WMO OMM

World Meteorological Organization

Working together in weather, climate and water

User preparedness for the transition to new satellite generations

Stephan Bojinski

Virtual Lab Management Group, 6th Meeting

8-11 October 2012, São José dos Campos, Brazil

Background: Recognizing…

- Essential importance of data from geostationary and low-earth orbiting satellites for operational activities of WMO Members;
- Planned introduction of several new generation geostationary satellite series by operators in the 2014-2018 timeframe. affecting all WMO Regions;

2014: Himarawari-8
2015: GOES-R; FY-4A
2017: GEO-KOMPSAT
2018: MTG-I1

- Experience of user preparedness projects undertaken by different satellite operators, e.g.
  - NOAA Proving Ground programme for GOES-R and JPSS missions,
  - Prepare the Use of MSG in Africa (PUMA) project of EUMETSAT in Africa (RA I) for Meteosat Second Generation;
- Provisions in WMO Manual on GOS, applicable to all contributing satellites

Background: Recognizing…

Goals:

Optimal utilization of new operational satellite systems should be assured

Risk of disruption for operational users should be mitigated

→ WMO Commission for Basic Systems (CBS-Ext. 2012) endorsed
"Guideline for Ensuring User Readiness for New Generation Satellites"

Guideline: 12 Points (1-3)

Assist users in preparing for new generation satellites through:

1. Establishing/maintaining a dialogue between providers of the new generation satellites and prospective users – awareness raising through workshops and test beds;
2. Maintaining portals for updated information on development status of the new systems, instrument and data format specifications, and technical documentation;
3. Advancing user training, including the development of training material and training events, through the satellite provider–training centre partnerships established in the WMO-CGMS Virtual Laboratory, and other established mechanisms such as COMET, MetEd, and EUMETrain;

Guideline: 12 Points (4-9)

Assist users in preparing for new generation satellites through:

4. Development of learning and decision-support tools, demonstrating the added value of new products;
5. Provision of proxy data sets, tools, and products;
6. Indication of the maturity status of products (operational; development; experimental);
7. Guidance on the specification or upgrade of receiving hardware;
8. Planning parallel dissemination in old and new dissemination formats or protocols,
9. Planning an appropriate overlap period between the operation of current and new satellites to allow intercomparison and validation of products, smooth migration of operational applications and downstream service delivery

Guideline: 12 Points (10-12)

Assist users in preparing for new generation satellites through:

10. Consider using multi-mission dissemination systems to allow for flexibility in accommodating new data streams, without the technical, financial, and schedule constraints related to setting up a receiving facility specific to the new satellite system,
11. Establishment by the NMHSs of a project focussed on the introduction of new satellite data streams into its operations, development of a user readiness plan (initiate user readiness programme ~5 years prior to launch), and nomination of focal points of responsibility;
12. Supporting user community-building through collaborative mechanisms, such as monthly online briefings and social media.

Thank you for your attention

http://www.wmo.int/sat