

A satellite image of Earth from space, showing a portion of the Western Hemisphere. The image is partially obscured by a blue horizontal bar at the top and a semi-transparent grey rectangle in the center. The title text is overlaid on the grey rectangle.

Overview of NOAA's Commercial Weather Data Pilot

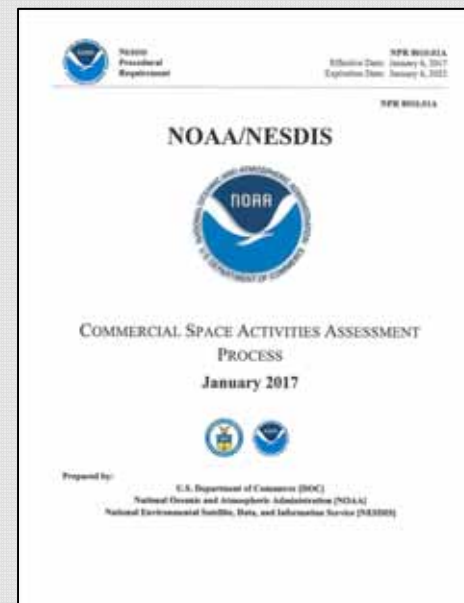
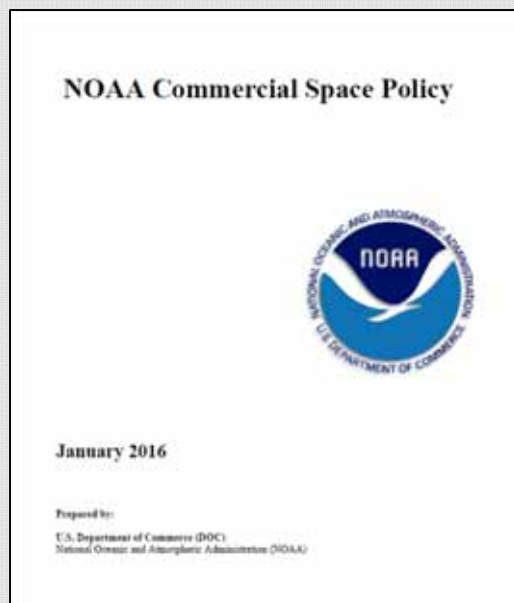
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Office of System Architecture and Advanced Planning (OSAAP)

Spring 2017 Meeting of the Committee on Earth Science and Applications from Space
29 March 2017

