REQUEST FOR INFORMATION / MARKET RESEARCH

Department of Commerce (DOC) | National Oceanic and Atmospheric Administration (NOAA) National Weather Service (NWS)

- **Requirement Title:** Cooperative Observer Program (COOP) Network Modernization & Management Paradigm Analysis
- **Product Service Code (PSC):** 6660 – Navigational Instruments and Meteorological Equipment
- **North American Industry Classification System (NAICS) Code:**
  - Primary: 334519 – Other Measuring and Controlling Device Manufacturing
  - Secondary: 541990 – All Other Professional, Scientific, and Technical Services
- **Notice Type:** Request for Information / Sources Sought Notice for Market Research Purposes
- **Response Deadline:** July 13, 2026, at 5:00 PM EST

I. Introduction and Purpose

In accordance with **Federal Acquisition Regulation (FAR) Part 10 (Market Research)**, the DOC, NOAA, NWS is conducting market research to determine the capabilities, commerciality, and competitive landscape of the market, specifically targeting qualified Small Business concerns (including 8(a), HUBZone, Service-Disabled Veteran-Owned Small Businesses, and Women-Owned Small Businesses).

This market research will assist the NWS in defining its acquisition strategy for the wholesale modernization, technology refresh, and operational support of the **Cooperative Observer Program (COOP)**. The NWS is evaluating the feasibility, cost-effectiveness, and data continuity risks associated with blending three distinct management paradigms across approximately 6,700 highly distributed surface observation sites:

1. **Government-Owned, Government-Operated (GO-GO) [Current State]:** Hardware is federally procured and maintained directly by NWS personnel.
2. **Government-Owned, Contractor-Operated (GO-CO):** Standard hardware is federally procured, but field installation, preventive maintenance, and emergency restorative services are outsourced to a commercial provider.
3. **Contractor-Owned, Contractor-Operated (CO-CO) / "Data-as-a-Service" (DaaS):** The NWS does not own hardware or manage field logistics; instead, it subscribes to quality-controlled, climatological-grade data streams from commercial or state-level mesonet operators.

This is a Sources Sought Notice only. This is not a request for proposals, bids, or quotes. No contract will be awarded directly from this notice, and the Government will not pay for any information submitted in response.

II. Program Background & Technical Context

The NWS COOP network is the nation's premier climate and weather monitoring network of record,

operating since 1890. The network relies on roughly 6,700 volunteer observers located in urban, suburban, agricultural, and ultra-remote wilderness regions throughout all 50 states, Puerto Rico, the U.S. Virgin Islands, and Pacific territories.

To support NWS's dual operational mission of real-time weather forecasting and long-term climatological record-keeping, any proposed solution must consistently deliver high-quality surface meteorological parameters under extreme environmental conditions. The NWS is exploring modernizing these legacy sites with automated, low-power, commercially available All-in-One (AIO) weather stations and optional automated snow measurement sensors.

III. Information Requested from Industry

The Government requests that interested parties submit a capability package responding to the following specific focus areas. Responses will directly influence the acquisition structure, performance-based specifications, and small business set-aside determinations.

Part A: Company Profile & Socio-Economic Standing

1. **Corporate Identity:** Company Name, Address, Website, Unique Entity ID (UEI) via SAM.gov, and CAGE Code.
2. **Contact Information:** Primary Point of Contact (Name, Title, Phone, and Email).
3. **Socio-Economic Categories:** Identify your business size standard under the primary NAICS code (334519 - Size Standard: 600 employees) or secondary NAICS code (541990 - Size Standard: $19.5M). Indicate if your firm holds any of the following active designations:
   - Small Business (SB)
   - Small Disadvantaged Business (SDB) / 8(a) participant
   - Service-Disabled Veteran-Owned Small Business (SDVOSB)
   - Women-Owned Small Business (WOSB)
   - HUBZone Small Business
4. **Contract Vehicles:** List any existing Federal GSA Schedules, GWACs, IDIQs, or cooperative purchasing vehicles on which your solutions are currently available.

