

CGMS-42 ROSH/ROSC-WP-06 23 April 2014

Prepared by ROSHYDROMET/ ROSCOSMOS Agenda Item: B Discussed in Plenary

ROSHYDROMET/ROSCOSMOS REVIEW OF ACTION ITEMS

No actions required



ROSHYDROMET/ROSCOSMOS REVIEW OF ACTION ITEMS

CGMS-41 Plenary actions

Action 41.07: CGMS members to report on their support to WMO region-based groups maintaining satellite data access and exchange requirements.

Response: Roshydromet supports WMO region-based groups maintaining satellite data access and exchange requirements by participating in Expert Team on Satellite Utilization and Products (WMO ET-SUP).

WGI actions open from CGMS-39 and -40 (at CGMS-41)

Action 39.21: Based on the inputs of action CGMS-39 39.20 (CGMS Members to report on their plans for the utilization of the band 7750-7850/7900 MHz for their existing and future LEO systems [including the detailed list of frequencies used in the band, associated bandwidth and signal characteristics - together with the orbital parameters]), CGMS members to analyze potential interference issues, reporting results of analysis back to CGMS WG-I by next CGMS meeting.

Response: Roshydromet is going to utilize the 7750-7900 MHz band for future Meteor-MP series (meteorological and oceanographical) satellites. Two downlinks with throughput of 139 Mbit/s each will be used for data transmission over European, Siberian and Far Eastern centers of SRC Planeta. Each data transmission session will be at least 15 min. All Meteor-MP satellites are to be placed to sun-synchronous orbit. Orbital parameters for meteorological satellites are: H=835 km, inclination 98.85°, for oceanographical satellite: H=653 km, inclination 97.98°.

CGMS-41 WGI actions

Action 41.17: CGMS members to nominate representatives in the Task Team to work on RARS related aspects (before 1st IS meeting (WG-I.IS-2.1 mid October 2013).

Response: Roshydromet suggests to nominate Sergey Uspensky (<u>uspenskys@planet.iitp.ru</u>) as a representative in Task Team on RARS related aspects.

CGMS-41 WGII actions

Action 41.18: CGMS agencies with direct broadcast to provide access to software for converting satellite data packets to calibrated sensor observations (level 1b), and complete related information on the WMO website

(http://www.wmo.int/pages/prog/sat/accessandtools_en.php).

Deadline: 1 Nov 2013 to identify Point of Contact.



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Response: After the commissioning phase of Meteor-M N2 satellite (2014), software for data processing to Level 1B will be tuned and made publically available. Point of Contact: Sergey Uspensky (<u>uspenskys@planet.iitp.ru</u>).

Action 41.22: CGMS agencies to provide working papers on current and future capabilities for calibration monitoring and event logs – CGMS-42.

Response: Roshydromet will present the working paper on its calibration activity at CGMS-42 and GSICS-EX-15.

Action 41.31: ROSCOSMOS/ROSHYDROMET to verify information on its Meteor-M missions in WMO OSCAR database (http://www.wmo.int/oscar). Deadline: 1 Sep 2013.

Response: The information on the Meteor-M missions in WMO OSCAR database is verified. The more detailed information on the future Meteor-M missions is presented in WP discussed in Plenary: CGMS-42_ROSH-ROSC_WP_01.

CGMS-41 WGII Recommendations

Rec 41.10: CGMS agencies to assess the GHRSST data specification (GDS, https://www.ghrsst.org/files/download.php?m=documents&f=121009233443-GDS20r5.pdf) for applying to SST data, and to report to CGMS-42.

Response: Roshydromet assessed proposed GHRSST data specification and found it useful for SST data validation and provision.

Rec 41.11: CGMS agencies to support the ocean colour community by adopting netCDF4/CF for representing ocean colour data; and further support data analysis tools (such as SeaDAS, BEAM and ODESA), and optimize the dissemination of ocean colour datasets for research and operational applications.

Response: Roshydromet is going to use netCDF4/CF in its future data dissemination activities.

CGMS-41 WGIII recommendations

Rec 41.14: CGMS Satellite Operators to address the anticipated or potential gaps identified in the WMO Gap Analysis, in particular:

- Infrared and microwave sounding on the early morning orbit,
- Hyperspectral sounding missing in some geostationary sectors,
- Long-term follow-on of radio-occultation constellation,
- Global precipitation measurement precipitation radar follow-on mission.
- Long-term Earth Radiation Budget monitoring
- Limb sounding for high-vertical resolution observations in the stratosphere and mesosphere (of temperature, humidity, wind, aerosol, ozone and other trace gases).

Response: In order to fill the gaps in Hyperspectral sounding and Long-term Earth Radiation Budget monitoring over the Indian Ocean Roshydromet plans to install the appropriate instruments onboard future Electro-M geostationary satellites.



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Rec 41.15: All CGMS Members to provide updates on satellite programmes to be included in OSCAR, through their annual reports to CGMS and by other means as appropriate.

Response: The updated information on Roshydromet/Roscosmos satellite programmes is presented in WP discussed in Plenary: CGMS-42_ROSH-ROSC_WP_01.

WGIV Actions open from CGMS-39 and -40 (at CGMS-41)

Action 40.37: CGMS satellite operators to report about the implementation of the World Geodetic System (WGS84) and Earth Geodetic Model (EGM-96) geographical reference systems.

Response: Open.

Action 40.38: ROSHYDROMET to report at CGMS-41 on the technical modalities for the near-real time provision of Meteor-M global data sets and associated ancillary information, as needed to fully contribute to the GOS.

Response: A new satellite of Meteor-M series is to be launched this summer. After the commissioning phase Roshydromet will review the technical modalities for the near-real time provision of Meteor-M data and associated ancillary information based on instrument operational functionality.

CGMS-41 WGIV actions

Action 41.51: CGMS members to share information for HRIT/LRIT mission specific implementation for both direct broadcast and rebroadcast data for next generation GEO satellites.

Response: Current HRIT/LRIT mission specific implementation document for Electro-L N1 satellite is published at SRC Planeta WEB site: http://planet.iitp.ru/english/spacecraft/electro-l hrit Irit eng v1 0.pdf. Mission specific implementation document for the next generation GEO satellites should be published after imaging instrument specifications refinement. There will be one data format for both direct broadcast and rebroadcast date transmission.

Action 41.52: CGMS members to assess compatibility of the HRIT/LRIT global specification with the next generation GEO satellite broadcast. *Response*: Open.

Action 41.56: Each CGMS member to review the GEO version of the Long Term Data Preservation Guidelines (GEO LTDP) and provide feedback on the applicability of each single guideline to its own organization by creating a compatibility table for the organization.

Response: Open.

Action 41.58: CGMS members to provide feedback on the improved concept of the WMO Product Access Guide, in particular on the feasibility with respect to their organization's product catalog.

Response: Open.