

**Solicitation Number: 20-58111****Building Automation System (BAS) Controller Upgrade****1. Advance Contract Award Notice (ACAN):**

An ACAN is a public notice indicating to the supplier community that a department or agency intends to award a contract for goods, services or construction to a pre-identified supplier, thereby allowing other suppliers to signal their interest in bidding by submitting a statement of capabilities. If no supplier submits a statement of capabilities that meets the requirements set out in the ACAN on or before the closing date stated in the ACAN, the contracting officer may then proceed with the award to the pre-identified supplier.

**2. Definition of the requirement:**

The National Research Council of Canada (NRC) operates **76** buildings across 5 sites in the National Capital Region (NCR): Montreal Road Campus, Sussex, Uplands Campuses, Greenbank and Carleton Place. These buildings are primarily monitored and controlled under the Andover Continuum Building Automation System platform.

There are approximately 21,400 total control points in the NCR, of which 3,221 control points across 16 buildings have been previously upgraded to the Schneider EcoStruxure platform in conjunction with an additional 80 points of the 301 utility sub-metering points now managed under the EcoStruxure Power Monitoring Expert platform.

The Andover Continuum Platform has reached the end of its life. To ensure ongoing system compatibility and interoperability with the existing NRC infrastructure while removing potential disruptions in service, NRC wishes to issue a contract to upgrade all control points within the Continuum Platform to a consolidated system under the Schneider EcoStruxure platform.

**3. Criteria for assessment of the statement of capabilities (minimum essential requirements):**

Any interested supplier must demonstrate by way of a statement of capabilities that they are capable to provide, install and support the following project minimum requirements:

- Replacement of the Andover Netcontroller servers with Schneider AS-P Automation servers
- Replacement of Netcontroller IOU modules with Schneider AS-P IOU modules
- Replacement of Andover TCX and SCX controllers
- Pre-planning checklist/sign-off procedure
  - Site Survey, network architecture review, communication port review, review network segments, review network speeds
  - Critical system/non-critical system classification
  - Firmware upgrades
  - Demand response and metering transition

- IOU module / Controller replacement review
- Standardization requirements / implementation
- Back-up / fail-safe plan
- Remediation of issues that directly impact transition from pre-planning checklist
- Completion of detailed designs
  - Shop drawings of proposed equipment
  - Networks and address
  - Controllers, cut-sheets
  - Verification sheets
- Re-create: Users Groups (Administration), Graphics, Trend groupings and charts, Alarm, objects, Schedules, demand response programs, energy metering/power manager, report manager functions.
- Integration to 3rd-party systems. (ABB, Accutrol, Aircuity, Belimo, Carel, Daiken, Danfoss Drives, FieldServer, JCI, McQuay, Mestek, Onicon, Phoenix Controls, Price, Reliable Controls, Schneider Electric, etc)
- Post deployment verification and commissioning of proper operation of each field controller.
- Decommissioning of existing Andover Netcontroller and BCX controllers

**4. This procurement is subject to the following trade agreement(s):**

This procurement is subject to the following trade agreement(s)

- Canadian Free Trade Agreement(CFTA)
- Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP)
- Canada-European Union Comprehensive Economic and Trade Agreement (CETA)
- World Trade Organization–Agreement on Government Procurement (WTO-GPA)
- Canada–Honduras Free Trade Agreement
- Canada–Korea Free Trade Agreement
- Canada–Panama Free Trade Agreement
- Canada–Peru Free Trade Agreement

**5. Justification for the pre-identified supplier:**

Ainsworth currently provides the maintenance and service for the energy management and controls systems for the NRC campuses and buildings in the NCR.

Ainsworth is the authorized Partner of Schneider Electric Building Systems. The Andover Continuum Building Automation system which was acquired by Schneider Electric Building Systems in 2004, has reached the end of its service life and no further software or hardware development is occurring. The current evolution of the Andover Continuum Building Automation is the Schneider Electric Ecostruxure platform.

The Ecostruxure platform functions as a single system integrator securely connecting hardware, software, and building operation services over an Ethernet IP backbone to help

maximize building efficiency, optimize comfort and operations. This upgraded control system will provide advantages to the NRC such as: leveraging the latest available technologies, providing access to a wider family of products, while providing a simplified user front end.

The Schneider EcoStruxure platform is fully compatible with existing infrastructure and facilities. The contents of select controllers will be converted while the vast array of existing BAS infrastructure remains intact ensuring no disruptions in service as it is currently supported as part of the Schneider Electric BAS family of products.

This upgrade strategy has a direct synergy to the NRC retrocommissioning strategy which will provide standardization of control sequences and refining overall system operation to maximize system efficiency while being incorporated with the controls upgrade.

The upgrade will also provide operational advantages by providing a single standardized control system for all of NRC's buildings in the NCR.

This upgrade is the only compatible and interoperable solution that prevents from upgrading the current BAS infrastructure which would make any other solutions cost prohibitive and logistically extremely challenging.

#### **6. Government Contracts Regulations Exception(s)**

The following exception(s) to the Government Contracts Regulations (GCRs) is invoked for this procurement under subsection 6 (d) – only one person/firm is capable of performing the work.

Ainsworth Inc. (formerly Airtron Canada) has been an authorized Partner for Schneider Electric's Building Automation System product lines for over 30 years and is the only authorized dealer to supply, install and maintain the following Building Automation Systems in the National Capital Region.

#### **7. Exclusions and/or limited-tendering reasons:**

if the goods or services can be supplied only by a particular supplier and no reasonable alternative or substitute goods or services exist for any of the following reasons:

- to ensure compatibility with existing goods, or to maintain specialized goods that must be maintained by the manufacturer of those goods or its representative;

for additional deliveries by the original supplier of goods or services that were not included in the initial procurement, if a change of supplier for such additional goods or services:

(i) cannot be made for economic or technical reasons such as requirements of interchangeability or interoperability with existing equipment, software, services, or installations procured under the initial procurement; and

(ii) would cause significant inconvenience or substantial duplication of costs for the procuring entity

**8. Period of the proposed contract or delivery date:**

The proposed contract is for a period of 3 years, from April 2022 to December 2025

**9. Cost estimate of the proposed contract:**

The estimated value of the contract, is \$836,875.01 (GST/HST extra).

All costs are subject to negotiations.

**10. Name and address of the pre-identified supplier:**

Ainsworth Inc.  
69 Auriga Drive  
Ottawa, Ontario  
K2E 7Z2

**11. Suppliers' right to submit a statement of capabilities:**

Suppliers who consider themselves fully-qualified and available to provide the goods, services or construction services described in the ACAN may submit a statement of capabilities in writing to the contact person identified in this notice on or before the closing date of this notice. The statement of capabilities must clearly demonstrate how the supplier meets the advertised requirements.

**12. Closing date and time for a submission of a statement of capabilities:**

The closing date and time for accepting statements of capabilities is:

March 15, 2022, at 14:00 PM EST

**13. Inquiries and statements of capabilities are to be directed to:**

NRC Contracting Officer: Collin Long  
National Research Council Canada  
Email: Collin.Long@nrc-cnrc.gc.ca