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

Class J&A No. ML-25-03

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, Mid-Atlantic (NAVFAC MIDLANT)

2. Description of the Action Being Approved.

This Class Justification and Approval (CJ&A) authorizes and approves the use of brand name commercial equipment from Johnson Controls International (JCI) Metasys product line for Facility Related Control Systems (FRCS) building heating, ventilating, and air conditioning (HVAC) system Direct Digital Controllers (DDC) in contract actions requiring interface with the identified Installation networked facilities control and monitoring system at MCAS Cherry Point, NC (referred to in this document as "the Installation").

Authority to act under this class justification is authorized from 15 May 2025 to 14 May 2030.

3. Description of Supplies/Services.

The use of JCI Metasys product line for building DDC will be required for all projects that require a connection to the identified (existing or currently under development) installation networked facilities control and monitoring system commonly referred to as the Cherry Point Facility Related Control Systems (CPFRCS). The JCI Metasys DDC will be configured and programmed using government-licensed JCI Metasys software, including, but not limited to, JCI Metasys Controller Configuration Tool and System Configuration Tool, the Metasys Media Redundancy Protocol (MRP) network switch, and the Fiber SFP Transceiver. All systems' controllers will connect to the CPFRCS DDC are categorized as FRCS. All new construction and renovation projects require connection to the CPFRCS, including, but not limited to, Network Control Modules, Network Appliance Engines, Extended Digital Controllers, Variable Air Volume Modular Controllers, Unitary Controllers, and Field Equipment Controllers. The requirement to use JCI Metasys software to program JCI name brand commercial equipment in the Metasys product line 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 JCI brand name Metasys product line equipment through 29 April 2030 is $[redacted]. The cost of programmable building controllers typically represents approximately [redacted] percent of the cost of the total control's installation effort and is a miniscule percentage of the total cost of any building construction effort. 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).

A non-exhaustive listing of the projected projects that will utilize this equipment is provided in Appendix A.

Estimated Dollar Value of Brand Name Equipment ($)

	FY25 – FY30
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. 3204(a)(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.

MCAS Cherry Point, NC has a reasonable need for standardization and interoperability of its existing utility management and control that will require a connection to the identified installation networked facilities control and monitoring system commonly referred to as CPFRCS system. 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 equipment or software, and when it is likely that award to other sources would result in, among other things, substantial duplication of cost to the government that is not expected to be recovered through competition.

To assess the need for standardization and interoperability, MCAS Cherry Point, NC performed a rigorous business case analysis on the existing inventory of building automation system (BAS) connected and not connected to the CPFRCS. This business case analysis evaluated the standardization of DDC and quantified the annual cost associated with procurement, sustainment of operations 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 JCI brand name Metasys product line equipment and applications will be required for all projects that require a connection to the CPFRCS.

Additionally, in support of the Marine Corps Energy Resiliency program, all new BAS systems, unless identified by exception, shall be required to connect to the CPFRCS. The CPFRCS in turn is integrated into the Marine Corps Installation Command (MCICOM) FRCS enclave which provides additional cybersecurity services to the FRCS and hosts the authentication and auditing functions.

MCAS Cherry Point requires that programmable controllers connected to CPFRCS be JCI name brand Metasys product line 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 MCICOM enterprise. MCAS Cherry Point, NC is currently pursuing a Risk Management Framework (RMF) Authority to Operate (ATO) per Department of Defense Instruction 8510.01. JCI programmable controllers and their associated application software will be authorized per the ATO and provide for the following:

   (1) Cost-effectively reduce government information technology cybersecurity risks. Avoid the significant cost and delays associated with obtaining a new Assessment and Accreditation (A&A) package for the CPFRCS 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 separate A&A would unacceptably delay the operational use of the utility system for the affected facility and connection of the facility to CPFRCS, resulting in a significant degradation in accomplishment of mission. Annual cost for standardization on a single control interface costs $[redacted] compared to $[redacted] to $[redacted] depending on system configurations without standardization or using multiple manufacturers. Lack of standardization also costs approximately [redacted] manhours and an additional $[redacted] in modifications to existing work. These additional costs exclude the initial procurement cost of the controller of $[redacted]

   Similarly, if additional non-conforming equipment and software were added to the Energy Management Control System (EMCS) Network, the centralized climate control system, 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 EMCS Network avoids incurring additional risks to system operational availability should the NAVFAC 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 NAVFAC FAO.

