

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

## 2019-1 MEETING

February 26, 2019, 2:00 p.m. EDT  
SSMC 2, Room 15246  
1325 East West Highway; Silver Spring, MD 20910

<b>Members</b>	<b>(T) via telecon</b>	<b>Agency</b>
William Bauman (Chair)		DOT/FAA
Michael Bonadonna (Vice Chair)		OFCM
Mary Erikson for Louis Uccellini		DOC/NOAA/NWS
John Cortinas for Craig McLean		DOC/OAR
Vanessa Griffin		DOC/NOAA/NESDIS
Col Michael Gremillion for Ralph Stoffler		DOD/USAF/A3W
Bill Spendley(T)		DOD/USA
Chris Ekstrom		DOD/USN
Rickey Petty(T)		DOE
Jonathan Berkson (T)		DHS-USCG
Chris Cannizzaro (T) for Ken Hodgkins		DOS
Angel McCoy (T)		DOI/BOEM
John Vimont (T)		DOI/NPS
Keith Compton (T)		NRC
Don Eick (T)		NTSB
Roemer Alfelor (T)		FHWA
Jack Kaye		NASA HQ/ESD
Michael Clark (T)		OMB
<b>Invited Participants</b>		<b>Agency</b>
William Lapenta		DOC/NOAA
Andy Stern, Ming Ji,		DOC/NOAA/NWS
Jesse Carman		DOC/NOAA/OAR
David McCarren (T)		DOD/USN
LtCol James Reusse (T)		DOD/USMC
LtCol Robert Branham (T), Michael Farrar		DOD/USAF/A3W
Pat Murphy		FAA
John Lee (T)		NASA HQ/JASD
James Spann		NASA (HPD)
Laura Willingham		NRC
James Sims, Sim James, David Chorney, Ken Barnett,		OFCM
Floyd Hauth (T), Tony Ramirez (T)		OFCM STC

Date of Issue: 18 March 2019

## **1. OPENING REMARKS.**

Dr. William Bauman (FAA), ICMSSR Chair, and ICMSSR Vice-Chair, Mr. Michael Bonadonna (OFCM), provided opening remarks and moderated the meeting. Mr. Michael Bonadonna provided administrative information. Roll call was conducted for participants on site and those using teleconference media. Members approved the agenda and the Record of Action from the last ICMSSR meeting.

## **2. FEDERAL COORDINATOR'S UPDATE.**

Mr. Michael Bonadonna, the Acting Federal Coordinator for Meteorology presented a summary of several key OFCM/Federal Weather Enterprise (FWE) coordination activities and plans including:

- The FWE Coordinating Infrastructure has been reduced by combining two Working Groups into one and by the termination of one JAG.
- The furlough impacted the FWE Coordination Session at the Annual Meeting of the American Meteorological Society (AMS). Five of the scheduled presentations were given and three were canceled. However, OFCM has been invited to organize a follow-on session for 2020 Annual Meeting of the AMS.
- The OPM 1340 Meteorologist qualification package has been sent from NOAA HR to DOC for submission to OPM. The NOAA Asst. Secretary for Environmental Observation and Prediction is tracking the status of action. OFCM will report progress to ICMSSR as soon as feedback is received.
- Interagency Arctic Region Environmental Services status. At the last ICMSSR meeting an action item was taken to arrange and conduct a one-day meeting to review current and future operational meteorological, oceanographic, and space environmental services and supporting research for national interests in the Arctic region with the purpose of determining whether collective interagency coordination is needed. Progress was delayed by the lapse in appropriations. OFCM requested input for participants from ICMSSR organizations and more than 35 participants were identified. Next steps are to draft an agenda, identify key presenters and schedule a meeting in March or April.
- Budget data requests for FY2020 Budget Coordination Report (BCR) have been sent to all agencies. Timelines were adjusted due to the furlough and the delayed FY20 President's Budget Request which is now expected the week of 11 March. The new target date for agency data inputs to OFCM is 18 March. The target date to deliver preliminary BCR to OMB is 1 April, with OMB clearance to release FY20 BCR 15 April 2019.
- The 2019 Tropical Cyclone Operations and Research Forum (TCORF) and 73rd Interdepartmental Hurricane Conference (IHC) are scheduled for Tuesday and Wednesday March 12 & 13, 2019 at the Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, FL. The focus will be on Tropical Cyclone Research, Transition to Operations, and update of the annual National Hurricane Operations Plan. Funding support is from NOAA, United States Navy (USN), and National Science Foundation (NSF). Uncertainty in budget appropriations has delayed commitment from federal participants.
- The 2019 Space Weather Enterprise Forum is planned for 26 June at the Yates Auditorium, Dept. Interior Main Building, Vermont Ave NW, Washington DC. The theme is "Preparing the Nation for Space Weather". It will be a full-day meeting with about 250+ attendees. The intent is to engage the Space Weather community and public. USGS Director James Reilly is the invited

