ICAMS Presentation

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Interagency Meteorological Coordination Office Prepared for FPAW

October, 2021

WHAT IS ICAMS?

ICAMS is the formal mechanism by which all relevant Federal departments and agencies coordinate *implementation* of policy and practices to ensure U.S. global leadership in the meteorological services enterprise.

A 10-year charter was put in place on July 31st 2020 after a year of planning and robust engagement with 50+leaders across ICAMS Federal departments and agencies.

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CHARTER

of the

INTERAGENCY COUNCIL FOR ADVANCING METEOROLOGICAL SERVICES (ICAMS)

OFFICIAL DESIGNATION

The Interagency Council for Advancing Meteorological Services (ICAMS) is chartered under authority of the Director of the Office of Science and Technology Policy (OSTP) to serve as the Interagency Committee for Advancing Weather Services pursuant to Public Law No. 115-25, title IV, sec. 402 (Apr. 18, 2017), 15 U.S.C. § 8542.

As a continuation of the mandate in Public Law No. 87-843, title III, sec. 304 (Oct. 18, 1962), 68 Stat. 1114, and consistent with Public Law No. 115-25, ICAMS leads the annual development of an interagency budget review of programs supporting meteorological services and supporting research and annual implementation plans. ¹

PURPOSE AND SCOPE

ICAMS is the formal mechanism by which all relevant Federal departments and agencies (Ds/As) coordinate implementation of policy and practices to ensure U.S. global leadership in the meteorological services² enterprise. ICAMS also informs the development of relevant Federal policies via the National Science and Technology Council (NSTC) and within individual Ds/As.

WHY IS IT NEEDED?

ICAMS fulfills the mandate of the 2017 Weather Research and Forecasting Innovation Act by fostering collaboration on "meteorological services via an Earth system approach, providing societal benefits with information spanning local weather to global climate."

Public Law 115-25: Weather Research and Forecasting Innovation Act (2017)

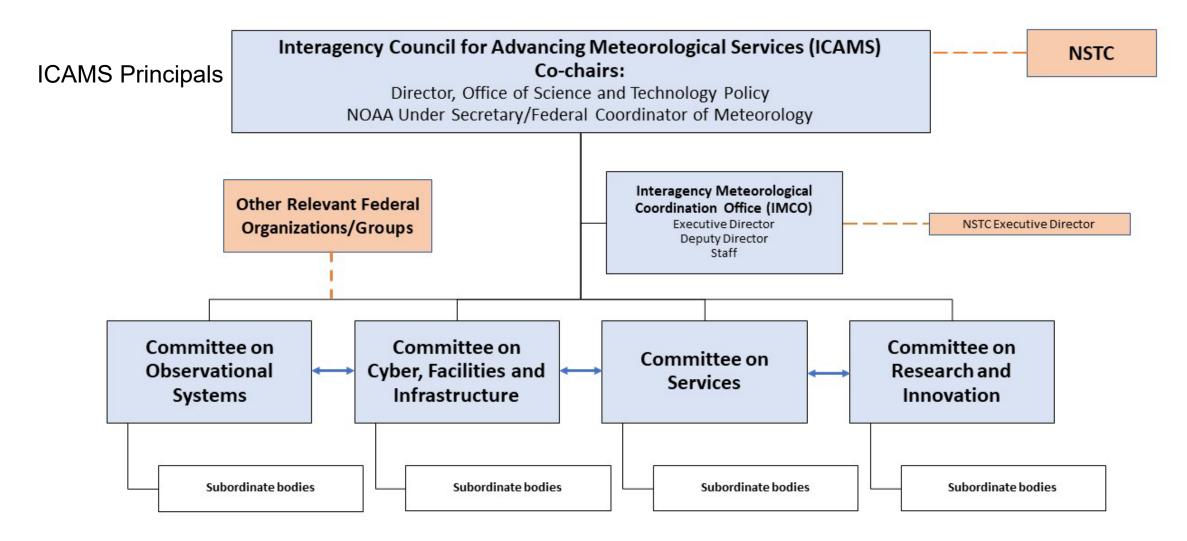
SEC. 402. INTERAGENCY WEATHER RESEARCH AND FORECAST INNOVATION COORDINATION. (a) ESTABLISHMENT.—The Director of the Office of Science and Technology Policy shall establish an Interagency Committee for Advancing Weather Services to improve coordination of relevant weather research and forecast innovation activities across the Federal Government. The Interagency Committee shall—

