AREA DETECTION AND IDENTIFICATION SYSTEM (ADIS)

VOLUME 2

ADIS ACQUISITION DRAFT RESULTING CONTRACT W8476-145109/001/sl

IMPORTANT INFORMATION REGARDING THIS REQUEST FOR PROPOSAL (RFP):

This RFP has multiple volumes. Bidders must bid on the work to be conducted in volumes 2 and 3 in accordance with the instructions stipulated in Volume 1.

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THIS CONTRACT CONTAINS A SECURITY REQUIREMENT

The following clauses and conditions may apply to, and form part of, any contract resulting from the bid solicitation. As bidders are anticipated to be from Canada, the United States and Europe, and some terms and conditions associated with the contract will vary depending upon the physical location of the bidder, multiple options have been included. Once the bidder is selected, based on the Basis of Selection detailed herein, the extraneous clauses will be removed.

1.0 Statement of Requirement (SOR)

The Contractor must deliver 32 standoff chemical detection and identification systems and perform the Work in accordance with the Statement of Requirement at Annex "A" and the Contractor's technical bid dated

The work will include integrating government supplied material into the Contractors' chemical detection and identification system in accordance with the SOR and all related Appendices, develop training and appropriate courseware for Operator and Maintenance training.

1.1 Delivery Point

The delivery point for the ADIS units is:

25 CFSD Montréal 6363 Notre Dame Est Montréal, QC H1N 3V9

1.2 Industrial and Technological Benefits (ITB) Commitments and Responsibilities

The Contractor must achieve all the ITB commitments in accordance with the schedule and commitments set out in Annex D, Acquisition ITB Terms and Conditions.

1.3 Optional Goods and/or Services (ADIS Systems and Training)

The Contractor grants to Canada the irrevocable option to acquire the goods, services or both described at Annex B,-Basis of Payment of the Contract under the same conditions and at the prices and/or rates stated in the Contract.

The exercise of this option (s) is solely at Canada's discretion, and without limiting that discretion, Canada, may consider the performance of the Contractor in meeting its ITB & VP Commitments, as determined by the annual reports. Canada may also take into consideration whether or not the Contractor has maintained the level of activities/commitments required to meet the mandatory requirement at Annex D – Acquisition ITB Terms and Conditions.

The option may only be exercised by the Contracting Authority and will be evidenced, for administrative purposes only, through a contract amendment.

2.1 Clauses and Conditions

2.1 Standard Clauses and Conditions

All clauses and conditions identified in the Contract by number, date and title are set out in the <u>Standard</u> <u>Acquisition Clauses and Conditions Manual</u> (https://buyandsell.gc.ca/policy-and-guidelines/standardacquisition-clauses-and-conditions-manual) issued by Public Works and Government Services Canada.

2.2 General Conditions

2030 (2018-06-21), General Conditions - Higher Complexity - Goods, apply to and form part of the Contract.

2.3 Supplemental General Conditions

The following supplemental general conditions apply to and form part of the Contract, as applicable:

4010 (2012-07-16), Services - Higher Complexity;

3.0 Security Requirements

3.1 Security Requirements – Canadian Contractor

- A. The Contractor/Offeror must, at all times during the performance of the Contract/Standing Offer, hold a valid Facility Security Clearance at the level of **SECRET**, issued by the Canadian Industrial Security Directorate (CISD), **Public Works and Government Services Canada (PWGSC)**.
- B. The Contractor/Offeror personnel requiring access to sensitive work site(s) must EACH hold a valid personnel security screening at the level of **SECRET**, granted or approved by CISD/PWGSC. Until the security screening of the Contractor personnel required by this Contract has been completed satisfactorily by CISD, PWGSC, the Contractor personnel **MAY NOT ENTER** sites without an escort.
- C. Subcontracts which contain security requirements are NOT to be awarded without the prior written permission of CISD/PWGSC.
- D. The Contractor/Offeror must comply with the provisions of the:
 - (a) Security Requirements Check List and security guide (if applicable), attached at Annex C.
 - (b) Industrial Security Manual (Latest Edition).
- OR

3.1 Security Requirements – Foreign Contractor

- A. The Foreign recipient **Contractor shall**, at all times during the performance of the **Contract**, hold a valid Facility Security Clearance (FSC), issued by the National Security Authority (NSA) or Designated Security Authority (DSA) of **the supplier's country**, at the equivalent level of **SECRET** in accordance with the national policies of **the supplier's country**.
- B. All **CANADA CLASSIFIED** information/assets accessed by the Foreign recipient **Contractor** shall NOT be safeguarded at the Foreign recipient's sites.

