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# SIGMET Workshop

*(Virtual, 9 December 2021)*

## **SIGMET Coordination and Harmonization**

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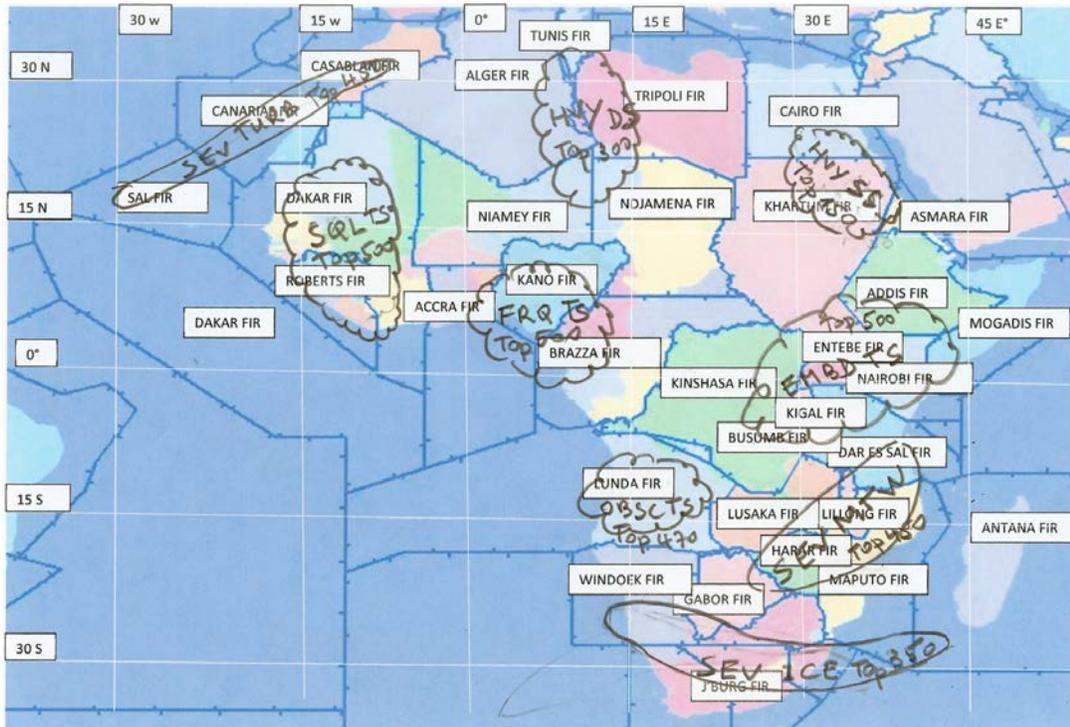


## Outline

- **WHAT** is the Problem ?
- **WHO** is impacted ?
- **HOW** to address the related Problem
- **Common Measures**

## WHAT is the Problem?

Hazardous phenomena affecting FIRs/ACCs



Where and when problem may happen?

- SIGMET worthy phenomena may **cover several FIRs/ACCs**
- Information **independently provided by MWOs**
- Credibility / Reliability at stake **when one and the same phenomenon is interpreted very differently** by neighbouring MWOs
- **Coordination of content**, timing, area and levels affected needed (similar to ATM coordination)
- **Contradictory SIGMET information** might be provided to Users



## WHO is impacted ?

- Planning layers (Pre-tactical; Tactical-Pre ops; Tactical-During ops);
- En-route aircraft;
- Departure aircraft;
- Arrival;
- etc.



## HOW ? (1/2)

- **Establishment of a MWO by State**, as per A3, Chap.3: §3.4.1, *Doc 8896*
  - **Training of Weather Forecasters** : In compliance with the requirements of the WMO in respect of qualifications, competencies, education and training of meteorological personnel providing service for international air navigation (WMO-No. 49, Volume I — General Meteorological Standards and Recommended Practices, Part V refers)
  - Move towards a « **common situational awareness** » in an entire region
- **Coordination**
    - **Coordination\_** between the MWO and its corresponding AMOs with the State
    - **Coordination** between the MWO and its neighboring MWOs
    - **Coordination between MWOs and ATS units**
    - **Coordination between MWOs, VAACs, TCACs and State volcano observatories**
  - **Cooperation /Collaboration and support**
    - **WMO regional /sub-regional WGs with APIRG auxiliary Bodies in MET**
    - **APIRG IIM concerned MET Project (s)** to assist States in the delivery of SIGMET information in a changing air space structure.
    - Participation of States MWOs in the **AFI Annual SIGMET Tests** and implementation of the resulting recommendations for improvement
    - **Cooperation with the RSMC** regarding the VAAs and TCAs



## HOW ? (2/2)

### ■ Changes in Air Traffic Management

- Several Regions are planning « **integrated air space concepts** » going beyond existing national borders
- Meteorological service provision, in particular SIGMET issuance, **may have to adapt to changed structures**