Part B: Technical Capability Questionnaire (10 Targeted Questions)

Focus Area 1: Hardware Solutions (AIO Stations & Snow Sensors)

Question 1: Technical Specifications & NWS/WMO Standard Compliance

> Describe your commercially available all-in-one (AIO) weather station units and optional add-on snow depth/snowfall sensors capable of meeting NWS operational requirements.

- What meteorological parameters do your units measure directly (e.g., temperature, relative humidity, barometric pressure, wind speed/direction, liquid precipitation)?
- Detail the communication options (e.g., cellular, satellite, GOES, or local radio), reporting frequency capabilities, metadata options, and power configurations (e.g., solar, AC, battery backup).
- Provide empirical data or independent test results demonstrating how your equipment complies with World Meteorological Organization (WMO) and NWS standards for observational accuracy,

calibration stability, data resolution, and siting.

Question 2: Lifecycle, Reliability, & Supply Chain Scalability

Provide empirical data regarding the average/actual versus guaranteed design life expectancy of your AIO stations and snow sensors under varied environmental conditions.

- Provide recommended vs. actual historical maintenance frequencies for your hardware.
- Based on a modernization deployment scaling from 100 to 3,000 units, describe your firm's manufacturing capacity, supply chain lead times, and recommended strategy/scenarios for periodic hardware recapitalization (e.g., complete replacement vs. modular component swaps).

Question 3: Unit Pricing, Tiered Discounts, & Siting Limitations

Provide standard commercial pricing for your proposed weather stations and optional snow sensors.

- Provide rough-order-of-magnitude (ROM) tiered volume discounts for hardware procurements across the following scales:
  - **Tier 1:** 100 to 500 units
  - **Tier 2:** 501 to 1,500 units
  - **Tier 3:** 1,501 to 3,000 units
- Detail any known geographic, micro-climatological, logistical, or environmental siting limitations (e.g., extreme arctic temperatures below -40 degrees C, high-salinity coastal areas, high-vibration/wind zones) that would degrade sensor performance or alter maintenance profiles.

Focus Area 2: Installation and Operations & Maintenance (O&M) (GO-CO Paradigm)

Question 4: Turnkey Field Service Capabilities & Geographic Scalability

Describe your firm's capability to provide turnkey field services, including initial site installation (inclusive of travel), routine preventive maintenance, as-needed diagnostic and emergency repair services, and communication services.

- Address your field service delivery model (e.g., in-house field engineers, regional service hubs, or established subcontracting/teaming arrangements) to support up to 3,000 highly distributed sites across the entire United States, including remote, offshore, or wilderness areas.
- Detail any geographic or logistical limitations your firm faces in meeting nationwide service Level Agreements (SLAs).

Question 5: Service Costing, Performance, & Risk Profile

Assuming preventive maintenance is conducted at your hardware's empirically driven optimal intervals, provide a ROM annual pricing structure or volume discount model for comprehensive O&M services across the 100 to 3,000-unit tiers.

- Explain how your service solution guarantees continuous data collection and dissemination to meet NWS requirements (including edge-based or cloud-based computation of daily averages) while maintaining federal open-access data standards.
- What are the primary technical, operational, and financial risks and opportunities your firm foresees in managing a nationwide O&M field contract at this scale?

Focus Area 3: "Data-as-a-Service" (DaaS) Solutions (CO-CO Paradigm)

Question 6: Mesonet Infrastructure, Parameters, & Open-Data Standards

> If your firm operates, partners with, or aggregates data from commercial or state-level mesonets, describe your capability to deliver subscription-based surface meteorological data streams to the NWS.

- Detail the technical features of your underlying network, including sensors utilized, parameters captured, reporting intervals, and metadata availability.
- Confirm your firm's capability and framework to ensure that all data provided to the NWS under a DaaS contract remains fully open, non-proprietary, and publicly accessible per NWS/WMO open-access data requirements.

