NRC·CNRC

Addendum / Addenda

No./No
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Project Description / Description de projet		
Smart Building Monitoring and On-going Commissioning - Maritime Provinces		
Solicitation No./N° de solicitation 19-58046	Project No./N° de projet	W.O. No./N° d'ordre de travail
Departmental Representative / représentant ministériel Scott Shillinglaw		Date October 29, 2019

Notice:	**Nota**:
This addendum shall form part of the tender documents and all conditions shall apply and be read in conjunction with the original plans and specifications.	Cet addenda fait partie intégrale des dossiers d'appel; toutes les conditions énoncées doivent être lues et appliquées en conjonction avec les plans et les devis originaux.

1 Questions and Answers (4 pages)
2 Appendix A - Statement of Requirements, revised items 2.13.D, 4.A and 4.I (2 pages)
3 Appendix C - List of Potential Buildings, revised (1 page)
4 Appendix D - DND Smart Building Pilot: Halifax and Gagetown, revised table (1 page)
5 The Proposal Closing Date is extended to 15 November 2019. As a result, Enquiries period is also extended.

RFP 19-58046 – Smart Building Monitoring and On-going Commissioning – Maritime Provinces

Questions and Answers

1. Appendix D indicates that buildings are "Remotely Monitored". Please explain what "remotely monitored" means in this context of this RFP.
   Answer: Refer to attached revised Appendix D.

2. Appendix D indicates that buildings are "Remotely Monitored". Will the successful bidder be provided with Remote Read Only Access to the BAS? If so, what is the method of access (i.e. VPN, web browser etc.)?
   Answer: The successful bidder will not have Internet or off-Base remote access to the BAS. Refer to Appendix A, 2.13.H.

3. Appendix D indicates that buildings are "On Other Network". Please explain what "On Other Network" means in this context of this RFP.
   Answer: Refer to attached revised Appendix D.

4. Is the BAS in each building on a dedicated network and physically separated from any other DND base or operations networks?
   Answer:
   Gagetown: The BAS in every building is physically connected to a network. Refer to #6 for more information.
   Halifax: No, refer to #6 for more information. However, air-gap with cell modem (as per RFP requirements) is approved for communications.

5. Is each BAS panel connected directly to a DND/SSC switch or is there a single connection per BAS network?
   Answer:
   Gagetown: Varies.
   Halifax: Varies.

6. What DND/SSC network is the BAS connected to?
   Answer:
   Halifax: The BASs are connected to MachineNet. MachineNet is physically connected to the SSC network and virtually separated from the SSC network.
   Gagetown: The BASs are not connected to the SSC network. The BASs communicate on a dedicated local Base network.

7. Could the BAS network for each building be temporarily separated from any other DND networks or network infrastructure to be made completely standalone?
   Answer:
   Gagetown: Yes
   Halifax: No

8. Could a temporary “deployment window” be arranged where the bidder will perform online remote configuration on their device while the BAS network is standalone?
   Answer: No. Refer to 2.13.H.

9. Will the successful bidder be allowed an extended on-site deployment/configuration period for a few days to a few weeks in lieu of remote access?
   Answer: Yes.

10. Will the successful bidder be allowed continuous access to the BAS graphics while on site to assist with configuration of the analytics?
    Answer: Yes.

11. Is cellular/LTE wireless internet an acceptable method of communication from the on site device to the bidder’s cloud at all DND buildings?
    Answer: Yes. Refer to revised Appendix A, 4.A. Refer to #12.

12. Please provide a list of the acceptable internet connectivity solutions allowable for this project.
    Answer: Cellular communication with air-gap solution is the only option.

13. Section 2.4 states that "energy metering data will be available via the BAS." Please confirm that it is not the bidder's responsibility to install new utility meters or submeters if they do not currently exist.
    Answer: It is not the bidder's responsibility to install new utility meters or submeters if they do not currently exist.

14. If on site utility meters are not connected to the BAS, is it the bidder’s responsibility to connect them to the BAS?
    Answer: No.

15. If sub-meters exist on site not connected to the BAS, is it the bidder’s responsibility to connect them to the BAS?
    Answer: No.

16. RFP states that ultra-lite buildings may not have a comprehensive BAS, however Section 2.4 states that "energy metering data will be available via the BAS". Please confirm if there are any sites where metering data will need to be obtained from a source other than the BAS.
    Answer: For the purpose of the bid, assume that energy metering data will be available via the BAS.

