

**INTERDEPARTMENTAL COMMITTEE FOR METEOROLOGICAL SERVICES AND
SUPPORTING RESEARCH (ICMSSR)**

COMMITTEE FOR OPERATIONAL ENVIRONMENTAL SATELLITES (COES)

Record of Actions: 2018-2 Meeting

June 21, 2018, 10:00 a.m. EDT

Room 7224, SSMC2

Office of the Federal Coordinator for Meteorology
Suite 7130, SSMC2
1325 East West Highway
Silver Spring, MD 20910

PARTICIPANTS

Agency	Organization	Name
DOC Cochair	NOAA-NESDIS	Ajay Mehta
DOD Cochair	USN	David McCarren
DOC	NOAA-NESDIS	Matt Butler
DOC	NOAA-NESDIS	Mitch Goldberg
DOC	NOAA-NWS	Joe Pica
DOC	NOAA-NESDIS	Pam Sullivan
DOC	NOAA-NESDIS	Steve Walters
DOC	NOAA-NWS	James Yoe
DOD	USN	Josh Cossuth
DOD	USN OPNAV N2N6E	CDR Jeff Dixon
DOD	USAF A3W	Lt Col Chris Hollinger
DOD	USN	Steve Lynch
DOD	NAVOCEANO	Mark Middlebush
DOD	SAF AQS	Matt Nowlin
DOD	USAF	William Pryor
DOD	SAF AQS	Maj Luke Rederus
DOD	USN NAVO	Lamar Russell
DOD	USAF AFSPC A5	Chris Stock
DOD	PDSA	Dan Weekly
DOT	FAA	Randy Bass
NASA	JASD	Jeff Volosin
NASA	JASD	Cathy Lapenta
NASA	MSFC	Andrew Molthan
NGA	MCR LLC supporting	Elia Sanjume
NRO	Aerospace Corp - Chantilly	Norm Modlin
OFCM	Federal Coordinator	William Schulz
OFCM	COES Executive Secretary	Michael Bonadonna
OFCM	IWRCC Executive Secretary	Sim James
OFCM	STC	Floyd Hauth

Date of Issue: July 30, 2018

1. OPENING REMARKS:

The Executive Secretary initiated the meeting and provided administrative comments. The COES co-chairs, David McCarren and Ajay Mehta, welcomed the attendees. The agenda was reviewed and approved.

2. ACTION ITEM REVIEW:

The Executive Secretary reviewed Action Items from the previous meeting. AI 2017-4.1 and 4.4 are closed. AI 2017-4.2 and 2018-1.1 remain open. Jim Yoe reported he would deliver the summary requested in 2017-4.2 by the end of June.

3. JPSS SATELLITE UPDATE:

Steve Walters and Mitch Goldberg (NOAA) provided an update on Join Polar Satellite System (JPSS) mission status and User Community issues.

Mr. Walters summarized development information and noted that JPSS Mission CDR is scheduled for September 2018. Instrument and spacecraft development are on track, however, CrIS and ATMS technical issues are putting pressure on the JPSS-2 July 2021 Launch Readiness Date (LRD),

Operations information included the S-NPP Solar Array anomaly that occurred on April 2, 2018 and resulted in current output drop of 30%. However, operations are nominal and S-NPP continues to exceed science data availability and latency thresholds. He also noted that NOAA-20 was declared operational on May 30, 2018.

JPSS ground status was provided for Blocks 2.0, 2.1, and 2.2. A Service Level Agreement (SLA) for Data Acquisition and Routing service is being developed and will simplify and standardize future mission support.

JPSS new mission support includes:

- EUMETSAT Enhanced Polar System-Second Generation (EPS-SG) under the Joint Polar System agreement.
- Possible DoD Partnerships (ORS-8, WSF).

Mr. Mitch Goldberg summarized information about NOAA-20 Science Product Validation and Readiness for Operations. The two charts provided dates for Beta Maturity, Provisional Maturity, and Validated Maturity for ATMS Level 1, Level 2 Products, and VIIRS Level 2 Products.

The JPSS Proving Ground Program optimizes the use of satellite data. There is a focus on applications and decision support for NOAA Service Areas and Partners. JPSS Soundings are now used operationally by NWS to provide FAA warnings on cold air aloft. The VIIRS Day-Night Band is used by FEMA for recovery efforts.

