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# IWXXM Exchange - Roles & Responsibilities

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Webinar on the implementation of the ICAO Meteorological  
Information Exchange Model (IWXXM), 27 to 29 October 2020





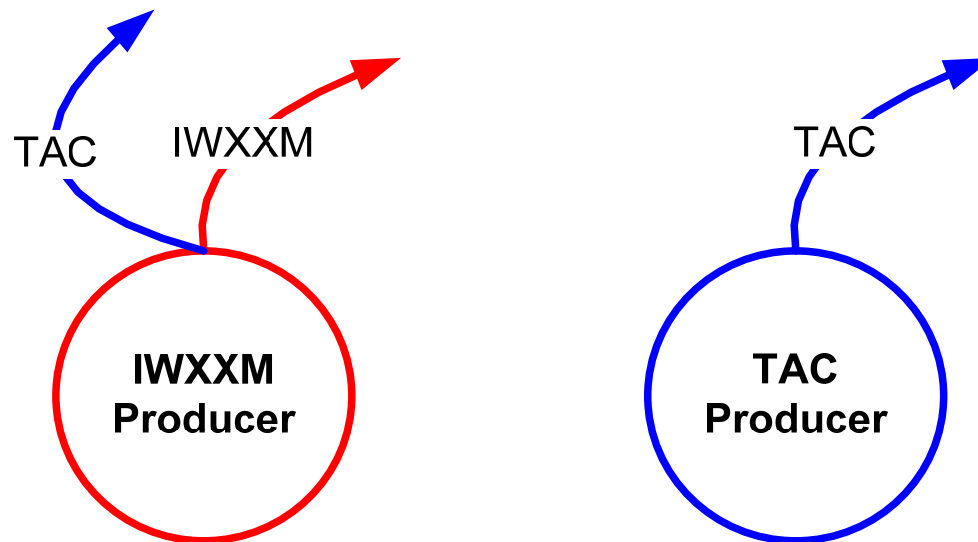
# Background

- Roles and responsibilities for TAC & IWXXM are very similar
- All States are required to arrange the generation and distribution of IWXXM





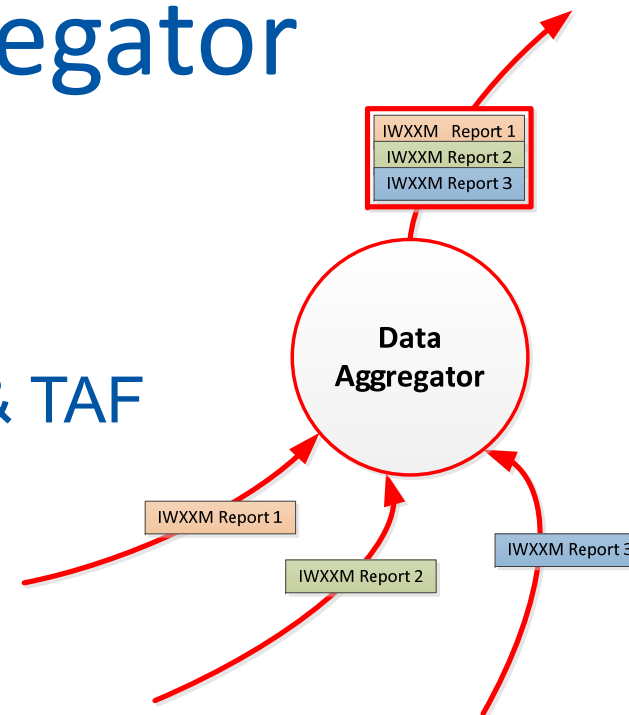
# IWXXM Producer





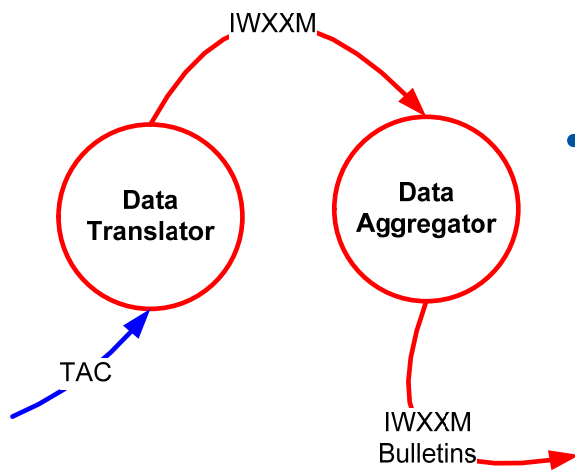
# Data Aggregator

- Generates a bulletin of reports
- Applies to METAR & TAF
- Separate bulletins for METAR & TAF





