
**Office of the Federal Coordinator for
Meteorological Services and Supporting Research
(OFCM)**

OFCM Update to COPC

**Bill Schulz
Federal Coordinator
May 2, 2017**

Three areas to cover:

- **Recap of update to FCMSSR (26 April 2017)**
- **Impacts of the new Weather Bill**
- **Status of revising the Federal Plan**

Federal Weather Enterprise Infrastructure

	Current	Active
FCMSSR	1	1
ICSSR & Councils	1	1
Committees	4	4
WGs	14	12
JAGs	3	2
TOTAL	26	23

Federal Committee for Meteorological Services and Supporting Research (FCMSSR)

Federal Coordinator for Meteorology

NEXRAD Program Council

Interdepartmental Committee for Meteorological Services and Supporting Research (ICMSSR)

Earth System Prediction Capability (ESPC) Executive Steering Group

Committee on Operational Processing Centers

Committee on Operational Environmental Satellites

Committee on Climate Analysis, Monitoring, and Services

Interagency Weather Research Coordinating Committee

Working Groups (enduring)

Joint Action Groups (short-term)

Federal Coordinator's Update

- **FCMSSR (Federal Committee for Meteorological Services and Supporting Research)**
 - **Met 25 April 2017:**
 - Reviewed the new Weather Bill and the new Strategic Plan for Coordination/Federal Plan.
 - National ESPC briefed on Exascale Computing Challenges Ahead.
 - Spectrum Efficient National Surveillance Radar (SENSR) Update.
 - Next meeting (24 October 2017).
- **ICMSSR (Interdepartmental Committee for Meteorological Services and Supporting Research)**
 - **Met 24 March 2017:**
 - Reviewed the new Strategic Plan for Coordination/Federal Plan.
 - Exascale Computing Challenges Ahead.
 - 1340 Meteorologist Qualification Standards.
 - FMH-1 Surface Observations
 - Next meeting (22 June 2017).

Federal Coordinator's Update

- **COES (Committee for Operational Environmental Satellites)**
 - Adjusting Terms of Reference to include three divisions of NASA Science Missions Directorate (ESFD, Heliophysics, and Joint Agency Satellite Division)
 - Called for USAF/NESDIS/NASA to provide updates on commercial data buy initiatives at next meeting (20 June 2017).
- **COPC (Committee for Operational Production Centers)**
 - Quickly highlighted to FCMSSR about the action item from last meeting (October) to revalidate telecommunications bandwidth requirements across COPC partners, will be used to identify current and future data flows and to validate bandwidth capacities for the gateways (MPG/NFG)
 - Advertised this meeting

Meeting agendas and records of actions for these groups are available at <http://www.ofcm.gov/groups.htm>

Federal Coordinator's Update

- **Interagency Weather Research Committee**
 - Adjusting Terms of Reference to include two Navy members (ONR and Oceanographer of the Navy) to mirror the ops/research membership of NOAA (NWS, OAR), and to allow for AMS observer attendance.
 - Coordinating talking points for WMO Executive Council meeting May 10-15.
- **NEXRAD Program Council (DoD, NWS, FAA)**
 - Address disposition of DoD WSR-88D radars, status of Radar Operations Center manning
 - Next meeting 31 May 17

Meeting agendas and records of actions for these groups are available at <http://www.ofcm.gov/groups.htm>

Federal Coordinator's Update

- Tropical Cyclone Operations and Research Forum '17 completed in March, annual update of the *National Hurricane Operations Plan** scheduled for release 1 May.
- Update to *Federal Meteorological Handbook -1 (Surface Observations)**
 - Release for agency preview 30 April 2017
 - In effect 1 November 2017
- OFCM supporting the National Space Weather Action Plan and the Space Weather Operations, Research and Mitigation Subcommittee by hosting/developing “SWORM.GOV, ” expected online in June.
- Space Weather Enterprise Forum will be held 27 June at NTSB Conference Center (L'Enfant Plaza). Seeking Congressional speaker. Information at <http://www.ofcm.gov/meetings/SWEF/swefmeeting.htm>

*Publications will be available at <http://www.ofcm.gov/publications.htm>

New Weather Legislation

Weather Research and Forecasting Innovation Act

- **HR353 went to the President for signature on 6 April, and was signed on 19 April. Section 402 prescribes creation of a new coordination committee under OSTP.**
- **Originally drafted in 2013; at least 7 instances of directed interagency coordination**
 - OSSE's**
 - National ESPC**
 - Operationalize COSMIC**
 - NOAA SAB New WG: Environmental Information Service WG (interagency communication)**
 - NEXRAD Coverage Gaps Study**
 - Tsunami Warning Education and Research**

Section 402

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 with those of the United States weather industry, State governments, emergency managers, and academic researchers.