JPSS PGRR initiatives include the Arctic, Aviation, Fire and Smoke, Hurricanes and Tropical Storms, Hydrology, NWP, Oceans and Coasts, River Ice and Flooding, Sounding, Training, and Volcanic Hazards.

A recent JPSS Arctic Summit focused on the Arctic where the JPSS satellite provides unique capabilities critical to science, service, and stewardship including saving lives and property. A need has been stated for the data to be in AWIPS 2 format.

Members discussed the coordination needed for AWIPS 2 format data and noted that this issue should be given to the CSAB for action. See **Action Item 2018-2.1**.

4. GOES-R SATELLITE UPDATE:

Pam Sullivan (NOAA) provided an update on the Geostationary Operational Environmental Satellite-R Series (GOES-R) satellite issues and User Community concerns.

Ms. Sullivan noted that the GOES-R series of four satellites is the first upgrade of U.S. geostationary satellite capabilities in about two decades. Their mission is to provide continuous imagery and atmospheric measurements of Earth's Western Hemisphere and space weather monitoring.

She described the GOES-R architecture and the sensors and their data. The instrument data include XRS, EUVS, MAG, and SEISS. The science product validation status charts show many of the products in provisional maturity stage and two in full maturity stage.

Goes-16 is fully operational as GOES East. GOES-17 was launched March 1st, 2018, is currently in post-launch test with all instruments on and collecting data. The ABI issue with the cooling system that affects some infrared channels for a portion of the day is being worked.

GOES-T is planned for launch in 2020 and GOES-U in 2024. Some modifications may be made to GOES-T ABI cooling instruments.

5. CGMS ANNUAL MEETING REVIEW:

Mr. Matthew Butler (NOAA-NESDIS) reported on the events and issues discussed at the annual Coordination Group for Meteorological Satellites (CGMS) meeting conducted 3-8 June in Bengaluru, India. He provided CGMS background, CGMS-46 Plenary highlights, CGMS-46 Working Group highlights, and an outlook for the CGMS-47 meeting.

CGMS provides an international forum for the exchange of technical information on geostationary and polar-orbiting meteorological satellites. In recent years, CGMS expanded to include climate monitoring. CGMS members include current and prospective developers and operators of meteorological satellites including:

- China (CMA), Europe (EUMETSAT and ESA), India (ISRO and IMD), Japan (JMA and JAXA), Korea (KMA), Russia (ROSHYDROMET and ROSCOSMOS), U.S. (NOAA and NASA), and User Groups (WMO and IOC/UNESCO)

Primary objectives are:

- Operational continuity of meteorological missions and contingency planning for a loss in capability.
- Coordination of satellite systems and operations including the development of best practices to create harmonization among systems.
- Enhancement of the quality of satellite-derived data and products.
- Coordination of data access and end user support for meteorological and climate data products.

CGMS-46 meeting main sessions:

- The plenary session covered WMO issues for coordination with CGMS Space Agencies included WIGOS 2040 Vision, OSCAR/Space Database, Public-Private Sector Engagement, and WMO Critical Satellite Data. Other plenary sessions covered Passive Microwave Observations, ISRO's thematic session on geostationary coverage over the Indian Ocean and the future of scatterometry, Climate and Greenhouse gas monitoring, and IOC-UNESCO and the Global Ocean Community.
- Working Group I: Systems and Services Operations focused on Frequency issues, Space Weather Anomaly Reporting, and Data Collection Systems (DCS).
- Working Group II: Satellite and Data Products topics were Intercalibration, the NOAA-CMA Flood Mapping Initiative, and Operational Oceanography.
- Working Group III: Operational and Contingency Planning focused on Indian Ocean Data Coverage, CGMS Baseline and Contingency Plan, and Gap Analysis and Risk Assessment.
- Working Group IV: Data Access and End User Support. Gap Analysis and Risk Assessment focused on Change Notifications, Next Generation GEO Data, and Indian Ocean Data Coverage.
- Space Weather Task Team will now be called the Space Weather Coordination Group giving this group permanent status for the first time. Its session topics included Space Weather Calibration, and Space Weather Anomalies.

CGMS-47 will be hosted by ROSCOSMOS in Sochi, Russia on May 19-24, 2019. Key concerns to address will be internal US issues to consider before the next plenary meeting related to GOES IO and how to reflect DoD contributions in the international community.