17. Will the successful bidder be expected to connect directly to meters or a metering network in BEMS-Ultralite buildings for data collection?
    Answer: Refer to #16.

18. Will the successful bidder be expected to install a data collection device in BEMS-Ultralite buildings?
    Answer: No.

19. Can you please provide as-builts of the BAS for each building (or as many as possible)?
    Answer: No.

20. Can you please provide as-builts of the metering system/devices at each building (or as many as possible)?
    Answer: No.

21. Can you please provide a list of the BAS panel make/models included in this project?
    Answer: No.

22. What communication protocol does the Delta V3.4 system use on the IP network?
    Answer:
    Refer to Appendix A, 2.3.5.
    Refer to revised Appendix D.

23. What communication protocol does the Alerton Envision system use on the IP network?
    Answer:
    Refer to Appendix A, 2.3.5.
    Refer to revised Appendix D.

24. What communication protocol does the Pinpoint V2 Digicon system use on the IP network?
    Answer:
    Refer to Appendix A, 2.3.5.
    Refer to revised Appendix D.

25. What communication protocol does the Envision C3.10 system use on the IP network?
    Answer:
    Refer to Appendix A, 2.3.5.
    Refer to revised Appendix D.

26. Please confirm that the bidder is only responsible for monitoring devices already connected to the location area network described in Section 4.A.
    Answer: Refer to attached revised appendix A, 4.A.

27. At Appendix A, paragraph 2.18 of the subject solicitation it states all employees of the bidders, and any sub-contractors working on the project must have proof of a Reliability Status Security Clearance submitted with the bid, and all bidders and sub-contractors must have a DOS or Designated Organization Screening with the bid. There are 3 different levels of DOS but the RFP does not specify which level is required? Can you confirm what type of DOS is required by bidders and subcontractors for this solicitation?
    Answer: Reliability Status

28. Currently none of our employees are in possession of a reliability status security clearance. Would it be acceptable in response to this bid to indicate clearances will be requested and applications will be submitted but no proof of clearance is available at the time of bid submission?
    Answer: Not acceptable.

29. For section 2.4, energy metering requirements, is there a way to understand the point breakdown ahead of time to ensure our pricing aligns with the requirements. Additional water and gas metering would be helpful to understand for pricing.
    Answer: No.

30. For section 2.6.2 Part a – does this mean we have the chance to conduct site visits to help prepare our bid or is this a requirement after contract award?
    Answer: These site visits are after contract award.

31. For Section 2.7.2, Part J – what's the expectation for the timestamp? It's our understanding that there will be no automatic changes made to the system so we want to ensure we understand how and when that happens.
    Answer: The successful bidder will record the timestamp and display it in the UI to indicate when an anomaly correction has been manually completed by the user.

32. For Section 2.13, Part D – we are unsure how to provide this without being able to conduct site visits ahead of the bid. Is there any way to schedule some onsite time.
    Answer: Refer to revised Appendix A, 2.13.D.

33. For the SME and P. Eng requirement – does the P. Eng. need to be the project manager and do we need a P. Eng in both Nova Scotia and New Brunswick or is Nova Scotia sufficient.
    Answer:
    The SME does not need to be the project manager.
    Refer to Appendix A, 2.5.1.E.

34. Can a subcontractor, with their DOS application in progress and soon to be acquired, be considered eligible?
    Answer: No.

35. Since the subject matter expert must be certified in the province where the work will done, can his/her application for membership in the order be in progress and soon to be acquired?
    Answer: Yes.

2.11.2 BEMS-Ultralite Buildings only:

Monthly Reports:

A. Automatically generate and email a one-page report summarizing energy anomalies and relevant energy statistics, for use by a DND energy manager and other stakeholders.
B. The report will be used to help prioritize the worst energy users and gain insight into what issues exist at the building.
C. At a minimum, the one-page report must include the following items: hourly heat map of energy use, energy use intensity benchmarking, base and peak load statistics, maximum demand event, recommended actions, data quality issues.
D. The report format and content must be adjusted as required to meet NRC and DND's needs.
E. The Contractor must provide monthly reports on the web based dashboard and via email to the project team.
F. The Contractor must issue the first monthly report within one month of starting managed services.