Section 402 - Opportunities and Issues

- **Some overlap with FCMSSR and ICMSSR missions**
- The FCMSSR provides a formal mechanism for interagency coordination on implementing national policy relating to, and developing plans and procedures for, cooperative Federal agency efforts in the development, acquisition, continuous operability, and increased effectiveness of meteorological services for the Nation. These services include observation, data sharing, analysis, prediction, dissemination of operational weather and atmospheric information, and the developmental research that supports these services.
- The ICMSSR supports the FCMSSR and provides a formal mechanism for interagency coordination on implementing national policy relating to and developing plans and procedures for, cooperative federal agency efforts in the development, acquisition, continuous operability, and increased effectiveness of meteorological services for the Nation.
- **Leadership (FC as Co-Chair) may imply level of participation**
- **Opportunity to streamline our coordination infrastructure, risk of encumbering our infrastructure**
- **Potential for a mandate, or some form of “official encouragement,” for agencies to participate in coordination activities**

Section 402 - Proposed path

- **FCMSSR approved forming a team to draft implementation proposals**
 - **OSTP, OMB, NOAA, NASA, FAA, NSF, OFCM mentioned in the Bill**
 - **FCMSSR directed us to include DoD and others**
- **Consider range of options**
 - **Two extremes:**
 - **“ICAWS” as a third, stand-alone coordination body**
 - **FCMSSR becomes ICAWS**
 - **Multiple possibilities in between**
 - **Amplifying guidance from OMB and/or OSTP?**
- **Get Legal/General Councils to provide opinions on feasibility of options**
- **Brief recommendations to FCMSSR/ICMSSR (October 2017 at the latest)**
- **Final audience for recommendation is Director, OSTP**

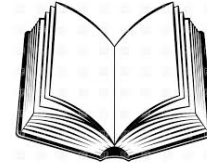
New Federal “Plan”

Old:



- Single publication
- Produced annually
- 200+ pages
- Multiple detailed spreadsheets
- Released in October
- No formal review

New (proposed):



First publication:

- **Strategic Plan**
- Published every four years
- Composed by interagency group
- Approved by FCMSSR



Second publication:

- **Annual Report**
- Smaller (~50 pages)
- Few spreadsheets (satisfies PL 87-843)
- Progress towards Strategic Goals and Objectives (Agencies, Committees)
- Released in March (normally, but not FY18 version)
- OMB Review

Strategic Plan for Federal Weather Coordination

Revising the annual Federal Plan for Meteorological Services

1. ICMSSR agency approvals for Strategic Plan ongoing
2. FCMSSR Approve Strategic Plan (October)
3. OFCM collect budget data from agencies (ongoing)
4. OFCM collect first draft strategic plan support write-ups from agencies, committees and working groups (May-July)
5. Publish (inaugural) FY18 version – *budget tables and discussions only* (Summer '17)
6. Publish robust (i.e. w/strat plan updates) FY19 version (March '18)

Strategic Plan: **DRAFT Goals and Objectives**

- 1. Improve the resolution, frequency, information content and sustainability of global observing capabilities.**
 - a) Enable interagency discussions of observation system acquisition at the capability planning stage.**
 - b) Conduct development, deployment and sustainment of common-use systems through formalized interagency processes.**
 - c) Coordinate data formatting, processing, communication, management and stewardship standards to optimize the exchange, timeliness, usability and value of earth observations.**
 - d) Coordinate the development of technology to extract information from observations.**

Strategic Plan:

DRAFT Goals and Objectives

2. **Make Federal forecasting processes more resilient for all relevant time and spatial scales.**
 - a) **Strengthen interoperability among interagency forecasting centers in producing accurate, timely, and precise weather products, information and services.**
 - b) **Ensure interagency utility (data types, precision, etc.) of intraseasonal-to-interannual and longer-term forecasts.**
 - c) **Support agency efforts to plan and develop the cooperative use of processing resources to increase the Nation's computing power for enhancing data assimilation and modeling systems.**

3. **Ensure availability of effective and consistent decision support products, information and services.**
 - a) **Coordinate interagency outreach efforts to identify weather and water related information needs for decision making and risk management.**
 - b) **Improve the consistency of decision support and risk management products, information and services.**
 - c) **Crossfeed processes and lessons learned between agencies to improve decision support tools.**

