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B1-DATM General Description

*Interregional APAC/EUR/MID Workshop on 'service improvement through integration of AIM, MET and ATM information'
(EUROCONTROL HQ, Brussels, 2-4 October 2017)*





PIA2 Schematic Diagram

Thread	Block 0	Block 1	Block 2	Block 3
AMET	B0-AMET	B1-AMET	-	B3-AMET
DATM	B0-DATM	B1-DATM	-	-
FICE	B0-FICE	B1-FICE	B2-FICE	B3-FICE
SWIM	-	B1-SWIM	B2-SWIM	-



Performance Improvement Area 2: Globally Interoperable Systems and Data – Through Globally Interoperable System Wide Information Management

Block 0	Block 1	Block 2	Block 3
<p>B0-FICE Increased Interoperability, Efficiency and Capacity through Ground-Ground Integration Supports the coordination of ground-ground data communication between ATSU based on ATS Inter-facility Data Communication (AIDC) defined in ICAO Doc 9694.</p>	<p>B1-FICE Increased Interoperability, Efficiency and Capacity through FF-ICE, Step 1 application before Departure Introduction of FF-ICE Step 1, to implement ground-ground exchanges using common flight information reference model, FIXML, XML and the flight object used before departure.</p>	<p>B2-FICE Improved Coordination through multi-centre Ground-Ground Integration: (FF-ICE/1 and Flight Object, SWIM) FF-ICE supporting trajectory-based operations through exchange and distribution of information for multicentre operations using flight object implementation and IOP standards.</p>	<p>B3-FICE Improved Operational Performance through the introduction of Full FF-ICE All data for all relevant flights systematically shared between air and ground systems using SWIM in support of collaborative ATM and trajectory-based operations.</p>
<p>B0-DATM Service Improvement through Digital Aeronautical Information Management Initial introduction of digital processing and management of information, by the implementation of AIS/AIM making use of AIXM moving to electronic AIP and better quality and availability of data.</p>	<p>B1-DATM Service Improvement through Integration of all Digital ATM Information Implementation of the ATM information reference model integrating all ATM information using UML and enabling XML data representations and data exchange based on internet protocols with WXXM for meteorological information.</p>		
	<p>B1-SWIM Performance Improvement through the application of System-Wide Information Management (SWIM) Implementation of SWIM services (applications and infrastructure) creating the aviation intranet based on standard data models, and internet-based protocols to maximize interoperability.</p>	<p>B2-SWIM Enabling Airborne Participation in collaborative ATM through SWIM Connection of the aircraft an information node in SWIM enabling participation in collaborative ATM processes with access to rich voluminous dynamic data including meteorology.</p>	
<p>B0-AMET Meteorological information supporting enhanced operational efficiency and safety Global, regional and local meteorological information provided by world area forecast centres, volcanic ash advisory centres, tropical cyclone advisory centres, aerodrome meteorological offices and meteorological watch offices in support of flexible airspace management, improved situational awareness and collaborative decision-making, and dynamically-optimized flight trajectory planning.</p>	<p>B1-AMET Enhanced Operational Decisions through Integrated Meteorological Information (Planning and Near-term Service) Meteorological information supporting automated decision processes or aids involving: meteorological information, meteorological translation, ATM impact conversion and ATM decision-making support.</p>		<p>B3-AMET Enhanced Operational Decisions through Integrated Meteorological Information (Near-term and Immediate Service) Meteorological information supporting both air and ground automated decision support aids for implementing weather mitigation strategies.</p>



Service improvement through integration of ALL digital ATM information

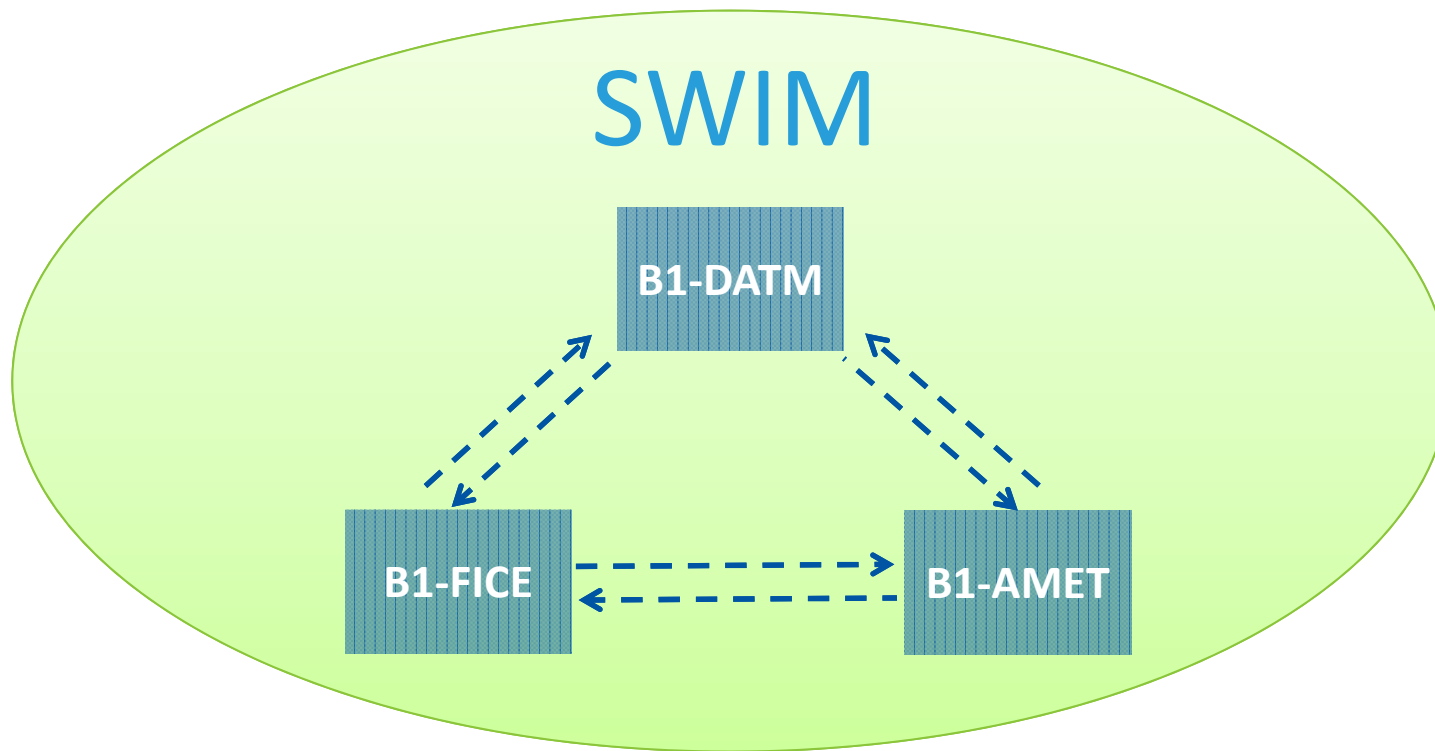
- This module addresses the need for increased information integration and will support a new concept of ATM information exchange fostering access via internet-protocol-based tools Exchange models such as AIXM, FIXM, IWXXM and others relate their concepts to the AIRM fostering convergence, re-use, and collaborative alignment.
- **Applicability**
 - Applicable at the State level, with increased benefits as more States participate.