# Data Translator



- Converts Traditional Alphanumeric Code (TAC) to IWXXM



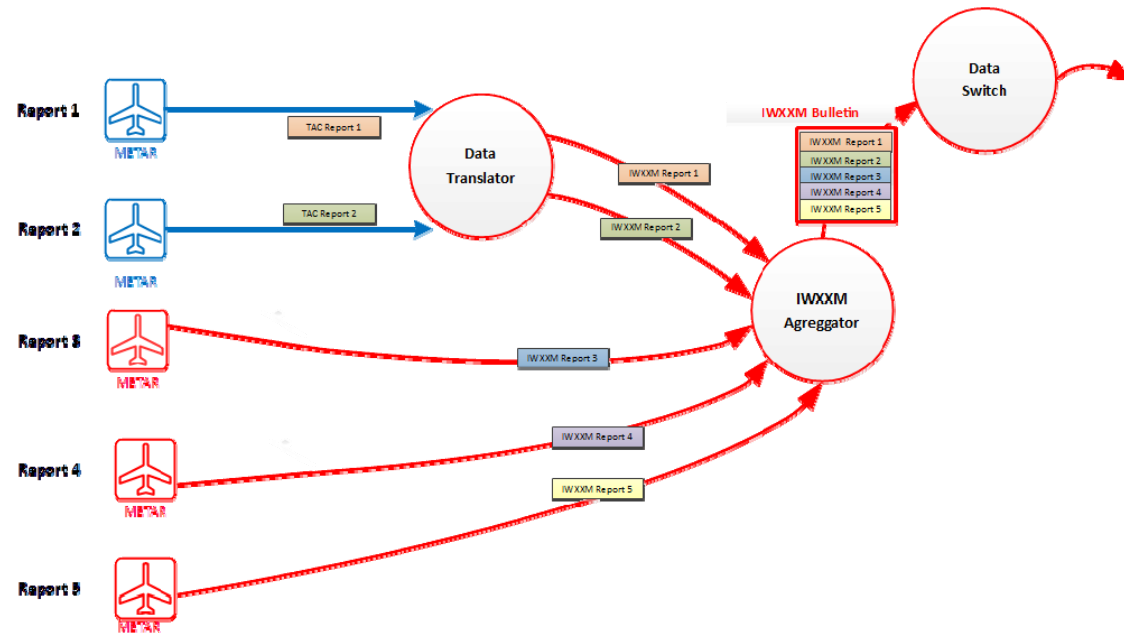
# Data Switch

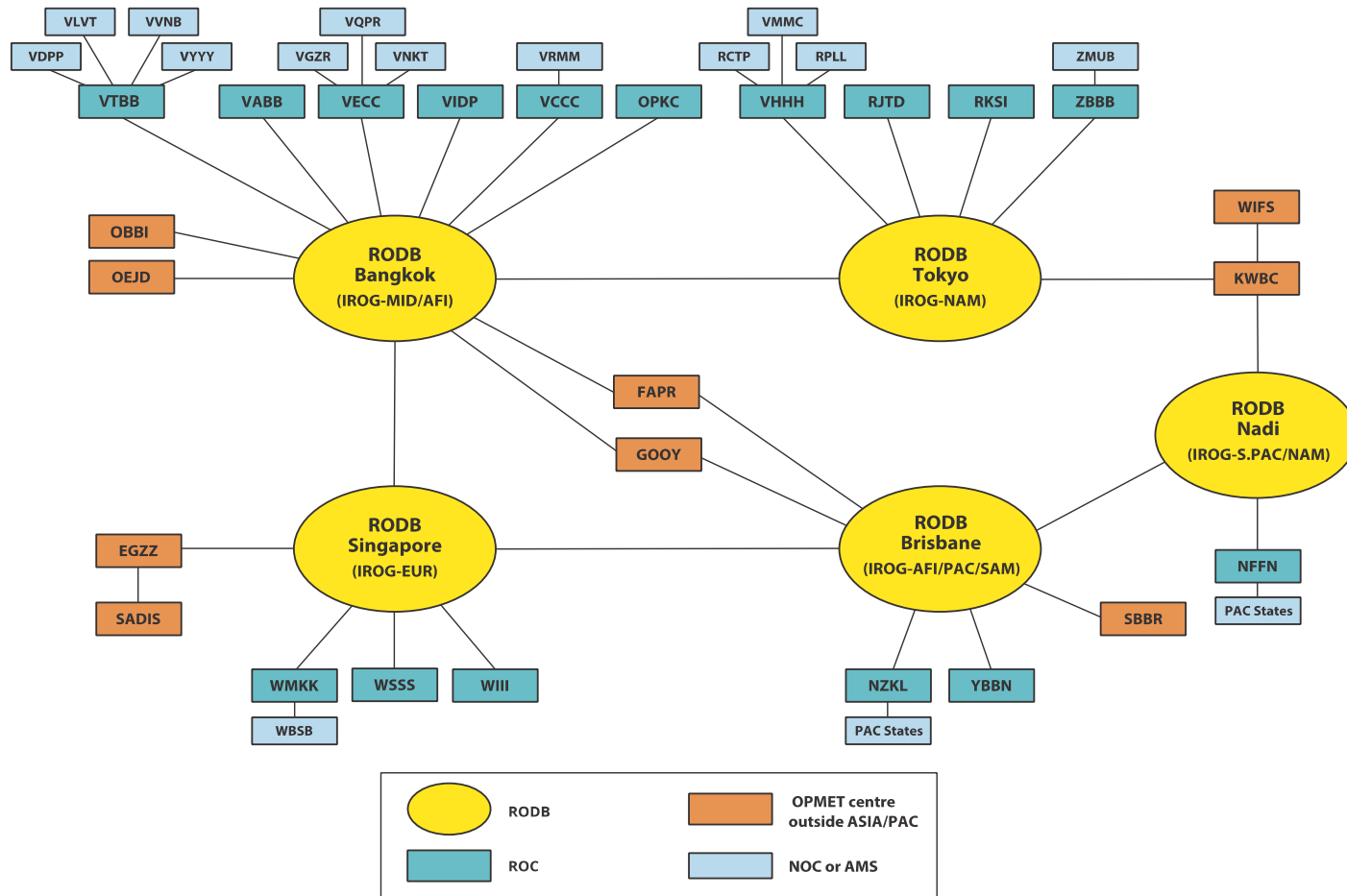
- Routes OPMET according to IWXXM filename