2.12 System Availability, Scalability, and Interoperability (response limited to one (1) page maximum for this section)
The solution must:

A. Have availability at least 99% during building operating hours and at least 95% during other periods;
B. Smart BEMSs Buildings only: Be scalable to monitor additional devices and meters, integrate additional sensors, and deploy to additional buildings as needed; and
C. Smart BEMSs Buildings only: Allow integration with other existing open systems or third party applications.

2.13 Cybersecurity, Privacy, and Data Sovereignty (response limited to one (1) page maximum for this section; include cybersecurity plan in appendix)
The following requirements related to cybersecurity must be met:

A. Provide security and protection measures in compliance with DND's security and privacy policies.
B. The Bidder must ensure that all DND data and project information is stored on systems, infrastructure and networks that are located wholly within the geographical boundaries of Canada. This includes backups, disaster recovery locations, alternate operations centers, cloud servers, etc.
C. All employees or sub-contractors who will have access to DND data or project information must obtain necessary security clearance as defined by DND and the Security Requirements Check List (SRCL) and other related security requirements.
① D. Cancelled.

① Issued for addendum no.01

4. Additional Information

This section provides additional information.

① A. Installation location for on-site vendor hardware: for the purpose of the bid, assume that on-site vendor hardware (data collection device, air-gap, cellular modem) will be located in one building in Halifax and one building in Gagetown and collect data for all pilot buildings via DND's internal BAS network.

B. There will be no site visits as part of the RFP process.

C. Consortiums and joint ventures can submit a proposal. The proposals must clearly define the role and responsibilities of all parties involved, as well as the lead party that will be the main contact for NRC and DND. Bids must be submitted by the leading organization.

D. For the purpose of the bid, assume that energy metering data are available via the BAS.

E. There will be no existing Internet connection to be used at the sites. The connection between the BAS and the Contractor's platform is the responsibility of the Contractor.

F. The Contractor must sub-contract an electrician for related electrical work and provide all required permits (electrical or otherwise).

G. There are no existing anomaly correction management systems available at the buildings to be used as part of the Bidder's solution.

H. Refer to the List of Potential Buildings for work locations and call-up list.

① I. Upon request from DND or NRC, the successful bidder must subcontract the Designated BAS Contractor(s) to make changes to the BAS for the purpose of implementing energy optimization measures at buildings included in the contract. Changes to the BAS must be approved by DND/DCC local operations staff before the Designated BAS Contractor(s) begin any work. Costs related to this item, incurred by the successful bidder, will be paid for via Change Order.

① Issued for addendum no.01

List of Potential Buildings:

The following list of buildings is defined as the “call-up” list. The initial work under this RFP is for the buildings identified as “Primary Building”. The price provided as part of this bid submission shall include primary buildings only. NRC and DND may call-up buildings from the “Potential Additional Buildings” listed below via Change Order.

1) Halifax:
    a. SH14: Primary Building, BEMS-Ultralite
    b. SH57: Primary Building, BEMS-Ultralite
    c. SH100: Primary Building, BEMS-Ultralite
    d. SH251: Primary Building, BEMS-Ultralite
    e. SH330: Primary Building, Smart BEMS
    f. WL57: Primary Building, Smart BEMS
    g. SH342(X): Primary Building, Smart BEMS
    h. SH343(Y): Primary Building, Smart BEMS
    i. SH344(Z): Primary Building, Smart BEMS

    Potential Additional Buildings
    j. D200: Smart BEMS
    k. S105: Smart BEMS
    l. S80: Smart BEMS
    m. D206: Smart BEMS

2) Gagetown:
    a. F19: Primary Building, Smart BEMS
    b. G08: Primary Building, Smart BEMS
    c. J07: Primary Building, Smart BEMS
    d. K92: Primary Building, Smart BEMS
    e. K94: Primary Building, Smart BEMS
    f. K95: Primary Building, Smart BEMS
    g. K96: Primary Building, Smart BEMS
    h. L37: Primary Building, Smart BEMS
    i. SW11: Primary Building, Smart BEMS

    Potential Additional Buildings
    j. D56: Smart BEMS
    k. D57: Smart BEMS
    l. D58: Smart BEMS
    m. D59: Smart BEMS
    n. D60: Smart BEMS
    o. H33: Smart BEMS
    p. J08: Smart BEMS
    q. J09: Smart BEMS
    r. K04: Smart BEMS

