



# National Space Weather Strategy

National Science and Technology Council  
Committee on Environment, Natural Resources and Sustainability  
Subcommittee on Disaster Reduction  
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# Severe Space Weather – Societal and Economic Impacts



# Space Weather Awareness

Multiple efforts underway across government agencies, nationally and internationally

- **Congress** – Critical Infrastructure Protection Act, H.R. 3410, Dec 2014; NASA Authorization Act of 2010
- **U.S. Regulatory Action** – FERC reliability standards
- **Space weather in Strategic National Risk Assessment**
- **FEMA Federal Interagency Response Plan** – Will include a Long-Term Power Outage Annex
- **International** – UN WMO Inter-Programme Coordination Team on Space Weather; FAA and UN International Civil Aviation Organization; NATO space weather teams



# National Space Weather Strategy

*A cohesive all-of government strategy was necessary to ensure the federal government was positioned to mitigate, respond to and recover from a major space weather storm*

Nov 2014 – The Space Weather Operations, Research, and Mitigation (SWORM) Task Force was established by action of the NSTC/CENRS/SDR

Tasked to develop:

- National Space Weather Strategy
- Space Weather Action Plan

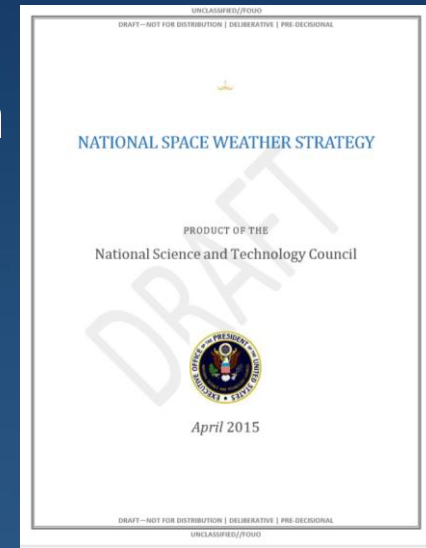




# National Space Weather Strategy – Structure

Strategy articulates six high-level goals.

1. Establish Benchmarks for Space Weather Events
2. Enhance Response and Recovery Capabilities
3. Improve Protection and Mitigation Efforts
4. Improve Assessment, Modeling, and Prediction of Impacts on Critical Infrastructure
5. Improve Space Weather Services through Advancing Understanding and Forecasting (*R2O/O2R, Observations*)
6. Increase International Cooperation



# Space Weather Action Plan

A Space Weather Action Plan (SWAP) is being developed that will establish a process to implement the National Space Weather Strategy

- Strategy must have an accompanying roadmap (action plan) to be successful
- The SWAP will establish specific actions with implementation timelines, detailed activities, and agency assignments



# National Space Weather Strategy – Whole Enterprise Involvement

- Multi-agency effort
- All Actions coordinated with White House Office of Science and Technology Policy, National Security Council, and Office of Management and Budget
- Public Comment Period - an opportunity for all stakeholders to provide input and feedback on NSWS

Strategy will require us to strengthen our interagency, public-private and international partnerships, in a whole community approach.



# National Space Weather Strategy – Comment Period

- Public Comment period now underway
- Will end on 29 May (30 days after Strategy was published on Federal Register)



## NSWS Presentations to:

- National Research Council Space Studies Board
- Boulder Space Weather Workshop
- Joint AGU-AAS Triennial Earth-Sun Summit
- Critical infrastructure sectors (DHS)





# Announcement on Federal Register (29 April)



The screenshot shows the Federal Register website interface. At the top left is the seal of the Archives and Records Administration. The main header reads "FEDERAL REGISTER" and "The Daily Journal of the United States Government". A blue bar contains the word "Notice". The title of the notice is "National Science and Technology Council; National Space Weather Strategy". Below the title, it states "A Notice by the Science and Technology Policy Office on 04/30/2015". There are social media icons for email, Twitter, and Facebook. A grey box indicates "Comments on this document are being accepted at Regulations.gov" with a green button labeled "SUBMIT A FORMAL COMMENT". The "ACTION" section says "Notice For Public Comment." The "SUMMARY" section states: "The National Science and Technology Council; Committee on Environment, Natural Resources, and Sustainability; Subcommittee on Disaster Reduction requests public comments on the draft 2015 National Space Weather Strategy: <http://www.dhs.gov/national-space-weather-strategy>." On the right side, there are navigation links for "Previous Document" and "Next Document", a "LEGAL DISCLAIMER" button, "Font Controls" with plus, minus, and font size icons, and a "PUBLIC INSPECTION" button.

<https://www.federalregister.gov/articles/2015/04/30/2015-10113/national-science-and-technology-council-national-space-weather-strategy>

<http://www.dhs.gov/national-space-weather-strategy>





***THANK YOU!***

*Space Weather Operations, Research, and Mitigation Task Force*

*Co-chairs: Caitlin Durkovich, Assistant Secretary for Infrastructure Protection, DHS*

*Louis Uccellini, Assistant Administrator, National Weather Service, NOAA*

*Tamara Dickinson, Principal Assistant Director for Environment and Energy, OSTP*