- (1) include participation by the National Aeronautics and Space Administration, the Federal Aviation Administration, National Oceanic and Atmospheric Administration and its constituent elements, the National Science Foundation, and such other agencies involved in weather forecasting research as the President determines are appropriate;
- (2) identify and prioritize top forecast needs and coordinate those needs against budget requests and program initiatives across participating offices and agencies; and
- (3) share information regarding operational needs and forecasting improvements across relevant agencies.
- (b) CO-CHAIR.—The Federal Coordinator for Meteorology shall serve as a co-chair of this panel.
- (c) FURTHER COORDINATION.—The Director of the Office of Science and Technology Policy shall take such other steps as are necessary to coordinate the activities of the Federal Government President. Determination. with those of the United States weather industry, State governments, emergency managers, and academic researchers.

HOW DOES IT FUNCTION?

- ICAMS is co-chaired by Office of Science and Technology Policy at the White House and NOAA.
- Principals represent all ICAMS Agencies and Departments.
- Interagency Meteorological Coordination Office (IMCO).
 - Provides administrative and logistical support to ICAMS.
 - Interagency coordination housed within NOAA.
 - IMCO Executive Director is detailed to OSTP.
 - IMCO Deputy Director and Staff are from NOAA.
- ICAMS committee members from across the Federal government.

ICAMS STRUCTURE



The new ICAMS coordination structure aims to simplify and improve coordination

ICAMS SUBCOMMITTEE STRUCTURE

Committee on Observational Systems



Committee on Cyber, Facilities, & Infrastructure



Committee on Services



Committee on Research & Innovation

- Space-Based Observations
- Surface and Sub-Surface (formerly In-situ Observations)
- Air Obs
 (formerly Air
 and Ground Based
 Observations)

- High Performance and Cloud Computing for Earth System Applications
- Earth System Data Infrastructure and Stewardship
- Operational Processing Centers

- Weather Services
- Climate Information and Services
- Integrated Hydrologic,
 Ocean and Coastal
 Information and Services
- Atmospheric Composition Information and Services

- Earth System Modeling & Prediction
- Data Assimilation and Observation Strategy
- Application of Weather and Climate Prediction to Decision Making
- Earth Systems ML/Al and Advanced Technologies

JOINT ACTION GROUPS FOR CROSS CUTTING TOPICS

Integrated Observations for Meteorological Extremes and Regional Information
Earth System Predictability
Transition of R&D into Services
Space Weather Observations, Services and Research

ICAMS SUBORDINATE BODIES STRUCTURE

Committees on Observational Systems



Committees on Cyber, Facilities, & Infrastructure



Committees on Services



Committees on Research & Innovation

WG on Non-Governmental Data

SC on Space-Based Observations

SC on Air and Ground-Based Observations

- WG on Aerial Reconnaissance Equipment
- WG on Future Radar Systems
- WG on NEXRAD Radar

SC on In-situ Observations

 WG on Satellite Telemetry Interagency SC on High Performance and Cloud Computing for Earth System Applications

SC on Earth System Data Infrastructure and Stewardship

SC on Operational Processing Centers

- WG on Cooperative Support and Backup
- WG on Centralized Communications Management
- WG on Observational Data

- WG on R2O and O2R
- WG on Meteorological Services supporting Social Equity

SC on Weather

- WG on Disaster Impact Assessments & Plans
- WG on Agriculture, Land & Water Management Services
- WG on Sector Predictive Services

SC on Water

- WG on Inland Services
- WG on Coastal Services (inland/coastal boundary)
- WG on Ocean Services (costal/ocean boundary)

SC on Climate

- WG on Climate Information Services
- WG on Adaptation Services
- WG on Mitigation Services

SC on Atmospheric Composition

- WG on Atmospheric Transport, Dispersion & Volcanic Ash
- WG on Wildfires, Controlled Burns, and other Sources Services

