPs must be made available



Q & A Session

- Any Questions ?



Abbreviations

- AIDC ATS Interfacility Data Communication
- AIXM Aeronautical Information Exchange Model
- ASBU Aviation System Block Upgrades
- ATMRPP Air Traffic Management Requirements and Performance Panel
- ATSUs Air Traffic Service Units
- CAEP Committee on Aviation Environmental Protection
- FIXM Flight Information eXchange Model
- GANP Global Air Navigation Plan
- METAR Meteorological Aviation Report
- OPMET Operational Meteorological
- RPASP Remotely Piloted Aircraft Systems Panel
- SIGMET SIGNificant METeorological Information
- UAS/RPAS Unmanned Aircraft System
- WXXM Weather Information Exchange Model