

**JUSTIFICATION FOR SOLE SOURCE  
(Simplified Procedures - MPT to ≤ SAT)**

**Purchase Request/Document number:** [REDACTED]

The supplies or services described herein are being solicited on a sole source basis and competition is precluded in accordance with FAR 12.102(a) for reasons indicated below. There are no substitutes available for the supplies or services.

**Restricted to the following source. (Check One)**

☒ **Service:**

<b>Contractor:</b>	Massachusetts Institute of Technology MIT MIT Haystack Observatory 99 Millstone Road Westford, MA 01886
<b>Cage Code:</b>	80230

☐ **Supply:**

<b>Original Manufacturer Name:</b>	
<input type="checkbox"/> Check here if obtaining product through authorized resellers of the manufacturer.	

**Description of the supplies or services required, the estimated price/cost, and required delivery date or period of performance.**

The United States Naval Observatory requires the Massachusetts Institute of Technology (MIT) Haystack support for a one-year period for the transportation of observational data from potentially compromised sources to support EOP determination at USNO. Additionally, MIT Haystack will provide consultation for special processing due to complex geodetic experiments, provide assistance with electronic-VLBI connections at the USNO and Kokee Park Geophysical Observatory shall make modifications to the 20m Antenna Backend (located at Kokee Park, HI) in order to make the antenna VGOS compliant up to 14 GHz.

In conclusion, the requested supplies or services represent the minimum requirements of the government.

[REDACTED]

Required Period of Performance (PoP): 1 July 2026 – 30 June 2027

**Describe in detail why only this source(s) can furnish the requirements to the exclusion of other sources.**

MIT Haystack is a unique institution in that the standard format that all present and future IVS data uses was developed and maintained at MIT Haystack. They are uniquely placed with the expertise and infrastructure to quarantine and validate data coming from potentially compromised sources before making it available to the USNO via the NASA network to the DiFX correlator at USNO. This is a follow on for services currently being performed under [REDACTED]

☐ The supplies or services must be compatible in all aspects (form, fit and function) with existing systems presently installed/performing. Describe the equipment/function you have now and how the new item/service must coordinate, connect, or interface with the existing system.

Through international agreements with the International VLBI Service (IVS) The NEOS correlator at USNO agrees to correlate IVS sessions that contain international baselines coming from Russia and China. By buffering, inspecting and validating such data at MIT before making it available to the DiFX correlator, the vulnerability of accepting such data is mitigated, which will reduce the risk of reliance on EOP foreign data sources and has important ramifications for DoD Continuity of Operations Plan.

☒ These are "direct replacement" parts/components for existing equipment.

U.S. Naval Observatory staff are extremely familiar with the Correlator software and support market. Due to extremely small demand, there are no commercial Correlator vendors. Most of the correlator software and much of the associated hardware is one-of-kind custom components and the small VLBI Correlator community is self-contained. The proposed contractor designed and wrote most of the Correlator software adopted by the IVS in existence. There is no alternate supplier.

**Other information to support a sole source action:**

It is found that no other institution, Government or private, is capable of providing the data validation in the time required, and with the least amount of unnecessary risk, therefore USNO must continue work with MIT Haystack to obtain secure transfer services. MIT is the only source capable of supplying the required services.

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**TECHNICAL/REQUIREMENTS CERTIFICATION:**

I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS COMPLETE AND ACCURATE TO THE BEST OF MY KNOWLEDGE. I UNDERSTAND THAT THE PROCESSING OF THIS SOLE SOURCE JUSTIFICATION PRECLUDES THE USE OF FULL AND OPEN COMPETITION.



Signature



Date



Requiring Activity

I HEREBY DETERMINE THAT THE CIRCUMSTANCES  
JUSTIFYING ONLY ONE SOURCE IS REASONABLY

AVAILABLE APPLIES TO THE CONTRACT ACTION.

[Redacted Signature] [Redacted Date]

Contracting Officer Signature

Date

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NAVSUP Fleet Logistics Center, Norfolk Contracting  
Department