DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING SYSTEMS COMMAND, MID-ATLANTIC 9324 VIRGINIA AVENUE NORFOLK, VIRGINIA 23511-3095

Class J&A No. ML-22-05

FACILITIES RELATED CONTROLS SYSTEMS CLASS JUSTIFICATION AND APPROVAL FOR USE OF OTHER THAN FULL AND OPEN COMPETITION

1. Contracting Activity.

Naval Facilities Engineering Systems Command (NAVFACSYSCOM), Mid-Atlantic

2. Description of the Action Being Approved.

This Class Justification and Approval (CJ&A) authorizes and approves limiting sources of brand name commercial Facility Related Control Systems (FRCS) programmable building controllers to Automated Logic Corporation (ALC) WebCTRL product line and Johnson Controls International (JCI) Metasys system family products in contract actions requiring interface with networked facilities control and monitoring system at Naval Station Norfolk (referred to in this document as "the Installation"). Authority to act under this class justification is authorized from 10January 2022 to 9 J anuary 2025.

3. Description of Supplies/Services.

The use of the indicated brand name programmable building controllers in Section 2 will be required for all projects providing programmable building controllers that will be connected to the identified (existing or currently under development) installation networked FRCS commonly referred to as the ALC WebCTRL Building Automation System (BAS) Network (ALC BAN) and the JCI Metasys BAS Network (JCI BAN).

The ALC controllers and system equipment (hardware) will be configured and programmed using government-licensed ALC WebCTRL software. ALC hardware includes, but is not limited to, BACnet Routers and Gateways, Multi-Purpose Controllers, Multi-Equipment Controllers and expanders, Single Equipment Controllers, Zone Controllers and Sensors.

The JCI controllers and equipment (hardware) will be configured and programmed using government-licensed JCI Metasys software. JCI hardware includes, but is not limited to, Advanced Field Equipment Controllers (FACs), Input/ Output Modules (IOMs), LN Series Controllers, Field Equipment Controllers (FEC), Network Automation Engines (NAE), Network Control Engines (NCE), Network Integration Engines, TEC Thermostat Controllers, Variable Air Volume Modular Assemblies (VMAs), sensors and controlled devices.

The requirement to use ALC Automated Logic WebCTRL or JCI Metasys system family software to program ALC Automated Logic WebCTRL product line or JCI Metasys system family brand name commercial equipment does not restrict who can install, commission, test,

maintain, or operate the controllers and there are several known sources who can provide such services.

The total estimated value for the use of ALC Automated Logic WebCTRL product line or JCI Metasys family brand name equipment through 16 November 2024 is $[redacted]. The cost of programmable building controllers typically represents approximately [redacted] percent of the cost of the total controls installation effort, and is a miniscule percentage of the total cost of any building construction effort. A non-exhaustive listing of the projected projects that will utilize this equipment is provided in Appendix A. All required programmable building controllers are authorized under this CJ&A regardless of method of execution or procurement strategy (i.e., contracted, in-house shop forces, base operating support contracts, or materials supply chain contractor).

Estimated Dollar Value of Brand Name Equipment ($K)

	FY22 – FY24
MILCON	$[redacted]
Special Projects	$[redacted]
TOTAL	**$**[redacted]

4. Statutory Authority Permitting Other Than Full and Open Competition.

The statutory authority permitting other than full and open competition is Title 10, U.S.C. 2304(c)(1), as implemented by the Federal Acquisition Regulation (FAR) 6.302-1, "Only one responsible source and no other supplies or services will satisfy agency requirements."

5. Rationale Justifying Use of Cited Statutory Authority.

The Installation has a reasonable need for standardization and interoperability of its existing building control systems that will require a connection to the identified installation networked facilities control and monitoring systems commonly referred to as the ALC WebCTRL and JCI Metasys BAS Networks. Applicable United States Government Accountability Office (GAO) Comptroller General decisions have acknowledged the authority of a federal agency to use other than competitive procedures when there is a reasonable need for standardization or interoperability with existing agency equipment or software and when it is likely that award to other sources would result in substantial duplication of cost to the government that is not expected to be recovered through competition.

To assess the need for standardization and interoperability, a rigorous business case analysis was performed on the existing inventory of building control systems connected to the ALC WebCTRL and JCI Metasys BAS Networks. This business case analysis evaluated the standardization of building programmable controllers and quantified the annual costs associated with procurement, sustainment of operation and maintenance, and establishment and sustainment of Department of the Navy cybersecurity requirements. The results of this business case analysis demonstrate that in order to minimize costs and potential cyber vulnerabilities, the use of the

indicated brand name programmable building controllers will be required for all projects that require a connection to the ALC WebCTRL and JCI Metasys BAS Networks.

