SATURN: SATellite User Readiness Navigator

Preparing users for the next generation of satellites

Plenary Item C.5
CGMS-WMO-WP-20
New generation of geostationary satellites

• Satellites widely used by WMO Members in support of weather, climate, water applications

• New generation of geostationary meteorological satellites to enter operations in 2015-2018, including:
  – Himawari-8 (JMA)
  – FY-4 (CMA)
  – GOES-R (NOAA)
  – GEO-KOMPSAT-2 (KMA)
  – MTG (EUMETSAT)

• Capabilities improve (e.g., sampling rate, spatial resolution, spectral channels)

• Leading to more accurate and timely forecasts and development of new application areas

• Data rates increase drastically, by factors of 10-100

• Affecting all WMO Regions
User readiness is a critical issue

- Many Members report they are **insufficiently prepared** to the new generation of meteorological satellites

![Insufficient training related to...](image)

- Source: WMO 2012 Satellite User Survey - 227 responses from 95 countries
Prepare operational users for new generation of Geostationary meteorological satellites through user readiness programmes, with coordinated contributions from CGMS members in the areas of:

- Sensor and signal characteristics;
- Data dissemination and global data exchange;
- Test datasets, processing and analysis tools;
- Products;
- User training, including testbeds;
- Information on these topics should be synthesized and maintained by WMO in an multi-lingual online user guide, dynamically linked to resources of CGMS members;
- Maintaining close cooperation with user organizations, taking into account the “guidelines for ensuring user readiness for new generation satellites” adopted at WMO EC-65.
WMO guideline for ensuring user readiness for new generation systems

All WMO Members and satellite operators should assist users in preparing them for using the new generation of operational satellites, through the following:

1) User/provider dialogue through conferences, workshops and test beds;
2) Portals on status of new systems, instrument and format specifications...
3) User training
4) Learning tools demonstrating added value of new products;
5) Proxy data sets, tools, and products;
6) Indication of product maturity status (operational, development, experimental);
WMO guideline for ensuring user readiness for new generation systems

All WMO Members and satellite operators should assist users in preparing them for using the new generation of operational satellites, through the following:

(Continues)

7) Guidance on the transition of receiving hardware;
8) Parallel dissemination in old and new dissemination formats or protocols;
9) Overlap period between current and new satellites
10) Multi-mission dissemination systems such as GEONETCast for flexibility in accommodating new data streams
11) Establishing user readiness project (~5 years before)
12) Collaborative mechanisms, such as online briefings and social media.
Preparing WMO users for the next generation of satellites

- In response to the CGMS Crosscutting Area and taking into account the WMO Guideline, WMO is establishing an online **Satellite User Readiness Portal (SATURN)** to provide a single point of entry for up-to-date user information for the new generation of Geostationary Satellites.
- The content of the portal is provided directly by the satellite operators (Initially JMA, CMA, NOAA, KMA and EUMETSAT) and coordinated by the Space Programme Team.
- Initial content will be focused on the GEO satellites to be launched in the coming decade: Himawari-8, FY-4A, GOES-R, GEO-KOMPSAT-2A and MTG, but further satellites, also LEO, will be added.
- The continued support from CGMS members is essential to the success of the project.
Preparing WMO users for the next generation of satellites

• To guide the population of the SATURN portal, WMO is preparing a Reference User Readiness Project.
• It provides a generic timeline of user preparations activities, and the associated timeline of deliverables from the satellite system development in support of these activities.
• The initial scope of SATURN is the new generation of GEO satellites, but the reference project definition is established in a generic manner, and therefore also includes activities that are specific to LEO satellites.
• The initial draft of the Reference User Readiness Project has been prepared with the support of ET-SUP and the SATURN points-of-contact from JMA, CMA, NOAA, KMA and EUMETSAT.
• CGMS members are invited to provide detailed comments to the Reference User Readiness Project, included in CGMS-WMO-WP-20.
Sample SATURN screenshot

Satellite User Readiness Navigator (SATURN)
Preparing for the next generation of meteorological satellites

Home
Welcome to the Satellite User Readiness Navigator (SATURN).
The new generation of primary Meteorological satellites will present WMO members with unprecedented opportunities and challenges.

The aim of the SATURN portal is to provide a single point of access for all information needed for user community preparations.

The content is provided by the satellite operators and by the WMO Space Programme.

To start, use one of the following entry points:
- Search by Satellite
- Search by individual question under FAQ
- Search by topics under Data Access and Use

Bienvenidos a SATURN!

Bienvenue chez WMO-CGMS Satellite User Readiness Navigator (SATURN)
Sample SATURN screenshot
Sample SATURN screenshot

The portal will go live in June 2014
To be considered by CGMS:

- To note that the continued support from CGMS members, in particular the designated points-of-contact, is essential to the success of the project.

- CGMS members should provide detailed comments to the Reference User Readiness Project, included in CGMS-WMO-WP-20.