A\_LAAU31YBBN171500\_C\_YBBN\_20151117150010.xml.gz



# Data Paths

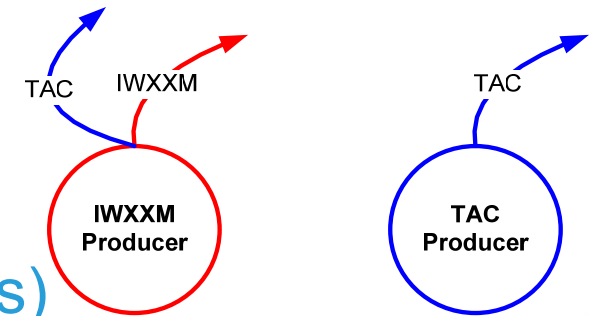






# National OPMET Centres (NOCs)

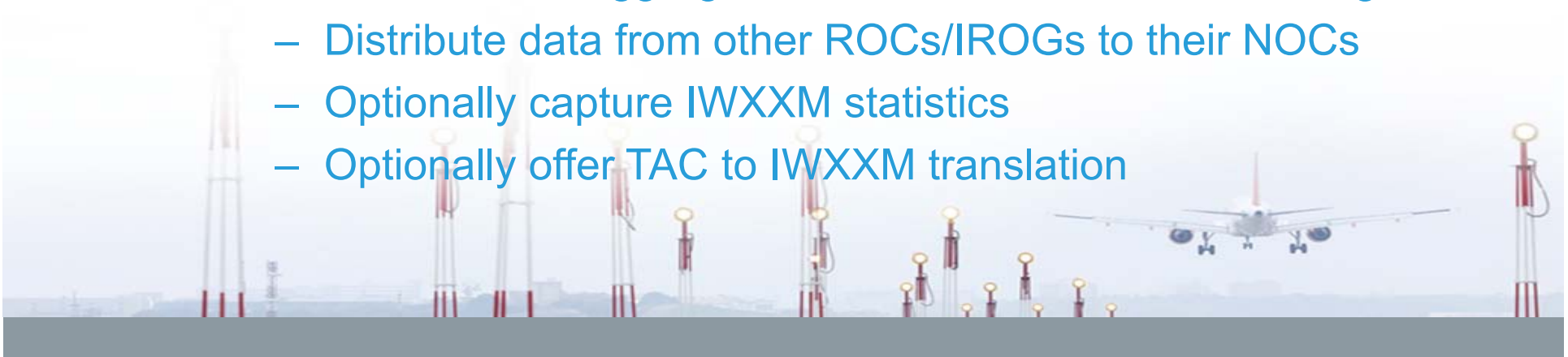
- Ensure IWXXM reports
  - Conform to the IWXXM schema
  - Pass Schematron (business rules)
- Aggregate reports into bulletins (where required)
- Distribute IWXXM to their regional OPMET centre (ROC)





## Regional OPMET Centres (ROCs)

- APAC has 14 ROCs who
  - Collect OPMET from their NOCs and validate
  - Perform data aggregation, dissemination and switching
  - Distribute data from other ROCs/IROGs to their NOCs
  - Optionally capture IWXXM statistics
  - Optionally offer TAC to IWXXM translation