- C. **CANADA CLASSIFIED** information/assets shall be released only to Foreign recipient **Contractor /** personnel, who have a need-to-know for the performance of the **Contract** and who have a Personnel Security Clearance at the level of **SECRET**, granted by their respective NSA or DSA of **the supplier's country**, in accordance with national policies of **the supplier's country**.
- D. Subcontracts which contain security requirements are **NOT** to be awarded without the prior written permission of their respective NSA or DSA, in accordance with the national policies of the **the supplier's country**.
- E. The Foreign recipient **Contractor** visiting Canadian Government or industrial facilities, under this contract, will submit a Request for Visit form to Canada's DSA through their respective NSA or DSA.
- F. The Foreign recipient **Contractor** shall immediately report to its respective NSA or DSA all cases in which it is known or there is reason to suspect that **CANADA CLASSIFIED** information/assets accessed by the Foreign recipient **Contractor** pursuant this **Contract**, have been lost or disclosed to unauthorized persons.
- G. The Foreign recipient **Contractor** shall comply with the provisions of the International bilateral industrial security instrument between **the supplier's country** and Canada, in relation to equivalencies.
- H. The Foreign recipient **Contractor** must comply with the provisions of the Security Requirements Check List attached at Annex C.
- I. In the event that a Foreign recipient **Contractor** is chosen as a supplier for this Contract, subsequent Country-Specific Foreign security requirement clauses shall be generated and promulgated by the Canadian DSA, and provided to the Government of Canada Contracting Authority, to ensure compliance with the security provisions, as defined by the Canadian DSA, in relation to equivalencies.

4.0 Term of Contract

4.1 Period of the Contract

The period of the Contract is from date of contract award for a period of three years.

5.0 Authorities

5.1 Contracting Authority

The Contracting Authority for the Contract is: (*To be inserted at contract award*)

Public Works and Government Services Canada Acquisitions Branch Innovation Procurement Directorate Les Terrasses de la Chaudière 10 Wellington, 4th Floor Gatineau, Quebec K1A 0S5

Tel: E-mail:

The Contracting Authority is responsible for the management of the Contract and any changes to the Contract must be authorized in writing by the Contracting Authority. The Contractor must not perform work in excess of or outside the scope of the Contract based on verbal or written requests or instructions from anybody other than the Contracting Authority.

5.2 Technical Authority

The Technical Authority for the Contract is:

(To be inserted at contract award)

The Technical Authority is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content related to the Optional Goods/Services associated with the Work under the Contract and the ADIS – In-Service Support contract. Technical matters may be discussed with the Technical Authority; however, the Technical Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

5.3 Project Authority

The Project Authority for the Contract is:

(To be inserted at contract award)

The Project Authority is the representative of the department or agency for whom the Work is being carried out under the Contract and is the primary approving authority for ADIS – Acquisition. Technical matters may be discussed with the Project Authority; however, the Project Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

5.4 Procurement Authority

(To be inserted at contract award)

The Procurement Authority is the representative of the department or agency for whom the Work is being carried out under the Contract. The Procurement Authority is responsible for the implementation of tools and processes required for the administration of the Contract. The Contractor may discuss administrative matters identified in the Contract with the Procurement Authority however the Procurement Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of Work can only be made through a contract amendment issued by the Contracting Authority.

5.5 Industrial and Technological Benefits Authority

(To be inserted at contract award)

The Industrial Technological Benefits Authority means the Minister of Innovation, Science and Economic Development or any other person designated by that Minister to act on the Minister's behalf under the Contract and is responsible for evaluating, accepting, monitoring, verifying and crediting ITB, and for assessing the Contractor's ITB performance under this Contract. Industrial and Technological Benefits matters may be discussed with the Industrial and Technological Benefits Authority; however, the Industrial and Technological Benefits Authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

5.6 Contractor's Representatives

Legal Authority Technical Project Manager (*To be inserted at contract award*)

The Legal Authority should be the individual who has the legal authority to sign documents on behalf of the Contractor and address contractual matters.

The Technical Project Manager must be available by phone or E-Mail for routine business during the working hours of 0800-1700 hours Eastern Standard Time.

The Technical Project Manager must provide as a minimum, an E-Mail address and a dedicated toll free phone number. The Contractor must respond within 24 hours of contact being initiated by Canada. This includes holidays and periods of plant shut down.

6.0 Payment

6.1 Basis of Payment

- a) For the 32 base units of the chemical detection and identification systems, Canada will pay the Contractor the firm unit price(s) as set out in Annex B, Basis of Payment, FOB Plant, including all customs duty and applicable taxes extra.
- b) For the replacement of any part or component no longer under warranty of the 32 base units, Canada will pay the Contractor the firm unit price(s) detailed in Annex B, Basis of Payment, FOB Plant, including all customs duty, applicable taxes extra.
- c) For the repair and overhaul of parts or components no longer under warranty, Canada will pay the Contractor the firm fixed price(s) detailed in Annex B, Basis of Payment, applicable taxes extra.
- d) For the professional services to integrate the government supplied material, develop the training program and courseware, and provision of helpdesk services, Canada will pay the Contractor the firm, all-inclusive hourly rates stipulated in Annex B, Basis of Payment, applicable taxes extra.
- e) For the delivery of training, Canada will pay the Contractor the firm price per session as detailed in Annex B, Basis of Payment, travel & living expenses and applicable taxes extra.
- f) For travel and living the Contractor will be reimbursed its authorized travel and living expenses reasonably and properly incurred in the performance of the Work, at cost, without any allowance for profit and/or administrative overhead, in accordance with the meal, and private vehicle

allowances specified in Appendices B, C and D of the <u>National Joint Council Travel Directive</u>, and with the other provisions of the directive referring to "travellers", rather than those referring to "employees". Canada will not pay the Contractor any incidental expense allowance for authorized travel. All travel must have the prior authorization of the Project Authority. All payments are subject to government audit.

