



Working Group on International Issues and Future Systems: Status of actions/recommendations from ITSC-17

Jérôme Lafeuille, John Eyre

Colour code

- Outcome of ITSC-17
 - Current status
 - Suggestion for the Working Group

Space-based GOS architecture

WG highlighted importance of sounding from LEO (MW/IR x 3 orbits), GEO (IR) and RO

Action 1: Mitch Goldberg, Jeff Hawkins and John Bates, to communicate these recommendations to the Joint Agency Requirements Group (JARG), a holdover from the NPOESS program that will assist in the transition to the restructured programme. (*Early morning :MW calibration accuracy /stability, and IR sounding*)

- **NPOESS was redefined, DWSS announced and suspended**
- **CGMS adopted a new baseline responding to the WMO Vision**
- **CMA indicated possibility to fly early morning instead of am or pm**
- **CMA and EUMETSAT confirmed their plans for GEO hyperspectral missions**
- **Geometwatch/STORM moving forward**
- **COSMIC-2 being pursued. Metop, Megha-tropiques, Oceansat, fly a GPOS RO**
- **WG to be informed on the new CGMS baseline**
- **WG to discuss early morning orbit plans**
- **WG to discuss GEO hyperspectral plans**

Data access issues (1)

- Recommendation 1: the Russian Federation to make the Meteor-M mission a fully contributing component of the GOS by providing the global data sets from this mission in a timely manner with all necessary ancillary information.
 - **Global data on request. Information available on Meteor-3M Direct Broadcast**
- Recommendation 2: Satellite agencies operating environmental polar satellites to provide or continue to provide a Direct Broadcast capability on their polar environmental satellite systems, and to make available in a timely manner the Direct Broadcast data processing (L0 to L1, and/or L1 to L2) software, documentation, and related training.
 - **Direct Broadcast available from NOAA/POES, METOP, Meteor-3M, FYA/B**
 - **AAPP, CSPP, FY3L0/L1PP available**
- Recommendation 3: Satellite agencies operating environmental polar satellites to provide expected formats of level 1b and level 2 datasets at least one year prior to launch, and to establish web sites to provide detailed information on instruments, schedule, products and formats
 - **NPP formats have been provided in advance**
 - **WG to renew these recommendations**

Data access issues (2)

- Recommendation 4: NOAA, NASA (or JPSS project management office) to include a BUFR conversion module in the IPOPP software package
 - **Included in CSPP**

- Recommendation 5: NOAA, NASA and DOD to confirm and implement Direct Broadcast capabilities on both the JPSS and DMSP Follow-on series ensuring that environmental data from these missions are openly and freely available in near-real time, and to make the relevant ingest and pre-processing software available to the global community
 - **OK for JPSS. DOD mission still to be defined**

Data access issues (3)

- Recommendation 6: NOAA and DOD to consider the use of the SafetyNet as a joint ground system ensuring timely availability of data from the JPSS and DMSP-Follow-on missions
 - SafetyNet implementation is no longer confirmed
 - Discuss alternative scenario based on DB+RARS
- Recommendation 7: CGMS to consider harmonization of the appropriate layers of the future X-Band Direct Broadcast services, for instance as concerns frequency or transmission protocols based on CCSDS standards
 - Upon suggestion from WMO, CGMS has taken actions to revisit the future LEO X-Band Direct Broadcast services towards an harmonized specification:
 - « CGMS Action 39.43: EUMETSAT and NOAA to prepare a new global specification for LEO high rate broadcast services and present it for consideration at the next meeting of CGMS. »
- WG should provide guidance

Data access issues (4)

- Recommendation 8: JMA to consider a broadcast service to facilitate access to Himawari-8 and -9 data in particular for users in Pacific islands that have limited Internet connectivity.
 - Still under investigation by JMA.
- Recommendation 9: CGMS satellite operators to investigate the potential use of satellite-to-satellite communication (e.g. Tracking and Data Relay Satellite System, TDRSS) as a mechanism to support timely collection and redistribution of polar-orbiting satellite data in future systems.
- Not investigated so far