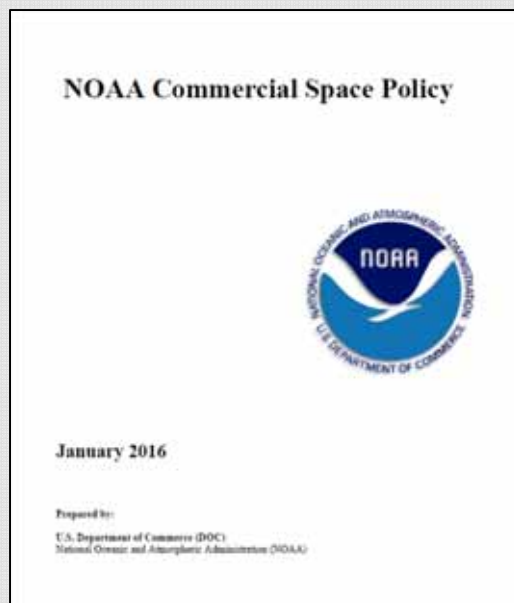


NOAA Policy Framework

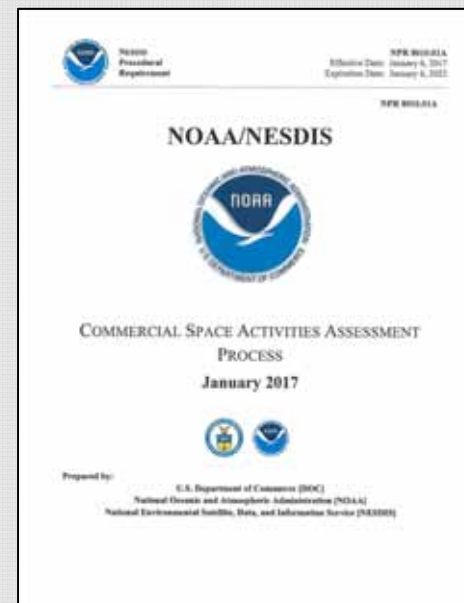


Meeting mission objectives with all available options

NOAA Policy Framework



“NOAA will explore and, where appropriate, **pursue demonstration projects** to validate the viability of assimilating commercially provided environmental data and data products into NOAA meteorological models and add value to the forecast.”



“NESDIS will issue one or more solicitations...for NOAA to **acquire and evaluate on-orbit observations from commercial sources**, where industry has or will establish on-orbit capabilities that were identified by NOAA as promising option(s)...”



NESDIS Commercial Space Assessment Process

- Process includes:
 - Analyze gaps in ability to meet requirements
 - Regularly canvass commercial sector
 - Pursue demonstration projects where appropriate
 - Given promising demonstration, enter into contracts for operational data buys
- Assessment Criteria – mission specific, but cover:

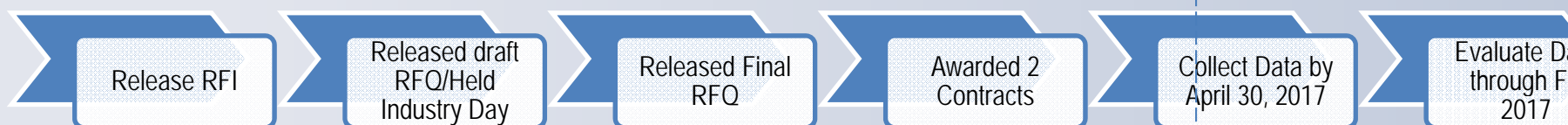
<u>Value</u>	<u>Cost Effectiveness</u>	<u>Exploitability</u>
Concept Legitimacy	Cost/value balance	Comprehensiveness
Accuracy	Availability	Security
Quality	Sustainability	Downstream use
Timeliness	Support	
Reliability		
Validity		

Codifies the Approach to Assessing New Commercial Capabilities

Commercial Weather Data Pilot

- Win-win for both NESDIS and the commercial sector
 - NOAA is learning about existing commercial capabilities and developing our processes for purchasing commercial data in the future
 - Companies are gaining a trial run of the NOAA evaluation process and data evaluation results

FY16 \$3M
Round 1



FY17 \$5M Request
Potential Round 2





CWDP Round 1 Evaluation

- CWDP initiated with \$3M in FY 2016
- NOAA identified radio occultation as initial data set for evaluation
- Roles:
 - NCAR performing data processing and initial quality evaluation
 - Joint Center for Satellite Data Assimilation performing data validation and NWP model impact assessment
- Requirements set to enable maximum participation:
 - Requested 3-6 months of data in specified format
 - No minimum requirement for occultations per day, distribution of occultations around the globe, or secure real time data delivery
- Round 1 activities addressed processes for contract writing and initial evaluation
 - Round 1 does not address NESDIS processes for IT security, data rights and distribution, real time data ingest





CWDP Round 2

- Additional FY 2017 funds requested
- Pending FY 2017 appropriations and results of Round 1 data assessment, Round 2 may include:
 - A second RFQ and assessment period for commercial radio occultation data
 - Extend the CWDP to data types other than radio occultation data
- If focused on radio occultation data, NESDIS would seek to pursue a demonstration project to inform procurement of data sets operationally
 - NESDIS processes not examined in Round 1
 - Vendor requirements approaching operational needs
 - NWP impact analysis to inform procurement of data sets operationally

Commercial Data Purchase Procedure	Round 1	Round 2 (pending FY 2017 funding)
Contract Writing	X	X
Data quality assessment	X	X
Real time secure data ingest		X
Numerical weather prediction impact assessment		X
Data rights negotiation		X
Data archive		X



Thank you!

