



FL01 to MET/R WG/15

Aligning next generation MET Information with ATM/ATFM requirements for seamless operation.

Presented by MET/R WG Chair





Topics

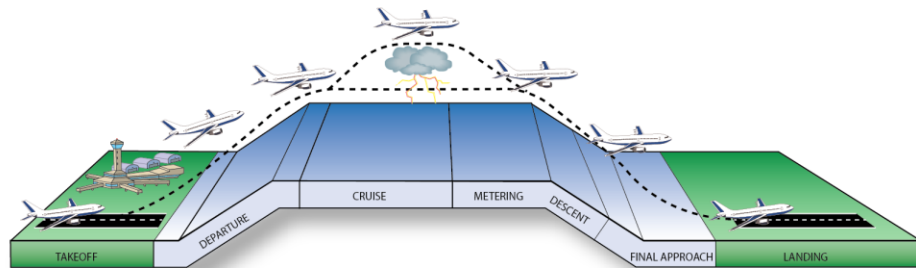
- ATM/ATFM operational needs – the weather challenge
- Strategic outcomes for ATM/ATFM
- Evolution of MET services
- Next-Generation Met Information Service
- APAC focus: What we should do together
- Moving forward





Why this matters to ATM/ATFM

- Weather remains a key constraint on capacity and efficiency
- Increasing demand requires:
 - Better predictability
 - Earlier decision-making
 - Network-wide consistency
- Current MET information is not always:
 - Easily integrated into ATFM systems
 - Consistent across regions





Strategic outcomes for ATM/ATFM

- Improved **predictability of weather impacts**
- **Consistent information** across the region
- **Seamless integration** into ATM/ATFM systems
- **Impact-based**, operationally relevant information
- Enhanced **network efficiency and flow performance**





Evolution of MET services

From static products to dynamic services

Traditional approach	Future approach
Static, text-based products (e.g., METAR, TAF)	Dynamic, machine-readable data (e.g., IWXXM format)
Limited integration with automated systems	Seamless integration with ATM and airline systems and decision aids



Services tailored to user needs, decision timeframes and automated.



Next Generation Meteorological Information Services

ICAO MET Panel is developing standards for new meteorological services:

- **AMOIS** - Aerodrome Meteorological Observation Information Service
- **AMFIS** - Aerodrome Meteorological Forecast Information Service
- **HWIS** - Hazardous Weather Information Service





What this means to you



ATC – real-time updates → better rerouting



Pilots – real-time hazard awareness in cockpit systems



Dispatchers - more accurate flight planning



Airlines - proactive ops management



ANSPs – automated data for ATM systems



Aerodrome Ops – planning for aerodrome conditions





Global direction and progress

- ICAO has endorsed the shift to data-centric MET services
- AMOIS, AMFIS and HWIS form the foundation of future Met services
- Development of standards to meet the requirements for a future globally interoperable ATM system is being finalised by the MET Panel





APAC focus: What we should do together

- Align **MET capabilities with ATM/ATFM requirements**
- Define **priority operational** use cases (e.g. CB, turbulence)
- Ensure **interoperability across States**
- Strengthen **regional coordination**





Moving forward

- Strengthen **MET-ATM/ATFM collaboration**
- Continue **joint discussions / seminars**
- Consider updating **Terms of Reference** to reflect new services [ref: MET/R WG/15 WP/06]
- Support harmonised implementation in APAC



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Action by the meeting:

The group is invited to review and propose updates to the sections of Terms of Reference (ToR) to reflect the transition towards next-generation, data-centric MET information services and to enhance coordination with ATM/ATFM stakeholders, for consideration by the MET SG.



METEOROLOGY PANEL



Thank you

Ashwin Naidu