Keynote speaker and a Congressional speaker is also being sought. The Secure World Foundation will support the forum and USGS and NASA will cover small incidental costs, if any.

- Implementing the Weather Act of 2017§402. The Office of Science and Technology Policy (OSTP) staff is coordinating with Congress to implement the proposal to establish the Interagency Committee for Advancing Weather Services (ICAWS).
- Upcoming National Earth System Prediction Capability (ESPC) events include a NOAA Leadership brief in March to the Executive Steering Group (ESG) leaders where Dr. Jacobs or his representative will brief Principals about NOAA's development of its Earth system Prediction Innovation Center (EPIC). An OMB briefing is also scheduled in March to inform their examiners more about ESPC. The formal National ESPC ESG meeting will be scheduled for mid-April. The Workshop on Building an Interannual to Decadal Prediction/Projection Capability for Decision Support was rescheduled to 5-6 June 2019, at the Center for Weather and Climate Prediction (NCWCP), College Park MD. This exploratory workshop will discuss the need for coordinated updating of physical earth system predictions to support a wide range of long-term decisions and will focus on the challenges of providing and maintaining an updating but non-operational capability, including the potential dual use of ongoing research efforts for decision support.

### **3. INTERAGENCY WEATHER RESEARCH COORDINATING COMMITTEE (IWRCC) ANNUAL UPDATE.**

Dr. John Cortinas (NOAA OAR) provided the annual update on plans and activities of the IWRCC.

The IWRCC promotes and helps to coordinate basic and applied U.S. research activities aimed at a better fundamental understanding and improved prediction of high-impact weather including applications in support of weather-sensitive decision making at Federal, State, and other agencies. The IWRCC helps to coordinate U.S. agency weather research priorities, promote U.S. interests in the participation of well-defined international projects, and explore and engage with new national and international weather research initiatives, including those associated with the The Observing System Research and Predictability Experiment (THORPEX) legacy projects (S2S, PPP, and HIweather).

Member agencies include NASA, NOAA, NSF, and the US Navy. Potential future members are DOE, FAA, USGS, USAF, DOI Bureau of Energy Management, and Environment Canada.

Activities in 2018 included facilitating input for the US Permanent Rep to WMO on issue papers ahead of Executive Council meetings, assisting in exploring funding outlets for WMO S2S database (work ongoing), established the Weather Research Working Group, and work on the USWRP Congressional required Implementation Plan.

Planned activities in 2019 are to continue USWRP Report activities, WG engagement with broader community, creating high level inventories of research in the fields related to the three WMO areas of interest, and preparing for a possible broader community survey.

### **4. IWXXM STATUS.**

The Joint Action Group for Aviation Weather Code Transition (JAG/IWXXM) fosters cooperation and coordination among the Federal agencies focused on transitioning aviation weather codes from the traditional alphanumeric character (TAC) format to an extensible mark-up language (xml) based code

generally referred to as IWXXM. Mr. Pat Murphy (FAA) provided an update on the progress being made by the agencies to transition to IWXXM.