The Installation requires that programmable building controllers be ALC Automated Logic WebCTRL or JCI Metasys system family brand name in order to meet its need for, and achieve the benefits of, standardization and interoperability as follows:

a. Establish and maintain a defensible cybersecurity posture. The rapid emergence of cyber incidents on critical Industrial Control Systems (ICS), which include FRCS, with the potential to debilitate our installation mission critical assets has catalyzed the need to establish a defensive cybersecurity posture across the shore enterprise. An RMF ATO is required per DoD Instruction 8510.01. The Installation's ATO status is:

The ALC WebCTRL and JCI Metasys BAS Networks have achieved ATO.

The indicated manufacturer's programmable controllers and their associated application software are authorized per the ATO and provide for the following:

(1) Cost-effectively reduce government information technology cybersecurity risks. Avoid the significant costs and delays associated with obtaining a new ATO for the ALC WebCTRL and JCI Metasys BAS Networks which, due to government information technology cybersecurity risks, is required when additional nonconforming hardware or software is added to the system with resultant changes in the security posture of the system. The process of obtaining a new ATO would unacceptably delay the operational use of programmable controllers for the affected facility and connection of the facility to the ALC WebCTRL and JCI Metasys BAS Networks, resulting in a significant degradation in accomplishment of mission. Similarly, if additional non-conforming equipment and software were added to the ALC WebCTRL and JCI Metasys BAS Networks, the associated cybersecurity costs to sustain the inventory of equipment and software and to maintain the ATO would significantly increase. Additionally, minimizing the different types of equipment and software permitted on the ALC WebCTRL and JCI Metasys BAS Networks avoids incurring additional risks to system operational availability should the NAVFACSYSCOM Functional Authorizing Official (FAO) determine that the additional equipment or software has security vulnerabilities precluding obtaining or maintaining an ATO.

(2) Control Systems (such as networked FRCSs) are classified as Platform Information Technology (PIT) systems. DoD Instruction 8500.01 requires that all PIT systems have their cybersecurity controls documented and validated prior to operation and/or deployment. All PIT systems on Navy networks must obtain an ATO from the FAO. Additionally, connection or integration into the CSPE and subsequently Smart Grid requires that the FRCS obtain an ATO from the NAVFACSYSCOM FAO.

ATOs remain valid for three years as long as the cybersecurity posture of the system does not change. A cybersecurity posture change includes, but is not limited to, system architecture changes or any other changes that increase risk or degrade the security posture. Any

cybersecurity posture change must be provided to the FAO that approved/authorized the ATO for impact review on that risk approval. When a cybersecurity posture changes, the PIT system normally will be required to complete the authorization process again to obtain a new ATO for the new configuration. The use of different brand programmable controllers or associated configuration or programming software on the ALC WebCTRL and JCI Metasys BAS Networks results in an undesirable, higher number of changes to the cybersecurity posture of the system. Obtaining an ATO is not the end of the process; maintaining an ATO is also very resource intensive and the effort increases exponentially when additional hardware or software is added to the system (that is, requires maintaining cybersecurity controls, vulnerability management, system scans/tests, and similar).

b. Maximize utilization of existing government-licensed ALC WebCTRL and JCI Metasys software to configure and program the controllers. Other contractors do not offer programmable controllers that can be configured/programmed with the ALC WebCTRL and JCI Metasys software. Although the BACnet open protocol is the required communications protocol for all manufacturers' controllers, it only allows for different manufacturers' equipment to share basic point data. It does not allow for configuration and programming functions to take place between different manufacturers' controllers. For example, manufacturer A's software cannot be used to program manufacturer B's controller. Each manufacturer's proprietary software tools must be used to configure or change the program within a controller.

c. Maintain installation networked facilities control and monitoring system so that all controllers can be programmed from a single central station versus a hybrid system composed of many different controllers and associated configuration/programming software, This will further improve operational efficiency and decrease installation, maintenance, repair, and energy costs. Utilizing hardware products from the same vendor that produced the configuration/programming software eliminates multi-vendor disputes regarding conflicts, standards, protocols, or performance characteristics should the controller not function as required.

d. Avoid the significant operational burden and cost of having maintenance and engineering staff become proficient with the configuration, programming, commissioning, operation, and maintenance of controllers from different manufacturers. Standardization reduces personnel training costs and decreases procurement costs related to additional equipment, maintenance, and support contracts for another manufacturer's hardware and software, as well as the maintenance of an additional parts inventory. Maintaining multiple solutions is inefficient and creates unnecessary work and overhead that increases the total costs of ownership and manpower costs.