SC on Earth System Modeling & Prediction

- WG on Common Model Architecture
- WG on Coupled Global Modeling
- WG on High Performance Computing

SC on Data Assimilation and Observation Strategy

SC on Application of Weather and Climate Prediction to Decision Making

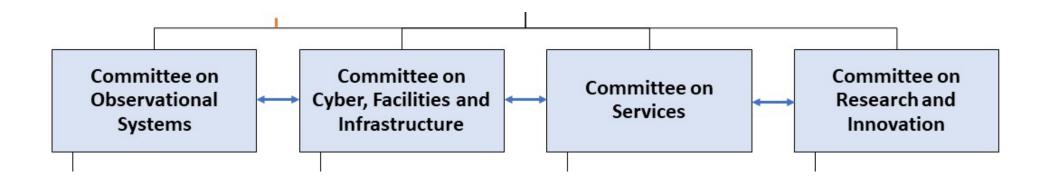
SC on Earth Systems ML/Al and Advanced Technologies

JOINT ACTION GROUPS FOR CROSS CUTTING TOPICS

Integrated Observations for Meteorological Extremes and Regional Information - Earth System Predictability - Transition of R&D into Services

Space Weather Observations - Services and Research

COMMITTEE LEADERSHIP



Co-chairs:

- Kevin Gallagher (USGS)
- Vanessa Griffin (NOAA)
 Amy Mahn (NIST)
- James Irons (NASA)
 Tony LaVoi (NOAA)

Co-chairs:

- Barbara Helland (DOE)

Co-chairs:

- Toral Patel-Weynand (USDA)
- Andy Stern (NOAA) Until 1 November
- Scott Van Blarcum (DOD) until 1 Oct)

Co-chairs:

- Jack Kaye (NASA)
- Gary Geernaert (DOE)
- Chris Ekstrom (DOD)
- Stan Benjamin (NOAA)

ICAMS IN THE BIDEN-HARRIS ADMINISTRATION

- ICAMS is an historic restructuring and modernization of the Federal meteorological enterprise to improve coordination.
- The Administration fully supports ICAMS' plans to complete the transition of the old coordination structure into ICAMS.

FEDERAL PARTNERS

ICAMS brings coordination across the broad set of 15 relevant agencies and departments.































- Executive Office of the President (EOP)
 - Office of Science and Technology Policy (OSTP)
 - Office of Management and Budget (OMB)
- Department of Agriculture (USDA)
 - Office of the Chief Scientist (OCS)
- Department of Commerce (DOC)
 - National Institute of Standards and Technology (NIST)
 - National Oceanic and Atmospheric Administration (NOAA)
 - NOAA National Weather Service (NWS)
 - NOAA National Environmental Satellite, Data, and Information Service (NESDIS)
 - NOAA National Ocean Service (NOS)
 - NOAA Office of Oceanic and Atmospheric Research (OAR)
- Department of Defense (DOD)
 - United States Army (USA)
 - United States Air Force (USAF)
 - United States Marine Corps (USMC)
 - United States Navy (USN)
 - United States Space Force (USSF)
- Department of Energy (DOE)

- Department of Health and Human Services (HHS)
 - National Institutes of Health (NIH)
 - Centers for Disease Control and Prevention (CDC)
- Department of Homeland Security (DHS)
 - Federal Emergency Management (FEMA)
 - United States Coast Guard (USCG)
- Department of the Interior (DOI)
 - United States Geological Survey (USGS)
 - Bureau of Land Management (BLM)
 - National Park Service (NPS)
 - Bureau of Ocean Energy Management (BOEM)
 - U.S. Fish and Wildlife Service (FWS)
- Department of State (DOS)
 - Bureau of Oceans and International Environmental and Scientific Affairs (OES)
- Department of Transportation (DOT)
 - Federal Aviation Administration (FAA)
 - Federal Highway Administration (FHWA)
- Environmental Protection Agency (EPA)
- National Aeronautics and Space Administration (NASA)
- Nuclear Regulatory Commission (NRC)
- National Science Foundation (NSF)
- National Transportation Safety Board (NTSB)

- Milestone 1: Transition the Federal meteorological coordinating structure into an ICAMS structure that aligns with ICAMS goals and principles.
- Milestone 2: Establish the Interagency Meteorological Coordination Office (IMCO) and its executive leadership.
- Milestone 3: Communicate ICAMS goals and structure.
- Milestone 4: Engage with the community and early career scientists to inform a long-term plan toward ICAMS aspirational goal and metrics of success.