Question 7: DaaS Pricing Matrices & Climatological Quality Processing

> Outline your commercial pricing and licensing schemes for DaaS delivery.

- Detail pricing structures based on combinations of site volumes and reporting frequencies (e.g., 15-minute observations for X number of stations versus hourly observations for Y number of stations).
- Explain your firm's capability and pricing structures to apply advanced processing and quality-control techniques to derive verified, archival-quality climatological datasets (e.g., verified daily minimum/maximum temperatures, daily total precipitation accumulation) from near-real-time observations rather than raw, unvetted data streams.

Focus Area 4: Contract Structuring, Risk, & Acquisition Planning

Question 8: Budget Management & Performance-Based Contract Structuring

> Assuming NWS operates under a fixed, multi-year procurement budget for hardware and a fixed annual operating budget for O&M/DaaS, how do you recommend the government structure the contract line items (CLINs) and performance metrics?

- What recommendations do you have for balancing cash flow with government accountability across cost, schedule, and data availability performance?
- Recommend optimal contract types (e.g., Firm-Fixed-Price (FFP) with Performance-Based incentives vs. Fixed-Price Incentive Firm Target (FPIF)) based on the three management paradigms.

Question 9: Transition Risk Mitigation & GFI Requirements

> What specific technical baseline data, legacy station metadata, or Government-Furnished Information (GFI) must the NWS provide within a formal Request for Proposal to enable your firm to submit a low-risk, competitively priced proposal?

- What specific transition-period strategies do you recommend the NWS implement to minimize data gaps and guarantee sustained data continuity while migrating legacy manual sites to your proposed automated paradigm?

Question 10: Scale Experience & Technical Evaluation Criteria

> Provide a brief summary of past performance or relevant case studies where your firm (or team) successfully deployed, maintained, or delivered DaaS streams for a surface

observation network at a regional or national scale.

- What specific technical evaluation factors or source selection approaches should the government utilize to effectively distinguish qualified small businesses while ensuring a fair, competitive playing field?

Part C: FAR Part 10 Market Research Questions

In accordance with FAR Part 10 requirements for identifying commerciality and customary practices, please respond to the following:

Commerciality and Customary Customization

- Are the proposed AIO hardware units, field installation/O&M services, or DaaS feeds of a type customarily available in the commercial marketplace to the general public or non-governmental entities?
- What customary modifications or tailoring do you routinely perform for commercial customers, and how do those modifications typically impact standard pricing or delivery timelines?
- What are your customary commercial terms regarding equipment warranties (e.g., standard duration, repair turnaround times, replacement terms), buyer financing, and volume discounts?

IV. Submission Instructions

Firms possessing the requisite capabilities, commercial products, or services are invited to submit a response.

- **Submission Format:** Searchable PDF or Microsoft Word format.
- **Page Limit:** Responses should be concise and limited to the minimum information necessary. Capability statements should not exceed **twenty-five pages** (excluding technical product datasheets/spec sheets).
- **Delivery Method:** Submit via email to the Contracting Officer at **Jennifer.Roesner@noaa.gov** and Contract Specialist Melissa Ross at **Melissa.Ross@noaa.gov** with the subject line: "**Sources Sought Response: NWS COOP Modernization - [Your Company Name]**"
- **Proprietary Marking:** If your response contains proprietary, confidential, or sensitive business information, please ensure it is clearly marked on a page-by-page basis. The Government will handle and safeguard marked information in accordance with applicable federal regulations.

V. Disclaimer and Important Notes

This Sources Sought Notice is issued solely for informational and market research planning purposes. It does not constitute a solicitation, a promise to issue a solicitation, or a commitment by the Government to procure any supplies or services now or in the future.

The Government is under no obligation to award a contract based on this market research. All costs associated with responding to this notice will be borne solely by the responding party; the Government will not provide reimbursement for any costs or administrative expenses incurred in the preparation of responses.