NAVFACSYSCOM Mid-Atlantic and NAVSTA Norfolk technical personnel who performed this business case analysis have determined that for the Installation, the contract actions authorized by this CJ&A will avoid substantial duplication of cost that is not expected to be recovered through competition. Specifically, the business case analysis performed by NAVFACSYSCOM Mid-Atlantic and NAVSTA Norfolk concluded that the Navy would realize annual savings of approximately $[redacted] by limiting FRSC controllers to the referenced products. Assuming other brand name controllers could be integrated into the ALC WebCTRL and JCI Metasys BAS Networks so as to be fully functional, the significant cyber security risks,

operational challenges, added costs (including the costs to re-procure the Installation's existing inventory), and other disadvantages arising from the use of different brands of controllers outlined above are not expected to be recovered through competition.

6. Description of Efforts Made to Solicit Offers from as Many Offerors as Practicable.

Per FAR 5.201, a Sources Sought announcement was synopsized on the sam.gov website to determine if there are other controllers capable of fully functional interface with the existing ALC WebCTRL and JCI Metasys Government licensed software. The Sources Sought Notice closed on 26 November 2021. There were no responses received from the market. By receiving no responses from competing vendors, it indicates that there may not be any substitute or equivalent products that would fulfill the requirement.

7. Determination of Fair and Reasonable Cost.

The Contracting Officer has determined the anticipated cost to the Government of the supplies/services covered by this CJ&A will be fair and reasonable. The cost associated with a complete replacement is not practicable or cost effective.

8. Actions to Remove Barriers to Future Competition.

For the reasons set forth in Paragraph 5, NAVFACSYSCOM Mid-Atlantic does not intend to compete future contracts for the types of supplies/services covered by this document. NAVFACSYSCOM Mid-Atlantic will continue to monitor the controls industry to determine if a universal controller configuration becomes available and if another potential source emerges, NAVFACSYSCOM Mid-Atlantic will continually assess whether competition for future requirements is feasible.

CERTIFICATIONS AND APPROVAL

TECHNICAL/REQUIREMENTS CERTIFICATION

I certify that the facts and representations under my cognizance, which are included in this justification and its supporting acquisition planning documents, except as noted herein, are complete and accurate to the best of my knowledge and belief.

[redacted]

NAVFACSYSCOM Mid-Atlantic

LEGAL SUFFICIENCY REVIEW

I have determined this justification is legally sufficient.

[redacted]

NAVFACSYSCOM Mid-Atlantic

CONTRACTING OFFICER CERTIFICATION

I certify that this justification is accurate and complete to the best of my knowledge and belief.

[redacted]

NAVFACSYSCOM Mid-Atlantic

CHIEF OF THE CONTRACTING OFFICE CERTIFICATION

I certify that this justification is accurate and complete to the best of my knowledge and belief.

[redacted]

Date

NAVFACSYSCOM Mid-Atlantic

APPROVING OFFICIAL (NPGI 6.304)

Upon the basis of the above justification, I hereby approve the class justification for proposed contract actions described herein using other than full and open competition, pursuant to the authority of 10 U.S.C. 2304 (c)(1).

[redacted]

NAVFACSYSCOM Mid-Atlantic

Appendix A

List of projects using Automated Logic WebCTRL or Johnson Controls Metasys family controls. .

PROJECT NO.	DESCRIPTION	PROGRAM YEAR	FUNDING TYPE	CWE COST (000)	MILCON (Y/N)	Cost of Controllers
1692162	NSN CEP-201 BUILDING RENOVATIONS	2022	O&M,N	$[redacted]	N	$[redacted]
1673779	NSN V-61 HVAC System Replacement	2022	O&M,N	$[redacted]	N	$[redacted]
1665967	NSN U-93 Replace 6 Rooftop AHUs & Chiller	2022	O&M,N	$[redacted]	N	$[redacted]
1637041	NSN CEP 200 & CEP209 - OFFICE RENOVATIONS	2022	O&M,N	$[redacted]	N	$[redacted]
1609906	NSN W-143, Multi-Purpose Room/Auditorium & Three Training Rooms, 2nd Floor	2022	O&M,N	$[redacted]	N	$[redacted]
P1127U	CMV 22B COMPOSITE SHOP	2022	MILCON	$[redacted]	Y	$[redacted]
P702	SUBMARINE LOGISTICS SUPPORT FACILITIES	2023	MILCON	$[redacted]	Y	$[redacted]
1689108	NSN LP-21, LP-33 & LP-34 SECURE ANNEX RENOVATIONS	2023	O&M,N	$[redacted]	N	$[redacted]
1692943	NSN U-40 SAR POOL RENOVATIONS	2022	O&M,N	$[redacted]	N	$[redacted]
N753417	CONSTRUCT NEX FOOD SERVICES FACILITY	2022	MILCON	$[redacted]	Y	$[redacted]
P1137U	CMV 22B O2N2 SHOP	2022	MILCON	$[redacted]	Y	$[redacted]