## Inter-regional OPMET Gateways (IROGs)

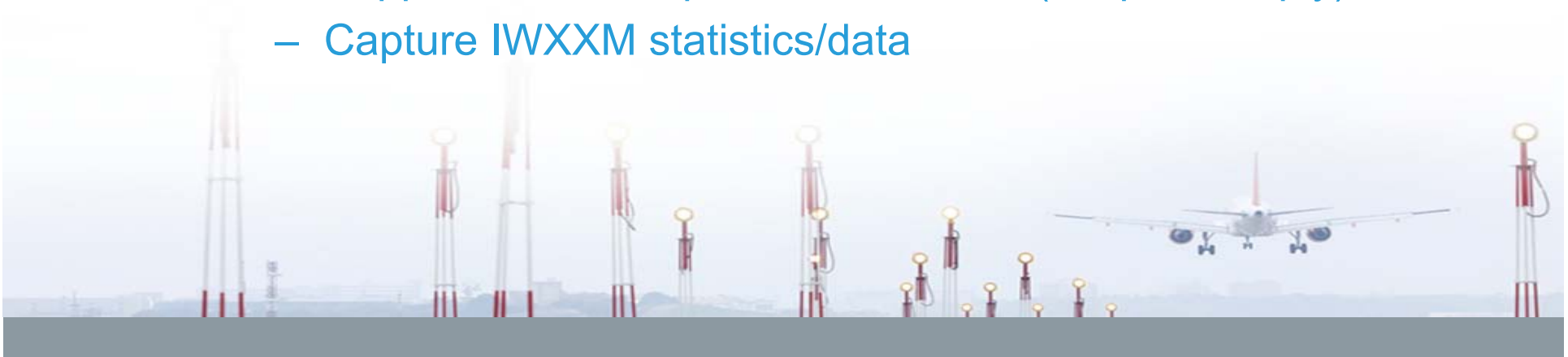
- APAC has 5 IROGs who
  - Collect and disseminate our OPMET to their partner IROGs
  - Collect OPMET from their connected regions and disseminate to the ROCs in our region
  - Optionally offer TAC to IWXXM translation





## Regional OPMET Databank (RODBs)

- APAC has 5 RODBs who
  - Store a copy of all regional (& typically global) OPMET
  - Support ad hoc requests for OPMET (Request/Reply)
  - Capture IWXXM statistics/data





## Summary of Roles

Role	Each State	NOC	ROC	IROG	RODB
Data Producer**	Y				
Data Aggregator		Y	Y		
Data Switch			Y	Y	
Request/Reply					Y

\*\* Some States may arrange for another State to provide translation



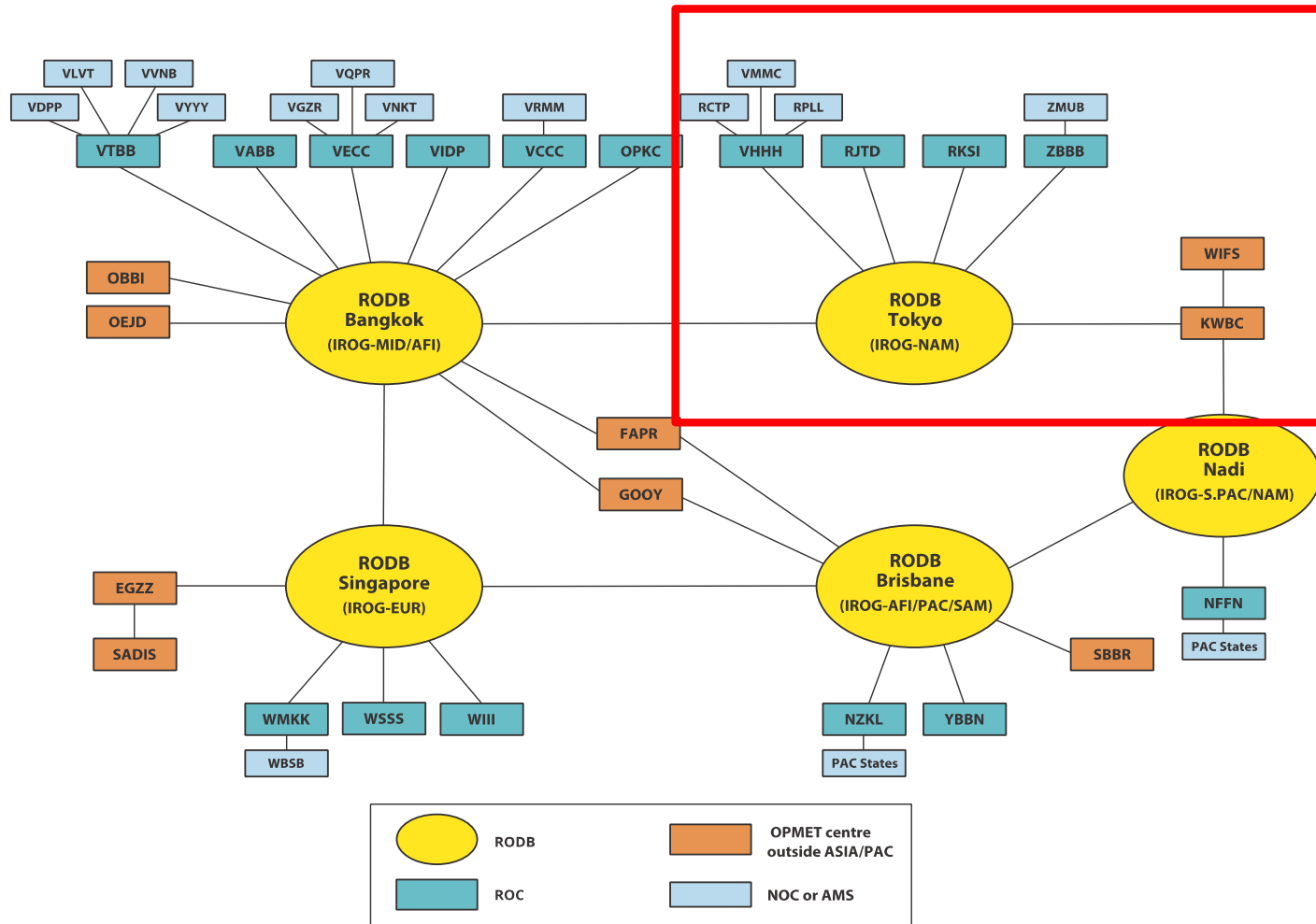
## Users (Airlines, Mets, ANSPs...)