National Defence / Défense nationale

DND Smart Building Pilot: Halifax & Gagetown

Appendix "D"

Geographic Region	Building	Type	Built (approximate)	Clearance Required	Gross Floor Area (m2)	BAS Software and Version / Standing Offer BAS Service Vendor	BAS		
							Number of Points	Centralized Monitoring*	Notes
Halifax, NS	SH14	Post Office / School / Daycare / CANEX / Hair Dressor	1959	Reliable	5,448	Envision C3.10 / VCI		Yes	3
Halifax, NS	SH57	Recreation Complex (pool, gym, squash, weights, bowling)	1957	Reliable	5,648	Envision C3.10 / VCI		Yes	3
Halifax, NS	SH100	Mess Hall & Short Term Accomodation	1953	Reliable	17,995	Envision C3.10 / VCI		Yes	4
Halifax, NS	SH251	Office	1994	Reliable	2,937	Envision C3.10 / VCI		Yes	5
Halifax, NS	SH330	Office / Flight Simulation	2007	Reliable	8,577	Envision C3.10 / VCI	437	Yes	5
Halifax, NS	WL57	Office / Shops	2014	Reliable	10,667	Envision C3.10 / VCI	879	Yes	5
Halifax, NS	SH342(X)	Office / Hanger / Warehouse	2008	Reliable	10,488	Andover Continuum BACnet / Digicon	1369	Yes	6
Halifax, NS	SH343(Y)	Office / Hanger / Warehouse	2008	Reliable	11,956	Andover Continuum BACnet / Digicon	1437	Yes	6
Halifax, NS	SH344(Z)	Office / Hanger / Warehouse	2008	Reliable	13,050	Andover Continuum BACnet / Digicon	1224	Yes	6
Gagetown/Oromocto, NB	F-19	Gate House Occupied 24/7	2008	Reliable	340	Alerton, Envision / Advanced Energy Management	55	Yes	
Gagetown/Oromocto, NB	G-08	New Barrack	2012	Reliable	5,928	Delta, V3.4 / Controls and Equipment	908	Yes	
Gagetown/Oromocto, NB	J-07	Training Facility	1990	Reliable	57,125	Alerton, Envision / Advanced Energy Management	2000	Yes	1
Gagetown/Oromocto, NB	K-92	Garage Space/Classroom	2011	Reliable	8,173	Delta, V3.4 / Controls and Equipment	509	Yes	
Gagetown/Oromocto, NB	K-94	Garage Space	2015	Reliable	735	Delta, V3.4 / Controls and Equipment	110	Yes	
Gagetown/Oromocto, NB	K-95	Garage Space	2016	Reliable	1,735	Delta, V3.4 / Controls and Equipment	303	Yes	
Gagetown/Oromocto, NB	K-96	Garage Space/Maintenance	2017	Reliable	6,928	Delta, V3.4 / Controls and Equipment	534	Yes	
Gagetown/Oromocto, NB	L-37	Meteorology Center Occupied 24/7	1999	Reliable	2,016	Alerton, Envision / Advanced Energy Management	167	Yes	2
Gagetown/Oromocto, NB	SW-11	Garage Space/Classroom	2,018	Reliable	3,870	Delta, V3.4 / Controls and Equipment	417	Yes	

* Centralized Monitoring: for the purpose fo this RFP, centralized monitoring means that the building's BAS is connected to a centralized operations facility where O&M staff remotely supervises and manages buildings on base.

NOTES:

1. Controls completely redone in 2014.
2. Major Renovation in 2013. Completely redone.
3. This facility includes Alerton IBEX controllers communicating to a remote VCI Controls VEC master controller using a dedicated phone line. VCI Controls VEC controllers are connected to DND's internal BAS network to perform centralized monitoring.
4. This facility includes Alerton IBEX controllers communicating to a remote VCI Controls PCU master controller using a dedicated phone line. VCI Controls PCU controllers are connected to DND's internal BAS network to perform centralized monitoring.
5. This facility includes Alerton BACnet controllers connecting to a local VCI BACnet VEC controller. VEC controllers and a local operator workstation are connected to DND's internal BAS network to perform centralized monitoring.
6. This facility includes an Andover Continuum BACnet controllers architecture. The facility has a number of BACnet-IP routers and local Andover Continuum workstations that connects with DND's internal BAS network to perform centralized monitoring.