Strategic Plan: **DRAFT Goals and Objectives**

- 4. Conduct productive, synergistic interagency research efforts.**
 - a) Exercise leadership in coordinating U.S. efforts in international weather research priorities including the current WMO Grand Challenges.**
 - b) Foster interagency collaboration of research initiatives starting at the planning stage.**
 - c) Support efforts among FWE participants to coordinate task definition and sponsorship of National Academies research initiatives.**
 - d) Expand interagency use of data and information for research.**

- 5. Develop, recruit, and sustain a professional diverse federal workforce.**
 - a) Coordinate OPM definitions and requirements for meteorology-related positions to ensure appropriate education and experience of the FWE workforce.**
 - b) Coordinate opportunities to leverage outreach, including education efforts, recruiting, and diversity inclusion initiatives.**
 - c) Crossfeed information on career path planning, training opportunities, diversity and inclusion, professional development, and retention programs.**

Strategic Plan: **DRAFT** Goals and Objectives

- 6. Coordinate messaging about FWE priorities and needs.**
 - a) Coordinate input about FWE priorities to the Executive and Legislative branches, including communicating these priorities to federal agencies that are not FWE participants.**
 - b) Coordinate input about FWE priorities to academia, professional associations, non-federal government entities, and the general public.**

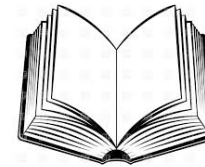
New Federal “Plan”

Old:



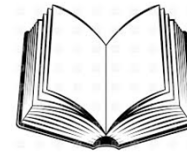
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Annual Report (FY18 FedPlan)

1. Amplifying information on agency budgets

- a) Includes FY18 President's Budget Request amounts
- b) Excludes FTE numbers
- c) Envisioned as an intro statement (overall amount, changes) followed by 2-5 bulleted highlights; we propose as guidance using:
 - (i) \$10M threshold or
 - (ii) 10% of top line or
 - (iii) items that reflect a significant change in approach or policy

Annual Report (Budget Table)

TABLE 1 Meteorological Services and Supporting Research*

AGENCY	ENACTED FY16	AUTHORIZED FY17	PBR FY18
Agriculture			
Commerce/NOAA(Subtot)			
NWS			
NESDIS			
OAR			
NOS			
OMAO			
Defense(Subtot)			
Air Force			
Navy			
Army			
Homeland Security (Subtot)			
USCG			
Interior/BLM (Subtot)			
BLM			
NPS			
USGS			
Transportation(Subtot)			
FAA			
FHWA			
EPA			
NASA			
NRC			
DOE			
DOS			
Smithsonian			
NSF			

Annual Report

Budget Description Example

Office of Oceanic and Atmospheric Research (Example)

The Office of Oceanic and Atmospheric Research (OAR) request for funding related to meteorological supporting research in the FY 2017 President's Budget totals \$172.9 million. This is a 5.9% increase over the FY 2016 Enacted.

- ***Climate Labs and Cooperative Institutes.*** NOAA requests a net increase of \$10.5 million for a total of \$70.9 million to support research activities that will help to gain a comprehensive understanding of the physical, chemical, and dynamical processes that shape our climate. NOAA will maintain and enhance NOAA's six Atmospheric Baseline Observatories (ABO) in order to deliver policy-relevant data and information on greenhouse gas emissions and other critical atmospheric data. NOAA will improve support of the U.S. Global Change Research Program's (USGCRP) priority research areas, including providing focused research to understand and predict climate and weather extremes like drought. Finally NOAA will build upon its North American Carbon Observation and Analysis System (COAS) to establish a more robust network of sensors and carbon cycle modeling efforts to improve our understanding of the carbon cycle and the effect on the earth. OAR's Laboratories and Cooperative Institutes are central to the effort of the climate research community to improve that understanding, to test our understanding through the development of state-of-the-art Earth System Models, and then to use those models to predict the future state of the climate. Observations of the Earth system and their analysis underpin the efforts that form the scientific basis for Climate Research.
- ***Weather and Air Chemistry Research (W&ACR).*** This sub-activity includes.....

Annual Report (FY19 edition)

2. Plans and Progress in Support of the Strategic Goals

- Descriptions of any effort your **agency/committee/WG** is currently engaged in that support or relate to the goals and objectives of the Strategic Plan.
- Not required to 'check every block'
- OFCM will assist with editing. FY19 edition should be first robust version of this section.