### Users are required to:

- Arrange access to IWXXM from one or many sources
- Manage non-translated TAC in IWXXM

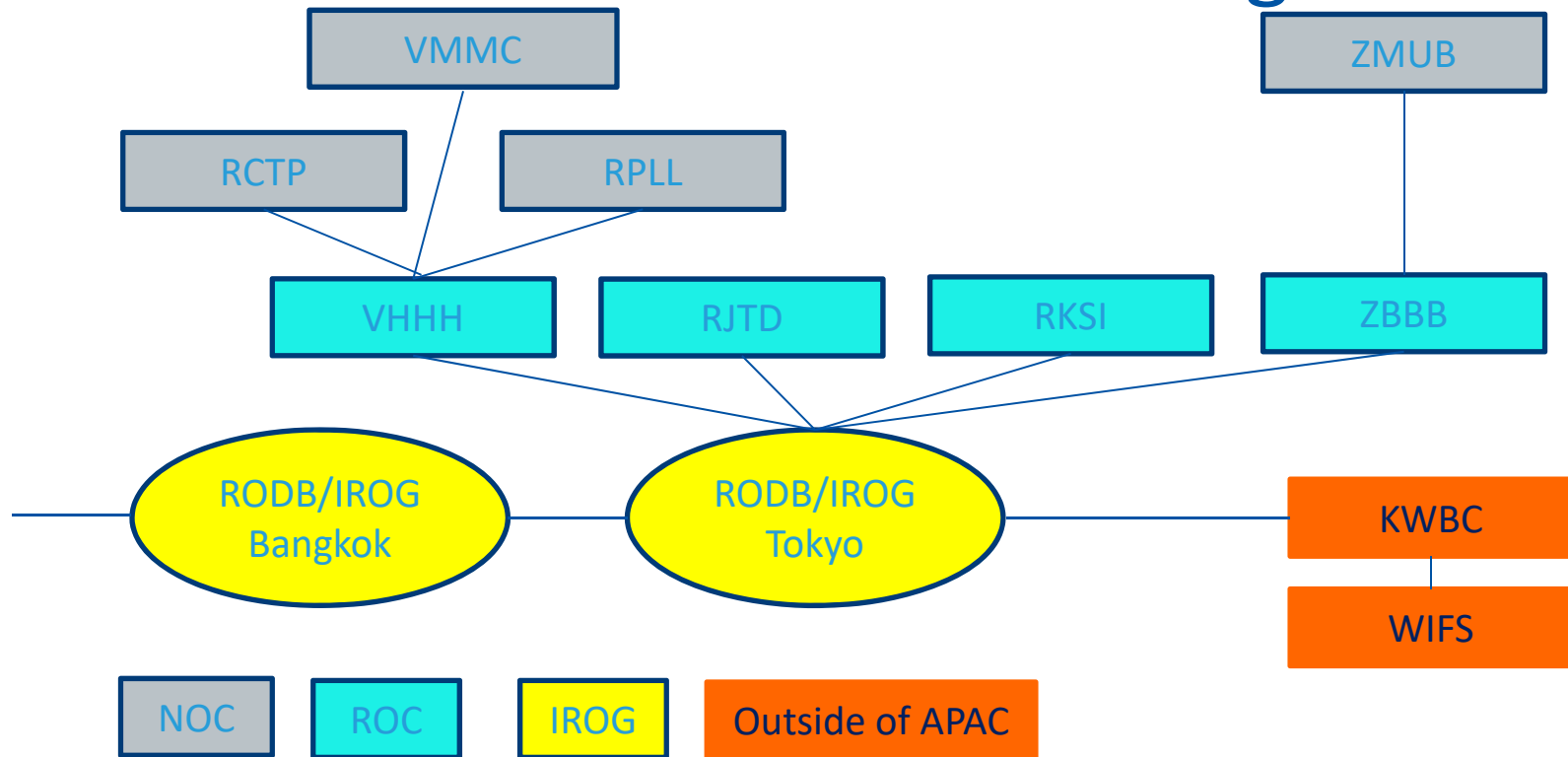
### Users are recommended to:

