FORM CD-492
(REV. 02-21) OAM

U.S. DEPARTMENT OF COMMERCE

JUSTIFICATION FOR OTHER THAN FULL AND OPEN COMPETITION

I recommend that the Department of Commerce negotiate only with HUBER+SUHNER Inc.

(Proposed Contractor(s))

for Polatis Optical Switches

(Description of Supplies or Services)

Requisition No. NB771030-26-01640 **Cost Estimate $** $84,000.00

(Include basic contract period and all options or total systems life costs)

Requesting Activity 771 **Contracting Activity** OAAM AMD

CERTIFICATION REQUIREMENTS

I certify that the attached narrative justification is accurate and contains complete data necessary to support the recommendation for other than full and open competition.
The requisitioner further certifies that the attached narrative justification verifies the Government's minimum needs or schedule requirements and any rationale used to justify other than full and open competition procedures.

Requisitioner (Name and Title)	Signature	Phone No.	Date
Thomas Gerrits	Thomas Gerrits	(301)975-6712	2026-04-24 15:17:27

Before requesting this acquisition, state the statutory authority for conducting this acquisition under "other than full and open competition" procedures in the following blank **41 USC 3304(a)(1) Only one responsible** (use only one statutory authority). Also provide a narrative justification to this form. In accordance with FAR Subpart 6.3, the narrative justification must include the facts necessary to reasonably and legitimately lead to the use of the specific authority for other than full and open competition; including adequate information on the nature and/or description of the action being approved and a description of the supplies or services required to meet the agency's needs.

Use of this form is optional when: the justification contains all information required by FAR 6.303-2, is certified by the requisitioner and contracting officer and is approved at the appropriate levels.

STATUTORY AUTHORITY

41 USC 3304(a)(1) - Only one responsible source and no other supplies or services will satisfy agency requirements.

The supplies or services required by the agency are available from only one responsible source and no other type of supplies or services will satisfy agency requirements.

41 USC 3304(a)(2) - Unusual & compelling urgency

The agency's need for the supplies or services is of such an unusual and compelling urgency that the government would be seriously injured unless the agency is permitted to limit the number of sources from which it solicits bids or proposals. (NOTE: This authority will not be approved if it is determined that the urgency is due to a lack of advance planning by the requiring activity. Solicitation from as many potential sources as is practicable under the circumstances is required.)

41 USC 3304(a)(3) - Industrial mobilization; engineering, developmental, or research capability; or expert services

It is necessary to award the contract to a particular source or sources in order (a) to maintain a facility, producer, manufacturer, or other supplier available for furnishing supplies or services in case of a national emergency or to achieve industrial mobilization; (b) to establish or maintain an essential engineering, research, or development capability to be provided by an educational or other nonprofit institution or a federally funded research and development center; or (c) to acquire the services of an expert or neutral person for any current or anticipated litigation or dispute.

41 USC 3304(a)(4) - International agreement

The terms of an international agreement or a treaty between the United States and a foreign government or international organization, or the written directions of a foreign government reimbursing the agency for the cost of the acquisition of the supplies or services for such government, have the effect of requiring the use of procedures other then competitive procedures.

41 USC 3304(a)(5) - Authorized or required by statute

A statute expressly authorizes or requires that the acquisition be made through another agency or from a specified source, or the agency's need is for a brand-name commercial item for authorized resale.

41 USC 3304(a)(6) - National security

The disclosure of the agency's needs would compromise the national security unless the agency is permitted to limit the number of sources from which it solicits bids or proposals.

41 USC 3304(a)(7) - Public interest

The agency head (Secretary of Commerce) determines that it is not in the public interest to use full and open competition in the particular acquisition concerned, and notifies Congress in writing of such determination not less than 30 days before award of the contract.

APPROVAL REQUIREMENTS

Contracting Officer (CO)	Signature	Phone No.	Date
Robert Cowins	Robert Cowins	(301) 975-8335	06/15/2026

Operating Unit (OU) Competition Advocate - Not exceeding $750,000:

OU Competition Advocate (Name and Title)	Signature	Phone No.	Date

Department of Commerce (DOC) Competition Advocate - Over $750,000 but not exceeding $75 million:

DOC Competition Advocate (Name and Title)	Signature	Phone No.	Date

Senior Procurement Executive (SPE) - Over $75 million:

SPE (Name and Title)	Signature	Phone No.	Date

NOTE: Use the total cost estimate specified on the front of this document in determining the necessary approvals. Each review must be preceded by lower level approval(s), e.g., over $75 million all approvals are required.

The Government is developing a quantum networking infrastructure that requires all-optical switching capabilities. Unlike conventional network switches, the required switches must route photons without converting optical signals into electronic signals, as such conversions are incompatible with the transmission requirements of quantum networks.

The Polatis optical switches utilize MEMS-based technology and provide the low insertion loss, compact form factor, and switching performance necessary to support the transmission of single photons across long-distance quantum networks. These characteristics are essential to maintaining signal integrity and achieving the technical objectives of the project.

In addition to meeting the technical performance requirements, the requested Polatis switches must be fully compatible with the Government's existing quantum networking infrastructure. The Government has previously acquired and deployed Polatis switches and has developed a custom Software Defined Network (SDN) control plane specifically designed to operate these switch models. The requested switches will be integrated into the same operational environment and controlled through the existing SDN architecture.

Substituting another manufacturer's product would require substantial modification or redevelopment of the Government's custom control software and could introduce significant technical, schedule, and performance risks. Furthermore, the Government's market research identified only a limited number of potential alternative manufacturers. One identified manufacturer, Calient, produces switches with a larger form factor and higher port-to-port insertion loss, which does not satisfy the Government's performance requirements. Another identified source, Molex (through acquired Glimmerglass technology), could not be confirmed as a viable supplier during market research.

Based on the Government's technical requirements, existing infrastructure dependencies, and market research findings, the Polatis switches are the only known products capable of meeting the Government's minimum needs without unacceptable technical risk, performance degradation, or substantial duplication of cost.