His presentation reviewed the current status of the IWXXM exchange model global implementation, the issues and questions arising from this implementation, and how IWXXM will interact with Flight Information Exchange Model (FIXM) and Aeronautical Information Exchange Model (AXIM) in the System Wide Information Management System (SWIM) environment.

The intent is to move from a 1-2-line TAC METAR to a 5-page IWXXM METAR. This will enable a commonality across the aviation system domains (e.g., weather, flight, and aeronautical information). It allows the geographic position and time of information to be easily integrated with multiple systems and supports ‘modernization’ of MET information. This includes higher resolution met information, user-definable visualization and integration, and the modern/future communications infrastructure. IWXXM essentially makes information “digital” and supports multiple uses, applications, and integration. **Most importantly, it separates the exchange of the information from the use of the information.**

ICAO Annex 3, November 2020 (in Amd 78(Nov 2018)) will make the [International] exchange of IWXXM products a ‘mandatory’ practice. IWXXM version 3.0 is to be operational March 2019 but full alignment is difficult due to slow WMO change processes.

OFCM has a multi-agency group focused on MET and is developing U.S. Implementation Strategy and a joint agency transition plan. The NWS will create IWXXM versions of forecast/warning products at point of production and disseminate these products to FAA for International distribution via AMHS (& WIFS). Products will include TAFs, METAR & SPECI, SIGMET, AIRMET, Volcanic Ash Advisories, Tropical Cyclone Advisories, Space Weather, and SIGWX.

IWXXM is a key enabler of System Wide Information Management (SWIM) concepts. SWIM has one standard “connection” that uses universal programming language across all data. It allows more efficient data sharing among aviation stakeholders by streamlining connections among different systems and it can access multiple systems through one connection and uses standard data formats nationally and globally.

Copies of applicable documents will be shared by FAA with other agencies.

## **5. SATELLITE DATA SHARING COMMUNICATIONS.**

Ms. Vanessa Griffin (NOAA-NESDIS) provided a briefing describing the current pathways and data flows of satellite data among the Operational Processing Centers (OPC) including plans for any near-term changes. This briefing was in response to a request for an update from the previous ICMSSR meeting.

NESDIS established the OPC Satellite Data Exchange through a satellite data exchange server (called the Data Acquisition, Processing, and Exchange (DAPE) server) to facilitate and support the acquisition, processing, and exchange of environmental satellite data and services. The DAPE server is no longer adding new data sources and is being phased out as the satellite missions end or are moved to the Product Distribution and Access (PDA). The PDA is an enterprise system for ingesting, producing, and delivering near real-time data to time-critical users. It features high speed networks, scales to meet new growth, greater security and configurable production with custom tailoring capability. Data services are available through GRB broadcast for GOES-16/17 data, Domestic Communication Satellite (DOMSAT), and NOAA STAR (which is not 24x7 supported). Other miscellaneous services are available (HRIT/EMWIN, GEONetcast, DCS, etc.).

Tables were shown listing the current data source methods and the METSAT platform/data for each of the OPCs: NCEP, 557th Weather Wing, NAVO, and FNMOC.

The potential future OPC/COPC Satellite Data includes GOES-T/U (2021/2025), JPSS-2/3/4 (2021/2026/2031), DOD Weather Satellite Follow-On (replacing DMSP), Sentinel series, and the [GOSAT-3] Greenhouse Observing Satellite - JAXA (2023).

Members discussed changes expected in international satellite systems and factors impacting the end life of GOES satellites and their sensors (primarily fuel life). They also requested that a copy of NOAA satellite life expectancy / reliability charts and methodology be distributed to the ICMSSR. **See Action Item 2019-1.1.**

## **6. OPEN DISCUSSION:**

Dr. Bauman noted the research in progress on various aviation focused topics and offered to provide briefings on FAA related issues and topics for ICMSSR meetings in 2019. See Action Item 2019-1.2.

