Relationship between IMP and METP

Presented to: ATIEC 2016
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Overview

• Introduction
• Information Management Panel (IMP)
• Meteorology Panel (METP)
ICAO Panel Structure

- Information Management Panel (IMP)
- Communications Panel (CP)
- Meteorology Panel (METP)
## IMP Responsibilities

<table>
<thead>
<tr>
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<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>Define the Global Interoperability Framework (GIF)</td>
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<tr>
<td>2</td>
<td>Define and elaborate on the ATM information management concepts, functions and processes on a system-wide basis.</td>
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<td>3</td>
<td>Identify the Quality of Service requirements necessary to maintain ATM information security, integrity, confidentiality and availability and to mitigate the risks of intentional disruption and/or changes to safety critical ATM information.</td>
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<td>4</td>
<td>Develop an ATM information service architecture.</td>
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<td>5</td>
<td>Identify the requirements for SARPS and changes to existing SARPS that will provide an interoperable environment that will support the information requirements of all ANS stakeholders.</td>
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<td>6</td>
<td>Develop transition strategies and guidance necessary for the implementation of global SWIM and new information exchange formats.</td>
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<td>7</td>
<td>Plan for anticipated data and information flows in relation with future ATM requirements and capabilities and assess the capacity of appropriate facilities to support them.</td>
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IMP Structure

ICAO Air Navigation Commission

Information Management Panel

WG-A Provisions and Guidance on the use of ATM messaging including the review of NOTAM

WG-B Information Architecture and Management

WG-C SWIM Awareness and Communication

WG-D SWIM Governance
ICAO Doc. 10039

- SWIM Concepts
- SWIM Global Interoperability Framework
- Transition to SWIM
- SWIM Technologies
  - Web services/Service-Oriented Architecture (SOA)
  - (Reliable) Messaging
  - SWIM Registry and associated metadata
### METP Responsibilities

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<tr>
<td><strong>1</strong></td>
<td>Define and elaborate concepts for aeronautical MET service provision, including aeronautical MET services and information supporting the future system-wide information management (SWIM) system</td>
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<td><strong>2</strong></td>
<td>Identify the scientific and/or technological capabilities necessary to fulfill the identified operational requirements</td>
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<td><strong>3</strong></td>
<td>Develop and/or maintain ICAO provisions necessary for meteorological service for international air navigation</td>
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<td><strong>4</strong></td>
<td>Develop and/or maintain aeronautical MET integration roadmaps (or similar) that provide transition strategies for aeronautical MET services and information consistent with the GANP</td>
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<td><strong>5</strong></td>
<td>Develop proposals fostering interoperability through appropriate collaborative arrangements for MET systems and services.</td>
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MET Panel Structure

ICAO Air Navigation Commission

Meteorology Panel

- WG-1 MET Requirements and Integration (MRI)
- WG-2 MET Information & Service Development (MISD)
- WG-3 MET Information Exchange (MIE)
- WG-4 MET Operations Group (MOG)
- AG-1 MET Cost Recovery Guidance and Governance (MCRGG)
MET Panel Structure (Cont’d)
MET-SWIM

- WG-MIE tasked with the development of MET-SWIM concepts (Workstream 3: SWIM)
- WG-MIE has developed two documents

**MET-SWIM Plan**
Describes information exchange principles and concepts for the MET component of SWIM

**MET-SWIM Roadmap**
Describes the timelines and transition plan for the introduction of MET-SWIM
IMP and METP Relationship

IMP
- WG-A
- WG-B
- WG-C
- WG-D SWIM Governance

Doc 10039
MANUAL ON SYSTEM WIDE INFORMATION MANAGEMENT (SWIM) CONCEPT

METP
- WG-1 MRI
- WG-2 MISD
- WG-3 MET Information Exchange
- WG-4 MOG
- WG-5 MCRGG

Common Concepts and Approaches

MET Concepts and Requirements
METP / IMP Coordination

- METP will continue developing MET-SWIM concepts and share them with the IMP
- IMP will continue developing common SWIM concepts and share them with the METP
- IMP WG-SWIM Governance
  - IMP and METP members continue developing governance guidance
  - METP members contribute MET governance expertise and distribute governance information to the broader METP
- ICAO Doc. 10039
  - IMP will continue developing SWIM concepts
  - MET-SWIM content may become a new section or appendix in Doc. 10039 Manual on System-Wide Information Management
MET-SWIM Roadmap

Block 1 (B1-SWIM, B1-AMET, and others)
2019-2024
- MET-SWIM Bi-Lateral Exchanges
- Dependencies:
  - TCP/IP and HTTP communications
  - SWIM Messaging
  - Service Security
  - SWIM Registry

Block 2 (B2-SWIM, B2-AMET, and others)
2025-2030
- MET-SWIM Transition Period

Block 3 (B3-SWIM, B3-AMET, and others)
2031 and beyond
- MET-SWIM Operational Capability

*MET-SWIM timelines are notional and have not yet been discussed by the full METP*
GANP and ASBUs

- The Global Air Navigation Plan (GANP) describes several phases of SWIM Implementation. These are Aviation System Block Upgrades (ASBUs).
- MET-SWIM capabilities rely upon common SWIM capabilities.
- Recent GANP and ASBU proposals would update Block 1 implementation from 2019 to 2024.
Summary

• CP, IMP and METP relationships and coordination are very important
• ICAO SWIM implementation is in progress
• MET-SWIM (and other domains such as AIM-SWIM) will require Block 1 SWIM capabilities such as SWIM messaging and HTTP communications
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