- Take appropriate malware and anti-virus precautions if ingesting compressed files
- Validate received IWXXM
- Managed off-line copies of all required schema's & code tables



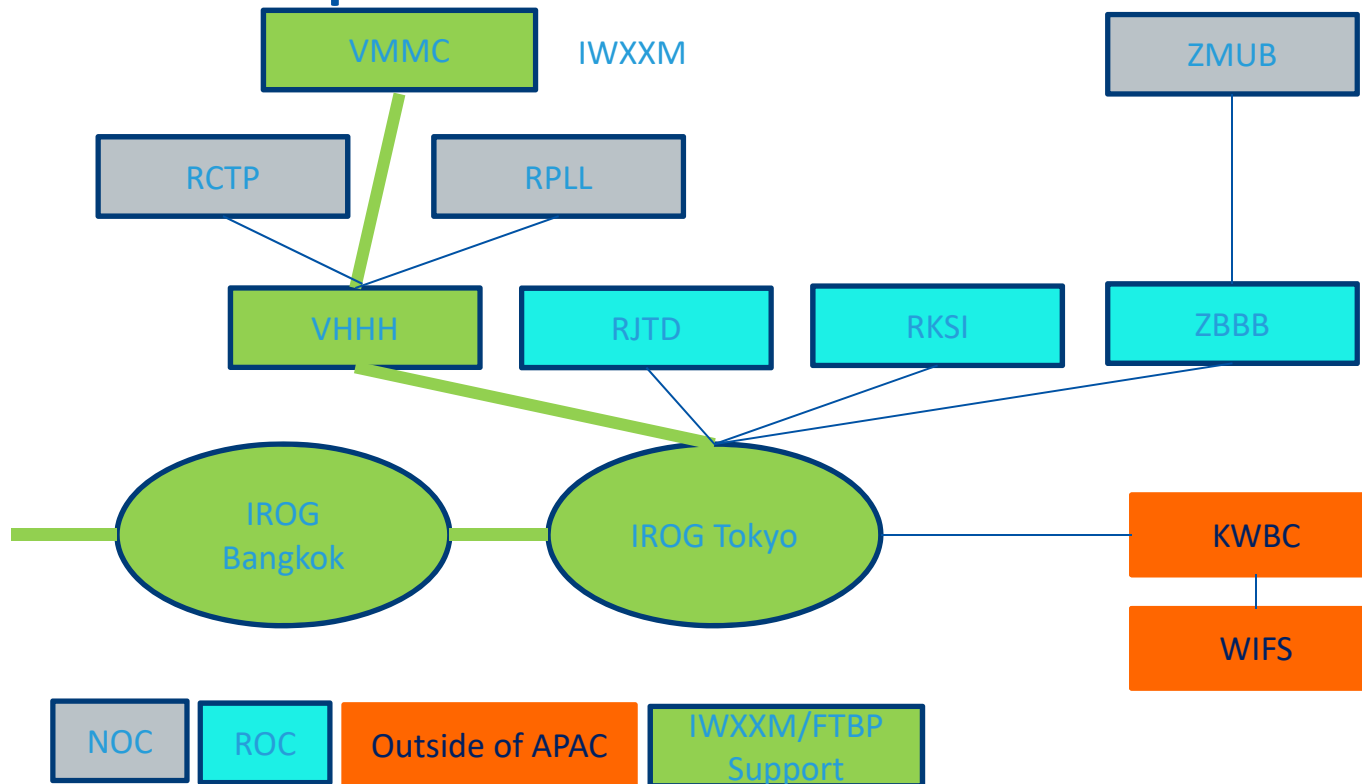


# APAC ROBEX Scheme – 1 subregion



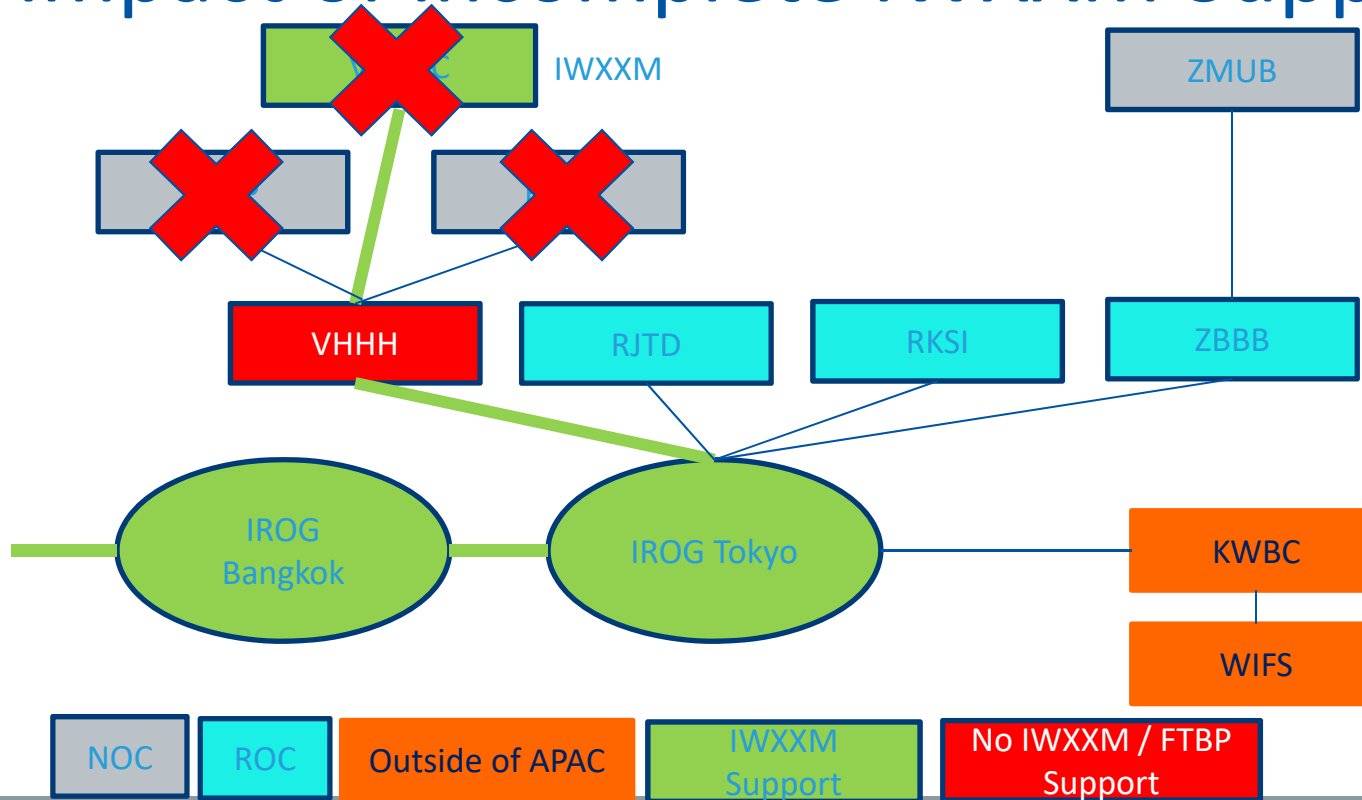