Canada will not pay the Contractor for any design changes, modifications or interpretations of the Work unless they have been approved, in writing, by the Contracting Authority before their incorporation into the Work.

6.2 Limitation of Expenditure

- A. Canada's total liability to the Contractor under the Contract must not exceed \$ ______. Customs duties are included and Applicable Taxes are extra.
- B. No increase in the total liability of Canada or in the price of the Work resulting from any design changes, modifications or interpretations of the Work, will be authorized or paid to the Contractor unless these design changes, modifications or interpretations have been approved, in writing, by the Contracting Authority before their incorporation into the Work. The Contractor must not perform any work or provide any service that would result in Canada's total liability being exceeded before obtaining the written approval of the Contracting Authority. The Contractor must notify the Contracting Authority in writing as to the adequacy of this sum:
 - a. when it is 75% committed, or
 - b. four months before the contract expiry date, or
 - c. as soon as the Contractor considers that the contract funds provided are inadequate for the completion of the Work,

whichever comes first.

C. If the notification is for inadequate contract funds, the Contractor must provide to the Contracting Authority a written estimate for the additional funds required. Provision of such information by the Contractor does not increase Canada's liability.

7.0 Method of Payment

7.1 Multiple Payments

Canada will pay the Contractor upon completion and delivery of units and for work performed during the period of service covered by the invoice in accordance with the payment provisions of the Contract if:

- a. an accurate and complete invoice and any other documents required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract;
- b. all such documents have been verified by Canada;
- c. the Work delivered has been accepted by Canada.

7.2 Time Verification

Time charged and the accuracy of the Contractor's time recording system are subject to verification by Canada, before or after payment is made to the Contractor. If verification is done after payment, the Contractor must repay any overpayment, at Canada's request.

7.3 SACC Manual Clauses

A9117C (2007-11-30), T1204 - Direct Request by Customer Department C2000C (2007-11-30), Taxes - Foreign-based Contractor C2610C (2007-11-30), Customs Duties – Department of National Defence – Importer C2800C (2013-01-28), Priority Rating OR C2801C (2017-08-17), Priority Rating - Canadian-based Contractors

7.4 Invoicing Instructions

1. The Contractor must submit invoices in accordance with the section entitled "Invoice Submission" of the general conditions. Invoices cannot be submitted until all work identified in the invoice is completed.

Each invoice must be supported by:

- a. a copy of time sheets to support the time claimed;
- b. a copy of the release document and any other documents as specified in the Contract;
- c. a copy of the invoices, receipts, vouchers for all direct expenses, and all travel and living expenses.
- 2. Electronic Invoices must be distributed as follows:
 - a. Contracting Authority;
 - b. Procurement Authority;
 - **c.** Technical Authority.

7.5 Electronic Payment of Invoices

The Contractor accepts to be paid using the following Electronic Payment Instrument(s):

- a. Visa Acquisition Card;
- b. MasterCard Acquisition Card;
- c. Direct Deposit (Domestic and International);
- d. Electronic Data Interchange (EDI);
- e. Wire Transfer (International Only);
- f. Large Value Transfer System (LVTS) (Over \$25M)

8.0 Industrial and Technological Benefits Commitments

8.1 Holdback

If the Contractor fails to meet any of its ITB Obligations under this Contract, the performance guarantees, in the form of holdbacks and/or stop payment detailed in Annex D, Acquisition Industrial and Technological Benefits Terms and Conditions, section 18.3 will apply.

8.2 Liquidated Damages

In respect of the failure to achieve any of the Commitments specified in Annex D – Acquisition **Industrial and Technological Benefits** Terms and Conditions Articles 3.1.1 to 3.1.6 by the end of the ITB Achievement Period, the Contractor shall pay to Canada as liquidated damages 10% of the Shortfall as detailed in Annex D-Industrial and Technological Benefits Requirements Terms and Conditions – section 18.4.

9.0 Certifications

9.1 Compliance

The continuous compliance with the certifications provided by the Contractor in its bid and the ongoing cooperation in providing additional information are conditions of the Contract. Certifications are subject to verification by Canada during the entire period of the Contract. If the Contractor does not comply with any certification, fails to provide the additional information, or if it is determined that any certification made by the Contractor in its bid is untrue, whether made knowingly or unknowingly, Canada has the right, pursuant to the default provision of the Contract, to terminate the Contract for default.

9.2 Federal Contractors Program for Employment Equity - Default by the Contractor

The Contractor understands and agrees that, when an Agreement to Implement Employment Equity (AIEE) exists between the Contractor and Employment and Social Development Canada (ESDC)-Labour, the AIEE must remain valid during the entire period of the Contract. If the AIEE becomes invalid, the name of the Contractor will be added to the "FCP Limited Eligibility to bid" list. The imposition of such a sanction by ESDC will constitute the Contractor in default as per the terms of the Contract.