ICAMS Transition Team (ITT) In place until Executive Director is announced

- Provides executive leadership and transition support to ICAMS, IMCO and the committees.
- Ensures continuity until there is an IMCO Executive Director at OSTP.
- Members from OSTP, NOAA, NSF, and DOE in representation of the interagency.

Milestone 1:Transition the Federal meteorological coordinating structure into an ICAMS structure that aligns with ICAMS goals and principles.

- The transition into the ICAMS structure is currently being worked on
 - ICAMS committees have been meeting since October 2020
 - Former high-level meteorological coordination groups have all been dissolved, with all essential roles and functions assumed by ICAMS and its committees. Includes:
 - Federal Committee for Meteorological Services and Supporting Research (FCMSSR).
 - Interdepartmental Committee for Meteorological Services and Supporting Research (ICMSSR)
 - Earth System Prediction Capability (ESPC) Partnership
 - The ICAMS structure under the committees has been defined and is currently being populated (selection criteria include needed expertise, agency representation and diversity)
 - Functions of all former groups have been mapped into the new ICAMS structure

Milestone 2: Establish the Interagency Meteorological Coordination Office (IMCO) and its executive leadership.

- NOAA is completing the establishment of the Interagency Meteorological Coordination Office (IMCO). Approved by Congress Sept 2021.
 - IMCO replaces the Office of the Federal Coordinator for Meteorology (OFCM).
 - The IMCO Deputy Director has been selected OSTP will recruit the IMCO Executive Director (an OSTP detailee from an ICAMS agency).
- The ICAMS Transition Team (ITT) will ensure continuity until there is an IMCO Executive Director.

Milestone 3: Communicate ICAMS goals and structure.

- The public ICAMS website is up: ICAMS-portal.gov.
- An OMB MAX site facilitates interagency and committee communication.
- The ITT has carried out several ICAMS 101 presentations to Federal groups over the past several months (e.g. to on-board new members, to communicate with NSTC groups etc.).
- There were ICAMS-related sessions at the annual AMS meeting, including a town hall.
- There are plans for further Federal and external outreach going forward.

Milestone 4: Engage with the community and early career scientists to inform a long-term plan toward ICAMS aspirational goal and metrics of success.

- A program for early career Fed scientists engagement in ICAMS.
 - Benefit: Provides committees with early career scientists' viewpoint.
 Provides the early career scientists with a unique professional development opportunity.
 - Mechanism: One-year appointments to engage in committees; a recruitment program open to all ICAMS agencies.
 - Who: Early career Fed staff who show promise for distinguishing themselves for scientific and technological excellence in meteorology.
- Broad engagement to inform ICAMS plans (e.g. a Federal data call, meetings with Federal staff, a Request for Information to the Public, other public engagements).

ICAMS WAY FORWARD

- ICAMS v1.0 is a starting point that we can build on and refine over time.
 - Principals support continued agency engagement in ICAMS.
 - Agencies review rosters and refine participation in ICAMS groups (later this Summer).
- ICAMS will need to develop a long-term ICAMS strategy during FY 2022.
 - Agencies engage in strategy development (e.g. through Federal survey, and discussions) over the next several months.

PRINCIPALS' ENGAGEMENT IN NEXT STEPS - IMCO

- IMCO ED recruitment announcement has been circulated.
 - Principals nominate suitable candidates by June 11 (extended).
 - Principals will be engaged in the selection.
 - Selection has been made, but not announced yet
- IMCO staffing and Committee support is needed to supplement NOAA staff.
 - Principals' commitment of staff support to coordinate ICAMS groups.
- IMCO coordinated Budget and Coordination Report to be developed under ICAMS.
 - Agencies respond to request which will be circulated soon.

ICAMS RESOURCES

- ICAMS-portal.gov
- ICAMS Charter
- ICAMS FAQs
- ICAMS contact: icams.portal@noaa.gov