

Report of Working Group IV

Global Data Dissemination

Objectives of WG IV

- The Group provides a forum for the discussion and distribution of information on satellite data dissemination including data exchange and retransmission. This includes also necessary tools to facilitate data exchanges.
- Participants: CMA, CNSA, Environment Canada, EUMETSAT, GEO, IMD, ISRO, JMA, KARI , KMA, NOAA, ROSCOSMOS, ROSHYDROMET , WMO

Objectives of WG IV

- Issues being discussed
 - Global DVB satellite services
 - Incorporation and dissemination of R&D and pre-operational mission data
 - Coordinated dissemination services
 - Disaster mitigation purposes
 - Ocean user community
 - Global data exchange from next generation GEO satellites
 - Development of coordinated approach for compression of data, incl. geographic location, from high-resolution imaging instruments
 - Contribution to the WIS infrastructure incl. RMDCN
 - Coordination of metadata for satellites and instruments
 - Data access portals, harmonisation between different portals
 - User dialogue and interface
 - Response to region-based requirements for satellite data access and exchange

Relevant HLPP items

2 DATA DISSEMINATION, DIRECT READ OUT SERVICES AND CONTRIBUTION TO THE WIS

- Support the user-provider dialogue on regional/continental scales through regional coordination groups maintaining requirements for dissemination of satellite data and products through the various broadcast services;
- Support the implementation of sustained, coordinated Digital Video Broadcast (DVB) satellite services for the Americas, Africa, Europe and the Asia Pacific regions;
- Increase access to, and use of, data from R&D and pre-operational missions;
- Investigate the feasibility of introducing a coordinated dissemination service for meteorological information in helping to mitigate disasters;
- Investigate the feasibility of introducing a coordinated dissemination service for information in support of the Ocean User Community;

Relevant HLPP items

2 DATA DISSEMINATION, DIRECT READ OUT SERVICES AND CONTRIBUTION TO THE WIS

- Evaluate the set of applicable (or TBD) standards for direct and other dissemination mechanisms in use by CGMS members and assess if there is a need, in view of future systems, to amend, modify or revise such standards (or to derive new ones);
- Work together to define a set of recommendations seeking affordable future receiving stations or alternatives to direct read-out solutions; (moved completely to WG-I)
- Further enhance the Regional ATOVS Retransmission Services (RARS) initiatives through their extension to advanced sounders for at least half of the globe; (moved completely to WG-I)
- Utilise operationally the WIS infrastructure for satellite data provision and discovery;
- Provide coordinated CGMS inputs to WMO on satellite and instrument identifiers or data representation and metadata within the WIS (including the Regional Meteorological Data Communications Network).

Relevant HLPP items

- 5.3 Prepare operational users for new generation of Geostationary meteorological satellites through user readiness programmes, with coordinated contributions from CGMS members in the areas of**
- Data dissemination and global data exchange;
 - Information on these topics should be synthesized and maintained by WMO in a 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.

Global DVB satellite services

- Further progress has been made on the deployment of DVB-based dissemination services.
 - Through various projects, NOAA is planning enhancements of the GEONETCast Americas System by providing more services, in order to better support the user community's requirements.
 - JMA is implementing HimawariCast, a DVB-S2 based data dissemination using a commercial telecommunication satellite to support the transition between current and the next generation HIMAWARI 8/9 satellites to be launched in 2015, and to serve user communities in regions with poor internet access like the Pacific. In addition to images there will also products be disseminated on this system.

Incorporation and dissemination of R&D and pre-operational mission data

- EUMETSAT is assessing and implementing data from R&D and preoperational missions on a regular basis;
- NASA is providing global data and imagery via its LANCE facility for download in near real time.

Coordinated dissemination services

- With GEONETCast Americas, NOAA is working on continued and increased participation in the International Charter: Space and Major Disasters As An Alternative Dissemination Method;
- CNSA is working on remote sensing processing technology to provide the environment & disaster information fast and accurately;
- EUMETSAT was actively involved in the International Ocean Colour Science Meeting 2013. Recommendations from this meeting are followed up in an action to CGMS members.

Global Data exchange from next generation GEO satellites

- ROSHYDROMET and EUMETSAT are exchanging data in the context of EARS and Electro-L N1. It is planned to continue this activity also for Electro-L N2.
- JMA will provide Himawari-8/9 data via internet and HimawariCast.
- IMD provides access to INSAT 3D via internet. Access for users worldwide is possible after registration
- KMA is planning satellite data dissemination for GeoKOMPSAT-2A in Ultra (enhanced) HRIT and HRIT/LRIT format.

Development of coordinated approach for compression of data, incl. geographic location, from high-resolution imaging instruments

- EUMETSAT presented an approach to accommodate geo-location and efficient compression of regional LEO satellite data for rebroadcast. The working group assigned an action to evaluate this proposal in view of a standardised compact product format, generalised to cover the advanced imagers of the current and planned polar orbiting satellites

Contribution to the WIS infrastructure incl. RMDCN

- Although the WMO Information System infrastructure is established and contributions progressing well, there is still a need for Satellite Operators to provide their WIS Discovery Metadata records. A recommendation was formulated with that respect.
- WMO presented a new Integrated Global Data Dissemination Strategy with a reformulation of the vision and strategic targets. An action was raised for CGMS members to provide comments to WMO.

Coordination of metadata for satellites and instruments

- After some delay the members of the task force on metadata have been nominated. During the working group meeting the co-chairs have been elected and the task team can now start the work.

Data access portals, harmonisation between different portals

- A refined WMO Product Access Guide is available to guide users to quality-controlled selections of (satellite) products. To make it a success more feedback from CGMS members is required as per existing action. A new action was proposed by the working group to support the population of the PAG.
- WMO presented a new Satellite User Readiness Navigator online portal (SATURN) for the purpose of “Preparing operational users for new generation of Geostationary meteorological satellites through user readiness programmes, with coordinated contributions from CGMS members”.
- A key element of the SATURN portal is a Reference User Readiness Project, which is intended as a “best practice” guiding CGMS members to provide content for the SATURN portal.

User dialogue and interface

- EUMETSAT is actively supporting activities on region-based requirements for satellite data access and exchange in WMO RA I, RA II and RA VI.
- JMA reported progress on the RA-II WIGOS project to develop support for NMHSS in satellite data, products and training.
- WMO reported that the Coordination Group on Satellite Data Requirements in Region III (South America) and Region IV (North America, Central America and the Caribbean) has made progress in
 - providing consolidated feedback to NOAA
 - identifying detailed user requirements for data access and exchange and related challenges in the Region through a user survey

Contribution to HLPP

- All of the HLPP items covered by WG-IV still considered relevant and important (none of them are obsolete or complete)
- Progress has been made in nearly all areas, and actions/recommendations were raised where it was considered most important
- The overlap between WG-I and WG-IV in some dissemination areas has been discussed during inter-sessional meetings, and clearer split of responsibilities has been found. Some updates to the HLPP are proposed to avoid ambiguity or double assignment between WG-I and WG-IV.

Inter-sessional Meetings

- Q4 2014:
Joined WG-I/IV intersessional meeting: topic is the analysis of the LRIT/HRIT Global Specification by CGMS member's focal points
- Q1 2015:
WG-IV intersessional meeting, topics are review of actions and preparation of CGMS-43 agenda
- CGMS members are encouraged to have one representative participating in the inter-sessional meetings