9.3 Proactive Disclosure of Contracts with Former Public Servants (2013-03-21) A3025C

By providing information on its status, with respect to being a former public servant in receipt of a <u>Public</u> <u>Service Superannuation Act</u> (PSSA) pension, the Contractor has agreed that this information will be reported on departmental websites as part of the published proactive disclosure reports, in accordance with <u>Contracting Policy Notice: 2012-2</u> of the Treasury Board Secretariat of Canada.

10.0 Applicable Laws

The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in _____.

11.0 Priority of Documents

If there is a discrepancy between the wording of any documents that appear on the list, the wording of the document that first appears on the list has priority over the wording of any document that subsequently appears on the list:

- (a) The Articles of Agreement;
- (b) the supplemental general conditions 4010 (2012-07-16), Services Higher Complexity;
- (c) the general conditions 2030 (2018-06-21), General Conditions Higher Complexity Goods;
- (d) Annex A, Statement of Requirement –with Appendixes;
- (e) Annex B, Basis of Payment;
- (f) Annex C, Security Requirements Check List;
- (g) Annex D, Acquisition Industrial and Technological Benefits Terms and Conditions;
- (h) the Contractor's bid dated _____.

12.0 Defence Contract

A9006C (2012-07-16), Defence Contract

13.0 Foreign Nationals

<u>A2000C</u> (2006-06-16), Foreign Nationals (Canadian Contractor) **OR**

A2001C (2006-06-16), Foreign Nationals (Foreign Contractor)

14.0 Insurance

<u>G1005C</u> (2016-01-28), Insurance - No Specific Requirement

15.0 Controlled Goods Program

<u>A9131C</u> (2014-11-27), Controlled Goods Program <u>B4060C</u> (2011-05-16), Controlled Goods

16.0 Canadian Forces Site Regulations

The Contractor must comply with all standing orders or other regulations, instructions and directives in force on the site where the Work is performed.

17.0 SACC Manual Clauses

B4042C (2008-05-12), Identification Markings D2025C (2017-08-17), Wood Packaging Materials D3010C (2016-01-28), Delivery of Dangerous Goods/Hazardous Products D3015C (2014-09-25), Dangerous Goods / Hazardous Products – Labelling and Packaging Compliance D6010C (2007-11-30), Palletization

17.1 Quality Assurance – SACC Manual Clauses

D5540C (2019-05-30), ISO 9001:2015 Quality Management Systems – Requirements (Quality Assurance Code Q)

D5545C (2019-05-30), ISO 9001:2015 - Quality Management Systems - Requirements (Quality Assurance Code C)

D5510C (2017-08-17), Quality Assurance Authority (DND) - Canadian-based Contractor

OR

D5515C (2010-01-11), Quality Assurance Authority (DND) - Foreign-based and United States Contractor

D5606C (2017-11-28) Release Documents, (Department of National Defence) - Canadian-based Contractor OR

D5604C (2008-12-12), Release Documents (Department of National Defence) - Foreign-based Contractor **OR**

D5605C (2010-01-11), Release Documents (Department of National Defence) - United States-based Contractor

18.0 Inspection and Acceptance

The Technical Authority is the Inspection Authority. All reports, deliverable items, documents, goods and all services rendered under the Contract are subject to inspection by the Inspection Authority or representative. Should any report, document, good or service not be in accordance with the requirements of the Statement of Work and to the satisfaction of the Inspection Authority, as submitted, the Inspection Authority will have the right to reject it or require its correction at the sole expense of the Contractor before recommending payment.

19.0 Release Documents - Distribution

The Contractor must prepare the release documents in a current electronic format and distribute them as follows:

- a. One (1) copy mailed to consignee marked: "Attention: Receipts Officer";
- b. Two (2) copies with shipment (in a waterproof envelope) to the consignee;
- c. One (1) copy to the Contracting Authority;
- d. One (1) copy to:

National Defence Headquarters MGen George R. Pearkes Building 101 Colonel By Drive Ottawa, ON K1A OK2 Attention: (Technical Authority name to be provided at Contract award)

e. One (1) copy to the Quality Assurance Representative;

- f. One (1) copy to the Contractor; and
- g. For all non-Canadian contractors, one (1) copy to:

DQA/Contract Administration National Defence Headquarters MGen George R. Pearkes Building 101 Colonel By Drive Ottawa, ON K1A OK2

E-mail: <u>ContractAdmin.DQA@forces.gc.ca</u>

20.0 Shipping

A. Goods must be consigned to the destination specified in the Contract and delivered:

Delivered Duty Paid (DDP) Montreal, QC, Incoterms 2010 for shipments from a commercial contractor.

- B. The Contractor shall deliver the goods to Canadian Forces (CF) Supply Depots by appointment only. The Contractor or its carrier shall arrange delivery appointments by contacting the Depot Traffic Section at the appropriate location shown above. The consignee may refuse shipments when prior arrangements have not been made.
- C. For hard copy versions of contract reports and publication deliverables (including manuals), Goods shall be consigned to the destination specified in the Contract (refer to Annex A, Appendix AB Contract Data Requirements List), DDP (Gatineau QC or Ottawa ON), Incoterms[®] 2000.