# Complete IWXXM Transfer Path



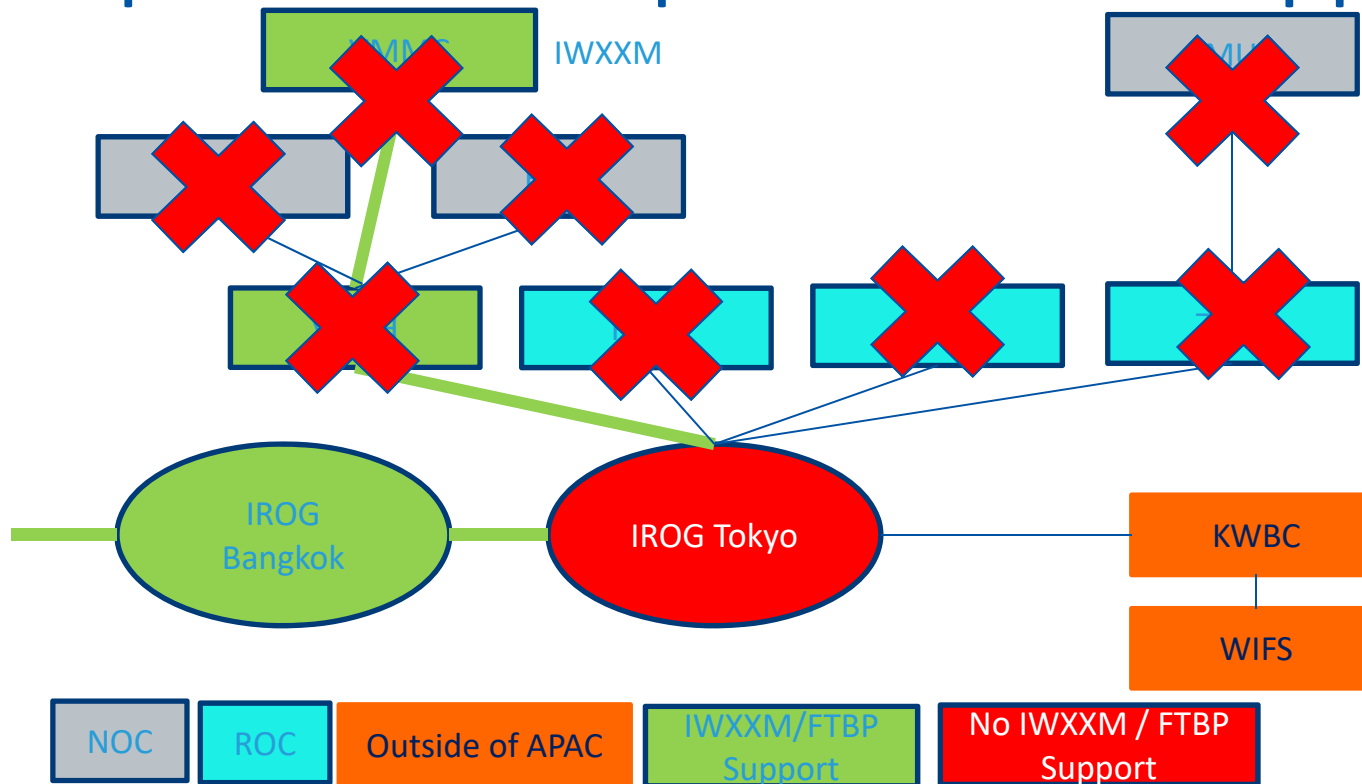


# Impact of Incomplete IWXXM Support



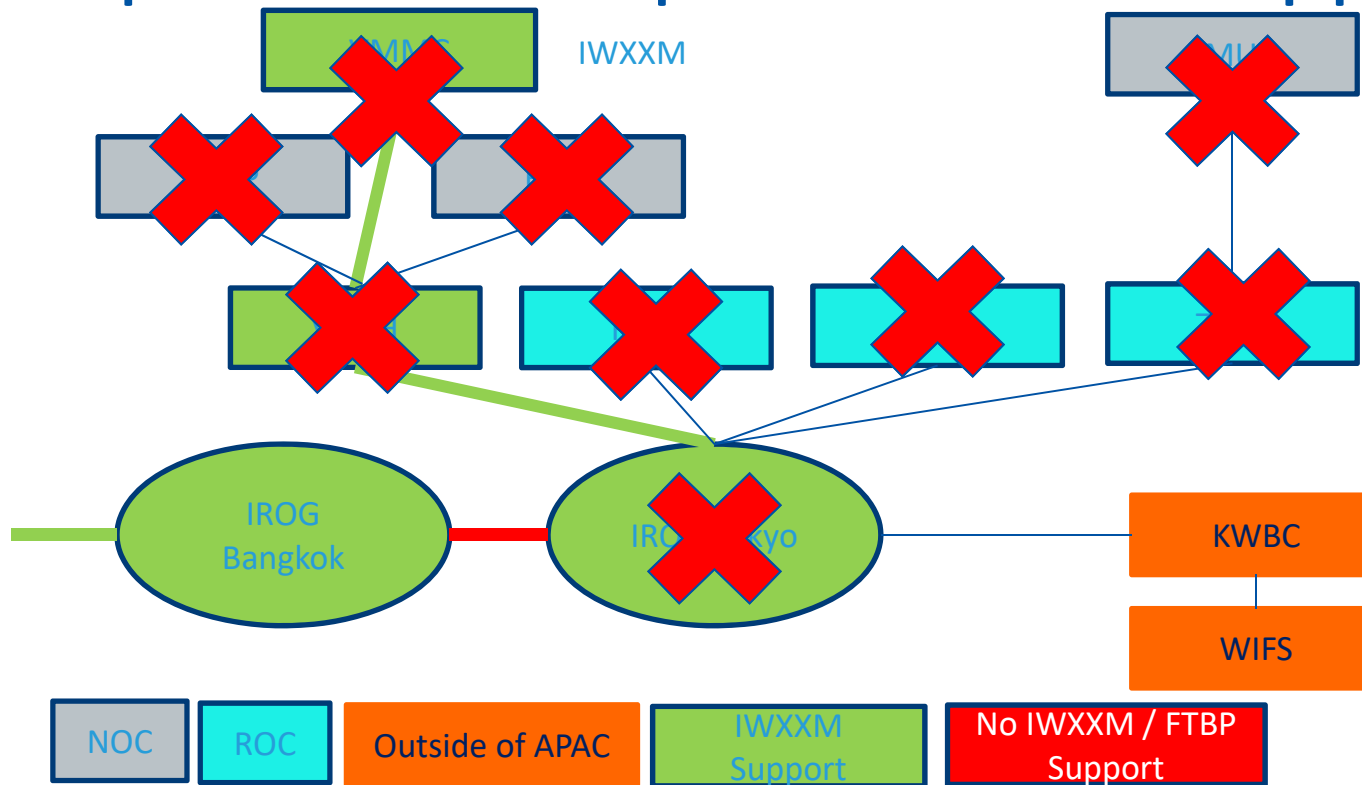


# Impact of Incomplete IWXXM Support





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## Reminder...!

- States must
  - Arrange the generation of IWXXM
  - Have AMHS/FTBP from generation source to NOC/ROC
  - Arrange to notify ICAO & RODB of new/changes to bulletins via a METNO
- States should
  - make IWXXM available to users



## Resources

- ICAO APAC e-documents (MET)
  - IWXXM Guidelines
  - ROBEX Handbook