



ICAO BANGKOK UNITING AVIATION

# IWXXM Extensions

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





# Background

- WMO develop IWXXM
- Schema supports ICAO Annex 3 SARPS
- Some States include additional information in their OPMET





KLAX 202353Z 27014KT 5SM HZ BKN013 20/16 A2981 RMK AO2  
SLP092 T02000161 10228 20200 56007

TAF YBWW 202310Z 2100/2118 07010KT 9999 BKN040  
FM210100 07012KT 9999 -SHRA SCT040 BKN050  
FM211500 06006KT 9999 NSW SCT010 BKN014

INTER 2100/2112 3000 SHRA BKN015

PROB30 TEMPO 2100/2112 VRB20G35KT 2000 TSRA BKN015  
SCT040CB

RMK

T 22 24 24 20 Q 1018 1015 1013 1014



# IWXXM Extensions

- IWXXM is compliant with ICAO Annex 3
- IWXXM is designed to allow extensions
- The method of extending the schema is very important
- ICAO discourages States from extending
  - Implications on the State
  - Implications on users





## Example: METAR COLOUR STATE INFORMATION

```
METAR EGUB 120850Z 18024G36KT 9999 BKN017 OVC045 16/13 Q1008 WHT TEMPO 6000 -RA SCT012 GRN=
```

```
<iwxxm:observation>  
...  
<iwxxm:extension>  
  <ukmoav:UKAerodromeColourState>  
    <ukmoav:UKColourState xlink:href="http://reference.metoffice.gov.uk/aviation/UKAerodromeColourStates/WHT"/>  
  </ukmoav:UKAerodromeColourState>  
</iwxxm:extension>  
...  
</iwxxm:observation>  
...  
<iwxxm:trendForecast>  
...  
<iwxxm:extension>  
  <ukmoav:UKAerodromeColourStateTrend>  
    <ukmoav:UKColourState xlink:href="http://reference.metoffice.gov.uk/aviation/UKAerodromeColourStates/GRN"/>  
  </ukmoav:UKAerodromeColourStateTrend>  
</iwxxm:extension>  
...  
</iwxxm:trendForecast>
```



# State Considerations

- Preparing the extension
  - Design
  - Publish
  - Maintain (release management)
- Publish information
  - Customisation of systems & tools
  - Accessibility of the extension



# User Considerations

- **Systems**
  - Software needs to be designed to interpret the extension
  - Management of extension updates
- **Benefits from extension**



## Regional Considerations

- Management of extensions?
  - Consistency of style
  - Misuse
- Adoption of regional extensions?