21.0 Work Site Access

The Contracting, Procurement or Technical Authorities must have access to the plant or premises where the Work is being conducted. This includes all aspects of the Work e.g. fabrication, manufacture, testing, packaging, etc. In addition, there may be a requirement for representatives of these Authorities (e.g. Cataloguing personnel) to have the same access for purposes related to their functions carried out under the terms and conditions of this Contract.

22.0 Government Supplied Technical Documents

- A. If required, the Contractor must obtain the government drawings and publications or other technical documents from the nearest National Defence Quality Assurance Region office.
- B. At contract completion, the Contractor must provide the Technical Authority with a list of all Department of National Defence-owned Canadian Forces Technical Orders and electronic data material, with a request for disposal instructions.

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The following Appendices are appended to this bid solicitation package and form part of this document:

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1 INTRODUCTION

1.1 Background

The Canadian Armed Forces (CAF) is required to sustain operations despite the threat or presence of Chemical, Biological, Radiological or Nuclear (CBRN) hazards. A cornerstone of the defence posture is an effective warning system that can provide an early warning so that soldiers can survive and operate under the chemical threat by adopting protective measures.

1.2 Intended Use

The intended use of ADIS is to provide an area chemical detection capability, such that airborne Chemical Warfare Agents (CWAs) and Toxic Industrial Chemicals (TICs) may be detected a minimum of three (3) kilometres away from the sensor in order to warn CAF personnel of incoming chemical threats. The ADIS will be used for surveillance and early warning of medium and large size perimeters (camps, airfields, harbours, etc.) and may be used to assess the overall contamination following a chemical release. The ADIS may also be set up and used as a survey and surveillance device prior to and during major events such as Olympics, Summits, etc., or used to conduct initial surveys during operational theatre activation. In addition, it is anticipated that some of the ADIS will be adapted for ground survey/ reconnaissance purposes, where they can be readily installed onboard any reconnaissance vehicle. ADIS will also be allocated to deployed CAF ships so that added surveillance capability will be provided while in port, at anchor, or during naval boarding operations.

Under direct or remote control, ADIS will:

- a. Scan in both azimuth and elevation;
- b. perform the detection and identification of airborne CWAs and TICs;
- c. provide threat depiction on map displays; and,
- d. when two or more systems are networked, allow triangulation, threat dimension, and threat movement calculations.

1.3 Structure of the SOR

This SOR includes several Appendices which are formally part of the SOW:

- a. Appendix AA: System Requirements Specification (SysRS);
- b. Appendix AA1: List of Chemicals;
- c. Appendix AB: Contract Data Requirements List (CDRL);
- d. Appendix AB1: Data Deliverable Specifics for Project Meetings, Reviews, and Audits
- e. Appendix AC: Data Item Descriptions (DID);
- f. Appendix AC1: Sample Lesson Plan;
- g. Appendix AD: Maintenance Support Concept; and
- h. Appendix AE: References, Acronyms and Glossary (RAG).

2. ADMINISTRATION

2.1 References

The Glossary of terms and acronyms used in this SOW are defined in Appendix AE - References, Acronyms and Glossary (RAG).

Any documents in the RAG not specifically identified in the text of this SOW are to be considered as supplemental information.

2.2 Order of Precedence

In the event of conflict between the content of this SOR and the reference documents, the following order of decreasing precedence applies:

- a. Annex A Acquisition Statement of Requirement;
- b. Appendix AA System Requirements Specifications (SysRS);
- c. North Atlantic Treaty Organisation (NATO) Standards;
- d. Canadian Military Specifications;
- e. Other Military Specifications and Standards; and
- f. Commercial and Industrial Standards.

2.2.1 Access to external documents

MIL-STD, MIL-SPEC, MIL-HDBK, NATO- AECTP:	http://everyspec.com/
ISO standards:	https://www.iso.org/standards.html
NATO STANAG:	https://nso.nato.int/nso/nsdd/listpromulg.html
ANSI/ASME laser standards:	https://www.ansi.org/
CEPA:	https://www.canada.ca/en/environment-climate- change/services/canadian-environmental-protection- act-registry/related-documents.html
CSA standards:	https://store.csagroup.org/
OHSAS :	https://www.bsigroup.com/en-CA/BS-OHSAS-18001- Occupational-Health-and-Safety/

2.3 Government Furnished Information (GFI)

The Contractor will be provided with the following as GFI at contract award:

- a. CF 777 Unsatisfactory Condition Report;
- b. DND 590 Certificate of Validation;
- c. DND 591 Certificate of Compliance;

- d. DND 642 Certificate of Reproducible Copy;
- e. DND 675 Request for Waiver or Deviation; and
- f. DND 2515 Certificate of Translation Accuracy Check.