Members discussed the need to review possible inputs to the CGMS prior to their annual meetings. See **Action Item 2018-2.2.**

6. FUTURE COES FOCUS AREAS:

The COES Co-Chairs led a discussion seeking suggestions on how to improve the effectiveness of the COES.

Areas of interest discussed by COES members included:

- Determining whether COES is doing all tasks identified in the charter and whether COES is meeting agency expectations.
- Determining whether COES is addressing pertinent goals and objectives identified in the Strategic Plan for Federal Weather Enterprise coordination.
- Satellite communications and remote sensing radio frequency coordination issues especially the associated risks.
- Briefings on new systems should include information on data latency and access.

Concerns related to these areas are addressed in **Action Items 2018-2.3 and 2.4.**

7. SATELLITE DATA ACQUISITION AND ROUTING:

Members determined that an update on this topic is needed at the next meeting. See **Action Items 2018-2.5 and 2.6.**

8. COMMERCIAL WEATHER DATA PROJECT UPDATES:

Members discussed concerns about commercial environmental satellite data projects within the agencies and decided that this information should be updated and presented every meeting. See **Action Item 2018-2.7.**

9. COES BRIEFINGS TO ICMSSR AND AMS:

The Executive Secretary Mr. Michael Bonadonna, reviewed the COES update briefing that was presented to ICMSSR last September and outlined COES update topics for the upcoming annual COES presentation scheduled for ICMSSR in August 2018.

COES has also been invited to give a presentation at the annual AMS meeting in January 2019 in the session “Inter-agency Coordination within the Federal Weather Enterprise”. The proposed title for the presentation is “The Committee for Operational Environmental Satellites (COES): An Effective Avenue for Improved Federal Agency Coordination of Environmental Satellite Issues.” An abstract for the presentation is due at AMS by the end of August. See **Action Items 2018-2.8 and 2.9.**

10. ACTION ITEM REVIEW / NEXT MEETING:

The next meetings are tentatively set for September 21, and December 14, 2018.

The meeting adjourned at 12:05 p.m. EDT.

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2018-2 Meeting Action Items

Action Item 2018-2.1: Refer the AWIPS 2 Arctic and Antarctic satellite data coverage issue to the WG/CSAB for action.

Responsible Office: ExecSec

Due Date: July 31, 2018

Action Item 2018-2.2: Update the COES ToR to have COES gather and provide NESDIS-IA, DoD input for the annual CGMS meeting and have NOAA report back to COES following the meeting.

Responsible Office: ExecSec, DoD COES members, NOAA CGMS participants

Due Date: October 31, 2018

Action Item 2018-2.3: Send the Strategic plan for Federal Weather Enterprise Coordination to COES to consider actions to address stated Goals and Objectives of the plan.

Responsible Office: ExecSec, COES members

Due Date: June 28, 2018

Action Item 2018-2.4: Send the Radio Frequency Interference table developed by CGMS to COES for consideration. Follow up with a discussion of impacts at the fall COES meeting.

Responsible Office: NESDIS/IA, COES Members

Due Date: September 21, 2018

Action Item 2018-2.5: Provide a summary of your organization's expectations and needs from "partner missions" including NASA research missions and foreign environmental satellite missions.

Responsible Office: DoD, USAF, USN, USA, USMC

Due Date: September 7, 2018

Action Item 2018-2.6: Discuss satellite ground systems for "partner missions" including data latency needs and DoD expectations at the next COES meeting.

Responsible Office: NESDIS, NASA, USAF

Due Date: September 21, 2018

Action Item 2018-2.7: Report status of commercial weather data project from each agency every COES meeting. Develop/Update a table of CWDP status for the ICMSSR.

Responsible Office: NOAA-NESDIS, USAF, NASA-ESD, ExecSec

Due Date: July 31, 2018

Action Item 2018-2.8: Secure COES review and submit the abstract for 2019 AMS conference session on Coordination across the Federal Weather Enterprise.

Responsible Office: ExecSec

Due Date: July 21, 2018

Action Item 2018-2.9: Update the COES status briefing for the Summer ICMSSR meeting.

Responsible Office: ExecSec, COES members

Due Date: July 3, 2018