Dr. Kaye discussed NASA work related to commercial satellite weather data programs and European space programs that could be presented at longer range future ICMSSR meetings. Mr. Bonadonna noted that commercial weather data is a topic of interest and an Action Item for COES and an update would be a good candidate for the mid-year ICMSSR meeting. See Action Item 2019-1.3

Mr. Bonadonna reported that a request was received to consider holding the next FCMSSR meeting at NOAA Headquarters in DOC. ICMSSR members agreed with this request. See Action Item 2019-1.4.

## **7. ACTION ITEM REVIEW:**

FCMSSR Action Items

AI #	Text	Responsible Office	Comment	Status	Due Date
2018-1.3	Review and brief FCMSSR on the impact of 1340-series qualification changes approximately one year after OPM implements the change.	USAF A3W, NWS	-	Open	10/31/19

## ICMSSR Action Items

AI #	Text	Responsible Office	Comment	Status	Due Date
2016-4.2	Provide a copy of the Terms of Reference for the new Committee on Climate Services (CCS) for ICMSSR review.	OFCM	2/20/19: Sent with ICMSSR read ahead package	Closed	02/10/17
2018-1.5	Upon FCMSSR approval of the Section 402 implementation plan, submit the recommend plan to Director, OSTP and work with OSTP to submit a legislation change request to identify the Federal Coordinator as the ICAWS Executive Secretary rather than a Co-chair.	OFCM, OSTP	1/29/19: OSTP is actively working it and coordinating with Senate Staff.	Open	05/30/18
2018-2.2	Convene an exploratory meeting to determine a framework (participants, subjects for considerations, timeline, etc.) for an interagency group to deliberate the need for policy or direction on the availability of potentially sensitive operational weather information.	OFCM, USAF	10/1/18: USAF A3W is developing a position on this. 11/27/18: Dep A3W will re-engage on this.	Open	08/01/18
2018-2.3	Convene an exploratory meeting to develop an approach for compiling the description of activities and requirements called for in Section 109 of the Weather Act of 2017.	OFCM	02/01/19: Post-shutdown regroup with members	Closed	07/15/18
2018-4.1	Conduct a meeting to determine whether updates to the plans FCM-R17-2002 and FCM-R23-2004 on Atmospheric Transport and Diffusion are warranted and whether new objectives should be set.	OFCM	Introductory meeting held. Next step is to scope out the plan and bring it back to ICMSSR	Open	02/28/19
2018-4.2	Provide a briefing to ICMSSR describing the current pathways and data flows of satellite data among the Operational Processing Centers including plans for any near-term changes	COPC	2/26/19: Briefing presented	Closed	02/28/19
2018-4.3	Arrange and conduct a 1-day meeting to review current and future operational meteorological, oceanographic, and space environmental services and supporting research for national interests in the Arctic region with the purpose with determining whether additional interagency coordination is needed.	OFCM	Assembled participant list. Scheduling and agenda development next. Target date in mid April	Open	02/28/19

## **8. NEXT STEPS/CLOSING COMMENTS/ADJOURN**

The ICMSSR Chair thanked members for participating in the meeting. The meeting adjourned at 3:42 p.m. The target date for the next ICMSSR meeting is May 2019.

Interdepartmental Committee for Meteorological Services and Supporting  
Research Meeting 2019-1

**Action Items**

**ICMSSR Action Item 2019-1.1.** Provide the NOAA satellite life expectancy / reliability charts and methodology for distribution to the ICMSSR.

Responsible Office: NOAA-NESDIS

Due Date: March 28, 2019.

**ICMSSR Action Item 2019-1.2.** Schedule a series of presentations at 2019 ICMSSR meetings on FAA related weather issues and topics.

Responsible Office: FAA, OFCM

Due Date: Dec 31, 2019.

**ICMSSR Action Item 2019-1.3.** Schedule presentations from DoD, NASA, and NOAA on their commercial satellite weather data programs at the Summer ICMSSR meeting.

Responsible Office: COES

Due Date: June 30, 2019.

**ICMSSR Action Item 2019-1.4.** Seek to host future FCMSSR meetings at NOAA Headquarters Department of Commerce in the Herbert C. Hoover Bldg. in Washington DC.

Responsible Office: OFCM

Due Date: October 31, 2019.