2.4 Government Furnished Equipment (GFE)

The Contractor will be provided with the appropriate quantity of the following items as GFE, which are considered part of ADIS and will need to be packaged with the Contractor-supplied materials:

- a. Quantity 32 Ruggedized laptop computers (1 per ADIS system) for use as the ADIS Console, either Panasonic Toughbook 33 or DELL Latitude 14, NSN 7010-20-AOR-3868; and
- b. Quantity 64 CAF in-house Ethernet radios (2 per ADIS system), Persistent Systems MPU5;
- c. Quantity 32 Manuals for GFE laptop computers (1 per ADIS system); and,
- d. Quantity 32 Manuals for GFE radios (1 per ADIS system).

The Contractor must provide dedicated transit cases for GFEs within each ADIS system as specified in SysRS section 3.3.1, DID-IL-508 and DID IL-509.

The Contractor must provide a dedicated, segregated secure location for safe storage of the GFE within its facilities.

3. GENERAL REQUIREMENTS

3.1 Requirement

The Contractor must provide quantity 32 standoff chemical identification and detection systems that will be integrated with the GFE to create the Automated Detection and Identification System (ADIS). Each ADIS system consists of the GFE listed in Section 2.4 and all Contractor supplied materials to meet the specifications detailed in Appendix AA - SysRS for the ADIS units.

In all manuals, drawings and instructions the Contractor must use metric units.

The Contractor must manage and execute the work, for the delivery of ADIS and Integrated Logistics Support (ILS), including Initial Cadre Training (ICT) for Operator and Maintenance training, preparation and delivery of the associated documentation and courseware.

The Contractor is responsible for all professional services, including the manufacturing, assembly, test, and delivery of all items of ADIS as required in Appendix AA - SysRS, and listed at section 1.3, and related documentation.

The Government of Canada reserves the right to inspect and test ADIS products as per the FCA and PCA, or as agreed upon with the TA.

3.2 Data Format

Unless otherwise specified as a specific requirement or approved by the TA, the Contractor must deliver all electronic copies of data deliverables, in formats compatible with the office software currently in use by the DND:

- a. Microsoft (MS) Windows 10 Enterprise Operating System, Service Pack 1;
- b. MS Internet Explorer (IE) 9.0 with 256 Bit Encryption;
- c. MS Office Professional Plus 2013 (Word, Excel, Access, PowerPoint and Outlook);
- d. MS Visio;
- e. MS Project 2013;
- f. Adobe Acrobat X; and
- g. WinZip 8.1 SR-1.

All electronic documents must be searchable through its table of contents. Delivery media containing compressed files must also contain the decompression software.

The Contractor must format all soft copies for printing on 8.5 x 11 inch bond paper unless otherwise specified in a DID or approved by the TA.

Unless otherwise specified explicitly in a CDRL/DID or approved by the TA, the Contractor will supply all files via the following means (in order of preference):

- a. Email
- b. File Transfer Protocol (FTP) for large files
- c. CD/DVD
- d. Hardcopy

Or as agreed by the TA.

All files must be clearly labeled with the DID number, publication title, version number, date, corresponding file number(s) and type, and Contract number, see section 9.2.

As agreed by the TA, the Contractor must provide a secure (at a minimum, password-protected) FTP site allowing sharing of large documents (greater than 10 MB) with DND.

3.3 Lexicon

The Contractor must develop and maintain a Lexicon in accordance with CDRL PM-107. The Lexicon must establish the terminology of the system in both Canadian English and Canadian French to be used in all other documents and deliverables.

The DND approved references for producing Canadian bilingual terms are:

- a. TERMIUM[®]: <<http://termium.gc.ca/>>;
- b. Ernst Comprehensive Dictionary of Engineering and Technology;
- c. The Canadian Oxford Dictionary (English); and
- d. Dictionnaire Le Petit Robert (français).

3.4 Request for Deviation (RFD)/Request for Waiver (RFW)

The Contractor must prepare and submit RFDs and RFWs for the TA's approval, as required, in accordance with (IAW) CDRL 108.

A RFD describes a requested departure from a contract requirement for a specified period of time and a specified number of units.

A RFW obtains authorization to deliver non-conforming material which may not meet prescribed documentation but is suitable for use as is or after repair and retrofit.

4. **PROJECT MANAGEMENT**

4.1 Project Management Program

The Contractor must prepare and submit an updated Project Management Plan (PMP) IAW CDRL PM-101.

The Contractor must designate a Project Manager (PM) with the responsibilities to coordinate, execute, and manage the Contractor's project management activities for the Contract. The Contractor's PM must have the total responsibility for all work required under the Contract.

The Contractor's PM must be the primary point of contact between the Contractor, the Technical Authority (TA) and the Project Authority (PA) for all technical project management activities of the Contract.

4.2 Master Project Schedule (MPS)

The Contractor must provide an updated MPS IAW CDRL PM-102.

4.3 **Project Meetings**

4.3.1 <u>Meeting Organization and Coordination</u>

- A. The Contractor must arrange and host all meetings, audits, technical reviews and working groups required in this SOR.
- B. The Contractor's PM must be present for the Kick-off Meeting (KOM), and at other meetings when requested by DND.