### ■ Harmonized hard-and software components for economies of scale (e.g. WXR, lightning detection, modelling)

### ■ Joint development of Quality Management Systems under ISO 9001 Standards

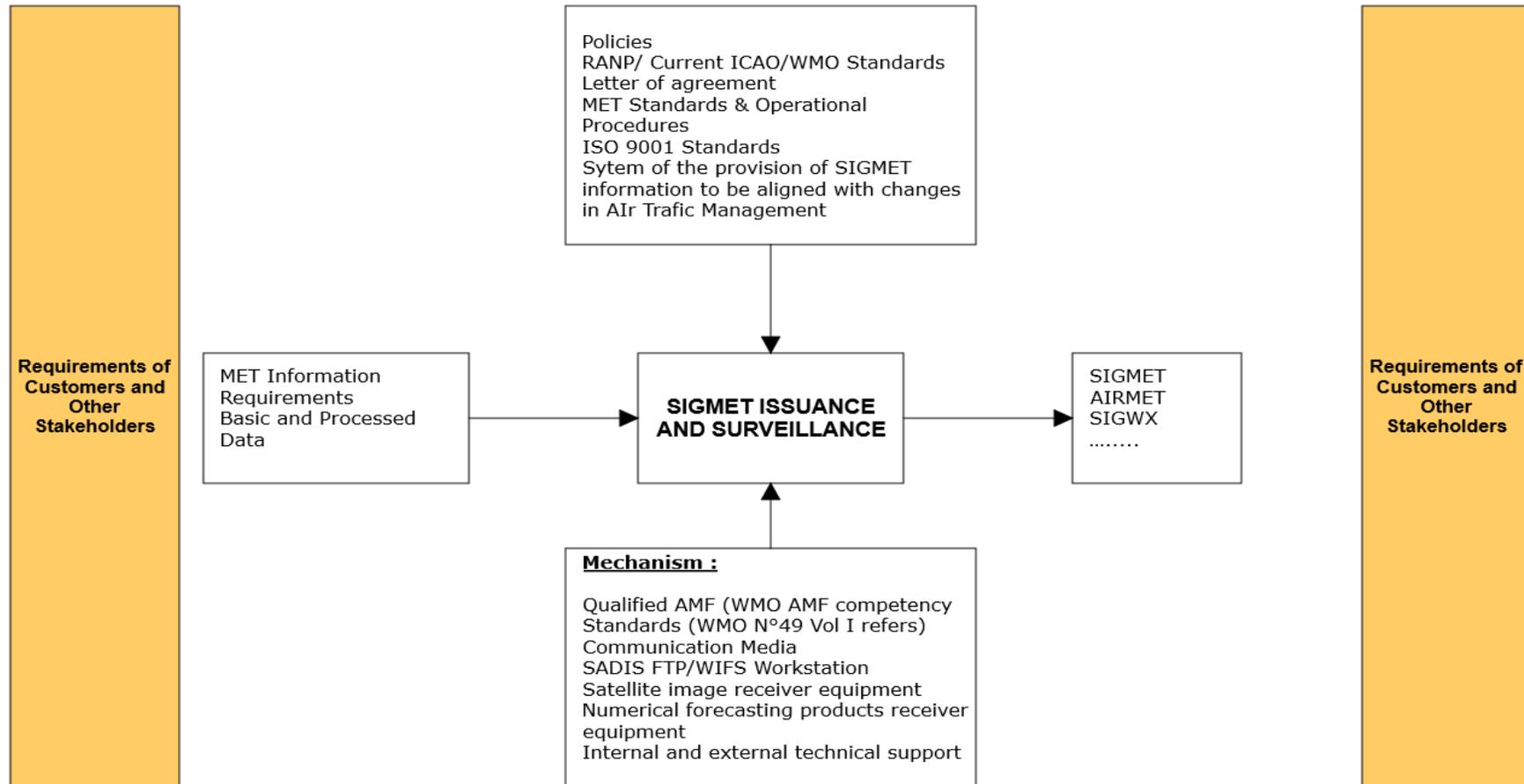
- **Operational Processes and Procedures** related to provision of SIGMET information
- **Interactions between processes** well managed
- Establishment of **functional agreements between neighboring MWOs** for effective coordination
- **Quality assurance** of SIGMETs delivery



## Common requirements /Measures (1/2)

- **Coordination at different Levels**
- **Harmonized hard-and software** components for economies of scale (e.g. WXR, lightning detection, modelling)
- **Joint development of Quality Management Systems**
- **Cooperation in development, Training and capacity building** (common, larger MWO's would allow for centralized training, staff rotation, exposure to up-to-date systems)
- **Alignment** of the system of the provision of SIGMET Information with Changes in Air Traffic Management **to adapt to changed structures**

## Common requirements /Measures (2/2)





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THANK YOU