

Report of Working Group IV

Global Data Dissemination

Objectives of WG IV

- The Group provides a forum for long-term data provision worldwide, for meteorological and other environmental satellite data dissemination
- To promote low cost data and product exchange services for users allowing easy access to the data.
- This includes necessary tools to facilitate data exchanges, data discovery and metadata 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;
- Further enhance the Regional ATOVS Retransmission Services (RARS) initiatives through their extension to advanced sounders for at least half of the globe;
-> the dissemination aspect,
shared with 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

5.1 Advancing the architecture for climate monitoring from space

- Promote a common approach to the long-term preservation of data through the exchange of information and the establishment of a coordinated consensus on best practice;

-> relevant for archive services

Discussion

- Issues being discussed
 - Global DVB satellite services
 - Coordinated dissemination services - Disaster mitigation purposes
 - Transition to new direct readout systems
 - Regional ATOVS Retransmission Services (RARS)
 - Contribution to the WIS infrastructure
 - Coordination of metadata for satellites and instruments
 - Internet based services
 - User dialogue and interface
 - Long Term Data preservation
- Participants: CMA, CNSA, EUMETSAT, ISRO, JMA, KARI , NOAA, ROSCOSMOS, ROSHYDROMET , WMO

Global DVB satellite services

- Further progress has been made on the deployment of DVB-based dissemination services.
- CMA and EUMETSAT have implemented data exchange and re-dissemination service, including metadata exchange, and provided each other a remote management tool for user registration, data access control and service monitoring. CMA plans to optimize the CMACast user registration and data access procedure to provide better service to users in Asia-Pacific region.
- EUMETSAT is migrating EUMETCast Europe to a DVB-S2 system to be prepared for future high volume data flows. The group enquired about the MTG dissemination plans for Africa.

Global DVB satellite services cont.

- JMA will implement a DVB based data dissemination for a sub-set of data, using a commercial telecommunication satellite to support the transition between current and the next generation HIMAWARI 8/9 satellites to be launched in 2014, and to serve user communities in regions with poor internet access like Pacific islands.
- NOAA is positive about disseminating via GEONETCast-Americas certain environmental data to users in Central and South America. The WG recommended to include also LRIT-like satellite products to ease the transition to GOES-R and GOES-S.

(2 actions for information, 1 recommendation)

Coordinated dissemination services - Disaster mitigation purposes

- GEONETCast Americas is working on integration into the International Charter “Space and Major Disasters” system.
- EUMETSAT has already joined the International Charter system as data provider and as provider of the GEONETCast/EUMETCast capacity

Transition to new direct readout systems

- The existing LRIT/HRIT Global Specification for GEO satellites was discussed and the group initiated an assessment of its suitability to next generation sensors, and to the new dissemination environment with both direct readout and DVB-based dissemination methods.
- The group also agreed to share and compare the planned Mission Specific Implementations and recommended to seek convergence on the Mission Specific Implementations for next generation GEO satellites (as much as possible).
- 2 actions for information, 1 recommendation

Regional ATOVS Retransmission Services (RARS)

- The Working Group supports the WG-I task team on RARS related aspects.
- The group felt that NOAA and WMO should discuss in more detail the relation of the NOAA Direct Broadcast Data Initiative (to Meet NWP Latency Requirements) to RARS, and how RARS can take advantage of this project
- Action was given to NOAA and WMO to ensure linkage between the Direct Broadcast Initiative and the RARS.

(2 actions for support and discussion)

Contribution to the WIS infrastructure

- The WIS has entered its operational phase, with already seven operational Global Information System Centres (GISC) and a total of 360 centres (National Centres, Data Collection or Production Centres or GISC) already identified.
- WGIV noted the progress made in the operational use of the WIS and encourages CGMS members to register their data and products in WIS.
- An example was given of the search interoperability enabled by the use of standardized discovery metadata.

Coordination of metadata for satellites and instruments

- The Terms of Reference for a CGMS-WMO Task Force on Metadata implementation has been adopted by the Working Group.
- The group supports the nomination of the Task Force to start the work as soon as possible.

Internet-based services

- Internet services were presented to the Working Group in the context of
 - Access to real time Elektro-L data
 - Eumetsat Advanced Retransmission Service (EARS)
 - Access to HIMAWARI 8/9 real time products

User dialogue and interface

- A Coordination Group on Satellite Data Requirements for WMO RA III and RA IV has been established.

The Working group agreed that Support from CGMS operators is important, to advance the work plan.

- The specifications of a WMO Product Access Guide to guide users to selections of (satellite) products are available and illustrated by a mockup. The group agreed to provide feedback on the feasibility and readiness of their organisation to submit links to product collections in order to participate in the PAG.

(One recommendation for support, one action for feedback)

Long Term Data Preservation

- Important in the context of the Architecture for Climate Monitoring
- Long Term Data Preservation Guidelines (LTPD) have been presented . They are now maintained as a Group on Earth Observation (GEO) Task .
- The task team is in favour of adopting these guidelines, but all members are invited to review them and provide feedback as concerns applicability in their respective organizations

(2 new actions for review and feedback)

Contribution to HLPP

- The Working Group raised several actions and recommendations which are implicitly or explicitly already covered by the current version of the HLPP
- No changes to the HLPP were proposed

Follow-up

- 3 inter-sessional meetings are planned:

IS-1 Wed mid Sep 2013, topic: CGMS-WMO Task Force

IS-2 (shared with WG-I) Wed mid Oct 2013, topics RARS

IS-3 Wed mid Jan 2014, topics: general and CGMS-WMO Task Force