4.3.2 <u>Meeting Requirements</u>

For each meeting, audit, technical review, and working group, the Contractor must ensure the following:

- a. **Readiness.** The Contractor must ensure that data, personnel and facilities are available for each meeting.
- b. **Representation.** The Contractor's representation at meetings must be suitable for addressing the subjects and issues that are the purpose of the meeting. The representation must be

expanded to support coincident meetings, for example, ILS working group meetings, as required.

- c. **Facilities.** Where a meeting will occur at the Contractor's facility, the Contractor must arrange a meeting facility cleared to the appropriate security level and of a sufficient size to accommodate the attendees. The Contractor must provide access as needed to a secondary secured meeting room to allow the TA to privately discuss issues with the TA's team. Video or teleconferencing should be used where possible.
- d. **Site Visits.** The Contractor must ensure that site visits and meetings be combined whenever possible to achieve economies of scale.
- e. **Chairperson.** The TA or an authorized representative will chair the meetings, unless otherwise specified.
- f. **Agendas.** The Contractor must prepare and submit a Meeting Agenda for the TA's approval each meeting IAW CDRL PM-105.
- g. **Meeting** Documentation. The Contractor must prepare and distribute meeting documentation, all presentations, reports, documents, view graphs, handouts and other materials to be presented, to each meeting attendee IAW CDRL PM-105.
- h. **Minutes.** The Contractor must record and submit the minutes to the TA for approval IAW CDRL PM-105.

4.3.3 <u>Pre-Kick-off Meeting</u>

The Contractor must hold a Pre-Kick-off meeting, no later than 2 Working Days (WDs) following Contract Award, through video or telephone conferences, to obtain Canada's guidelines and expectations for the Kick-off meeting.

4.3.4 <u>Kick-off Meeting (KOM)</u>

The Contractor must hold a KOM at the Contractor's Production facility no later than 30 WDs after contract award to review and secure a common understanding of the requirements expressed in the following:

- a. The Contract;
- b. The SOR;
- c. General overview of the project, risks, schedule and communication channels to follow, and
- d. Other contractual and programmatic issues associated with the project as agreed between the TA, CA and the Contractor.

Meeting Documentation requirements are found at section 4.3.8 and KOM milestone requirements found in section 7.2.

4.3.5 <u>Progress Review Meetings (PRMs)</u>

The purpose of the PRMs is to discuss project progress as well as to track and resolve project or technical issues including risk, schedule and cost that arise throughout the execution of the contract.

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The Contractor must schedule, plan and organize PRMs on a quarterly basis and when required as determined by the TA. To the extent possible, these meetings should encompass or coincide with other required scheduled meetings. At all PRMs, the Contractor must thoroughly review and update the Action Item Register (AIR). All PRMs will be chaired by the TA.

Meeting Documentation requirements are found in section 4.3.8 and PRM milestone requirements found in section 7.12.

4.3.6 Integrated Logistics Support (ILS) Meeting

The Contractor must hold and chair an ILS Meeting during the KOM (para 0), in order to:

- a) Review and secure a common understanding of the requirements expressed in the ILS CDRLs and DIDs, DND Canadian Forces Technical Orders (CFTO)s and specifications; and,
- b) Discuss possible sparing strategies and concepts, Line Replaceable Units (LRUs), and lines of maintenance.

The Contractor must host ILS review meetings on an as-required basis. When possible, the ILS review meetings should be scheduled to follow the PRMs.

Refer to Meeting Documentation requirements found at para 4.3.8.

4.3.7 <u>Other meetings</u>

The Contractor and the TA may schedule informal reviews, such as teleconferences, video conferences, briefings and technical interchange meetings, to help achieve the requirements of the Contract.

4.3.8 <u>Meeting Documentation</u>

The Contractor must prepare and deliver a meeting agenda for all formal meetings and conferences, and prepare and deliver the meeting minutes afterwards.

The Contractor must provide the Meeting Agenda(s) IAW CDRL PM-105.

The Contractor must record, prepare, and provide the Meeting Minutes of each meeting IAW CDRL PM-105.

4.4 Reports and Registers

4.4.1 <u>Significant Incident Report (SIR)</u>

The Contractor must prepare and submit a SIR applicable to matters that may impact the cost, schedule or scope of the project, including, but not limited to, the identification of significant engineering problems, including those affecting safety and environment; anticipation of a milestone slippage; development of a significant problem affecting schedule or technical quality of the deliverables; and, development of a significant problem that may affect the Work and/or planned activities under the Contract.

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Within 24 hours following the identification of a circumstance requiring an SIR, the Contractor must first inform the TA by telephone, in advance of preparing and submitting the actual SIR.

Following the initial telephone contacts, the Contractor must prepare and submit SIRs IAW CDRL PM-106.

The Contractor must prepare and submit an SIR when requested by the TA for circumstances as deemed necessary.

4.4.2 Monthly Progress Reports (MPR)

The Contractor must submit to the TA the MPR IAW CDRL PM-103.

4.4.3 Action Item Register (AIR)

The Contractor must prepare and submit to the TA the AIR IAW CDRL PM-104.

The Contractor must use the AIR as the central repository for monitoring all ongoing project activities in project management, system engineering, ILS, RFWs, RFDs, Engineering Change Proposals (ECP), and all ADIS deliveries.