ATOs remain valid for five 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 Navy Validation Group 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 EMCS Network 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. Be able to maximize utilization of existing government-licensed JCI Metasys product line to configure and program the controllers. Other contractors do not offer programmable controllers that can be configured/programmed with the specified manufacturer 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 central station versus a hybrid system composed of many different controllers and associated configuration/programming software. This will further operational efficiency and decrease installation, maintenance, repair, and energy costs. Using 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.

Through a business case analysis (BCA), NAVFAC MIDLANT and Facilities Engineering and Acquisition Directorate (FEAD) Cherry Point 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. Assuming other brand name controllers could be integrated into the installation's CPFRCS 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.

In accordance with FAR 5.201, a Sources Sought announcement was synopsized on the sam.gov website to determine if there are other controllers capable of full functional interface with the existing JCI Metasys product line Government licensed software. The Sources Sought Notice closed on date November 13, 2024. Three responses were received from [redacted] which are contractors, not manufacturers. [redacted] did propose an alternative system; however, based on the findings of the Business Case Analysis, NAVFAC MIDLANT and FEAD Cherry Point determined that procuring a single controller that fully integrates with the existing ATO is in the best interest of the government. The proposed alternative does not meet essential functional requirements, and integrating it into the current infrastructure would not provide the anticipated benefits in terms of cost, efficiency, or risk mitigation as discussed in Paragraph 5 above. Specifically, the proposed alternative cannot provide connectivity to existing installed systems. [redacted], who is the manufacture listed in this CJ&A, also responded. Since [redacted] alternative system was not feasible, and receiving no other responses from competing manufacturers, it indicates that there may not be any substitute or equivalent products that would fulfill this 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, MCAS Cherry Point does not intend to compete future contracts for the types of supplies/services covered by this document. MCAS Cherry Point will continue to monitor the controls industry to determine if a universal controller configuration becomes available, and if another potential source emerges, MCAS Cherry Point 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]

Date

[redacted]

NAVFAC MIDLANT

[redacted]

Date

[redacted]

NAVFAC MIDLANT

[redacted]

Date

[redacted]

NAVFAC MIDLANT

LEGAL SUFFICIENCY REVIEW

I have determined this justification is legally sufficient.

[redacted]

Date

[redacted]

NAVFAC MIDLANT

CONTRACTING OFFICER CERTIFICATION

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

[redacted]

Date

[redacted]

NAVFAC MIDLANT

ECHELON IV COMMANDING OFFICER APPROVAL

Upon the basis of the above justification, I hereby approve, as the Echelon IV Commanding Officer, the solicitations of the proposed procurement(s) described herein using other than full and open competition, pursuant to the authority of 10 U.S.C. 3204(a)(1).

[redacted]

[redacted]

Date

NAVFAC MIDLANT

Appendix A

The following is a list of projects using the Specified Manufacturer and Product Line network-capable programmable digital controllers and the estimated cost of the proprietary components of those controllers for the duration of this CJ&A.

PROJECT NO.	DESCRIPTION	PROGRAM YEAR	FUNDING TYPE	CWE COST (000)	Cost of Controllers (000)
1667764	F35 Flightline Modernization Phase 2	2022	MILCON	[redacted]	
1710805	CH-53K GEARBOX REPAIR AND TEST FACILITY	2023	MILCON		
1760529	P258 2D LAAD MAINTENANCE AND OPERATIONS FACILITIES	2024	MILCON		
1715336	RANGE OPERATIONS FACILITY	2024	MILCON		
1783997	P200 AIRCRAFT MAINTENANCE HANGAR	2025	MILCON		
1708958	F-35 AIRCRAFT SUSTAINMENT CENTER	2025	MILCON		
1764716	COMPOSITE REPAIR FACILITY	2025	MILCON		
1824965	ATLANTIC FIELD SECURITY	2025	MILCON		
TBD	REPAIRS TO ACTIVE CEHICLE BARRIERS	2027	MILCON		
TBD	REPAIRS TO ACTIVE VEHICLE BARRIERS	2027	MILCON		
TBD	ATLANTIC FIELD SECURITY	2027	MILCON		
TBD	F-35 SUSTAINMENT CENTER	2029	MILCON		
TBD	GENERAL PURPOSE WAREHOUSE	2029	MILCON		
TBD	GROUND SUPPORT EQUIPMENT FACILITY	2023	MILCON		
TBD	VARIOUS SPECIAL PROJECTS	2025-2030	OM,N		