Benefits	
Access and Equity	Greater and timelier access to up-to-date information by a wider set of users.
Efficiency	Reduced processing time for new information; increased ability of the system to create new applications through the availability of standardized data.
Interoperability	Essential for global interoperability.
Safety	Reduced probability of data errors or inconsistencies; reduced possibility to introduce additional errors through manual inputs.

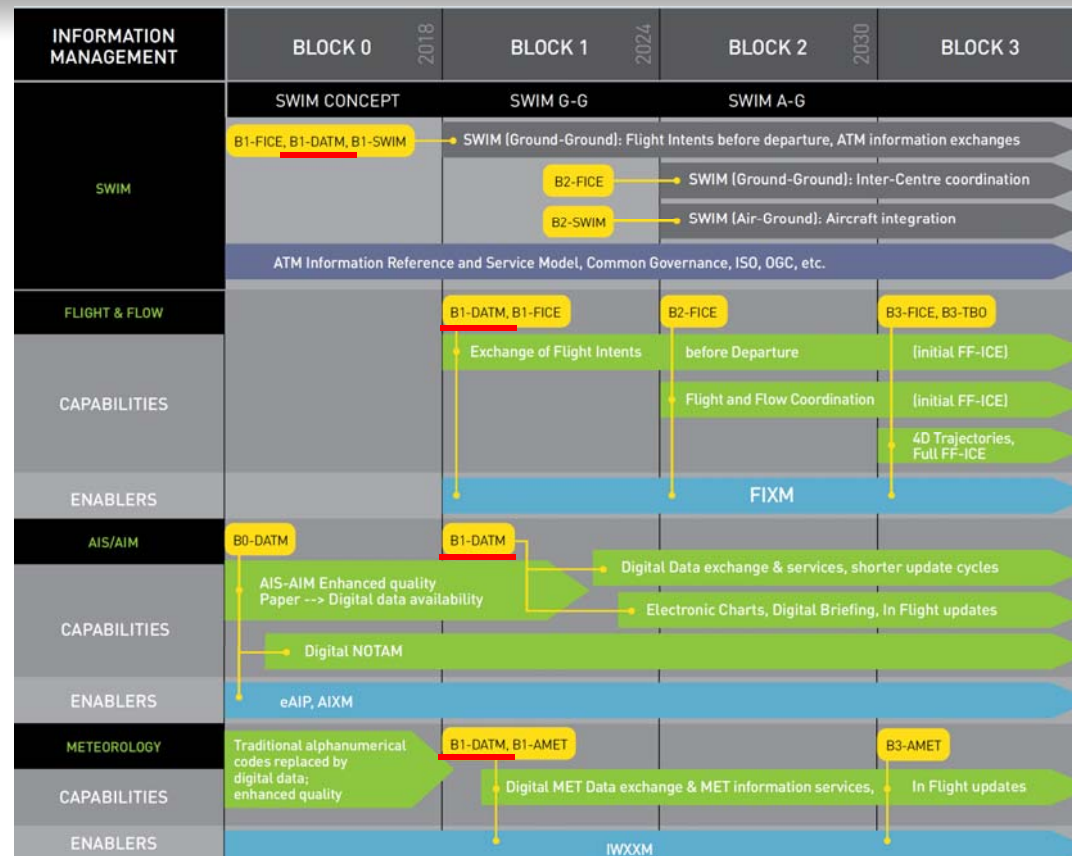


- Initial introduction of the ATM Information Reference Model (AIRM), which integrates and consolidates ATM information in a transversal way.
- Baseline: B0-DATM and AIXM implementation are the baseline for B1-DATM.
- Implements a second step of digital information management with exchange data models;
 - IWXXM for meteorological information;
 - FIXM for flight and flow information; and aircraft performance-related data
- B1-DATM addresses the need for increased information integration and will support a new concept of ATM information exchange.





B1-DATM position in IM Roadmap





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and Caribbean
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Paris

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(MID) Office
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THANK YOU