The Contractor must chronologically record in the AIR all Action Items (AI) arising from discussions, meetings, reviews, audits, working groups, and correspondence between DND's authorized representatives and the Contractor.

The Contractor must regularly maintain and update the AIR throughout the life of the project or when requested by the TA.

The Contractor must address and close out the AI that are assigned to the Contractor by the agreed upon date.

Both the TA and the Contractor must agree that the AI has been fully addressed and completed before it may be annotated as 'completed' and 'closed'.

4.4.4 <u>Risk Register</u>

The Contractor must provide a Risk Register IAW CDRL PM-110 and report risk related activities throughout the duration of the Contract.

The Contractor must ensure that risk factors identified by DND, their probabilities and effects on the project, together with a suitable risk management strategy, action and contingency plan, are assessed and monitored.

The Contractor must ensure that the Risk Register includes Subcontractor activities

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4.4.5 <u>Audits and Technical Reviews</u>

The Contractor must host audits and technical reviews using MIL-STD-1521B as a guide. As a minimum, the following technical reviews must be conducted prior to delivery of the equipment IAW section 7 of this document to ensure that ADIS meets the contractual requirement:

- a. System Requirements Review (SRR);
- b. System Design Review (SDR);
- c. Test Readiness Review (TRR);
- d. Formal Qualification Review (FQR);
- e. Functional Configuration Audit (FCA); and,
- f. Physical Configuration Audit (PCA).

The Contractor must resolve all discrepancies identified during the conduct of these technical reviews unless explicitly waived by the TA. The TA will provide formal acknowledgement to the Contractor of the accomplishment of each review/audit after receipt of the review/audit minutes. The TA will notify the Contractor of:

- a. Approval To indicate that the review/audit was satisfactorily completed;
- b. Conditional approval To indicate that the review/audit is not considered accomplished until the satisfactory completion of resultant action items; or
- c. Disapproval To indicate that the review/audit was inadequate.

4.4.6 Lines of Communication

The Contractor must allow direct communications between its authorized management, engineering, and ILS representatives and their DND authorized counterparts within the ADIS project for management and technical discussion purposes.

Final project decisions reside with the TA.

5. SYSTEMS ENGINEERING

5.1 Systems Engineering Management

This section describes the requirements for Systems Engineering (SE) work that the Contractor must perform. The Contractor has the responsibility for complete system design, engineering, integration, and verification to ensure that all sub-systems, when assembled and operating as a complete system, meet all requirements of Appendix AA – SysRS.

5.2 ADIS Hardware

Other than the GFE, the Contractor must provide all of the system components required for the control and operation of ADIS in order to meet the ADIS SysRS requirements.

Where third party bought out parts and components are selected by the Contractor for the ADIS, the Contractor must ensure the availability of the bought out parts and components for the lifetime of the ADIS.

5.3 Equipment Specification

The Contractor must prepare and deliver an ADIS Equipment Specification in accordance with CDRL SE-313.

5.4 Engineering Change Proposals (ECP)

The Contractor must prepare and submit, as required, ECPs IAW CDRL SE-308.

5.5 ADIS Software

The Contractor must provide all of the system software required for the control and operation of ADIS in order to meet the ADIS SysRS requirements.

5.5.1 <u>Software Version Description Document (SVDD)</u>

The Contractor must produce a SVDD IAW CDRL SE-306 for all Computer Software Configuration Items (CSCI).

5.6 Requirement Verification

5.6.1 <u>Test and Evaluation Master Plan (TEMP)</u>

The Contractor must prepare, submit and execute a TEMP IAW CDRL SE-302.

The Contractor must use the accepted TEMP to guide the test effort during the duration of the Contract.

5.6.2 <u>Verification Traceability Matrix (VTM)</u>

The Contractor must produce a VTM from SysRS requirements through to the test procedures and test reports IAW CDRL SE-312.

5.6.3 <u>Formal Qualification Review (FQR)</u>

The FQR is to verify that the performance of ADIS, through submitted test reports, complies with the ADIS SysRS, and that the ADIS SysRS requirements can be traced to the test reports. The Contractor must hold a FQR at its facility IAW 7.11.1.

The Contractor must provide to the TA all test reports that demonstrate conformance to each requirement of the ADIS SysRS.

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5.6.4 <u>Qualification Test</u>

Where there are gaps determined by the TA in the verification traceability to the ADIS SysRS, the Contractor must conduct qualification tests to prove those requirements. For those tests the Contractor must prepare and submit Qualification Test Procedures (QTP) IAW CDRL SE-303for TA approval.

The Contractor must perform the required qualification tests to complete the traceability of the ADIS to the ADIS SysRS. The number of systems allocated for testing will be based on the Contractor's recommendation. The Contractor must manufacture sufficient quantities of ADIS test units to satisfy the test requirements. The ADIS test units must have a configuration representative of the production units.

The qualification tests must also include a 48 hour endurance testing consisting of 4 to 6 fully functional and wireless networked ADIS. Test logs will be analysed to verify performance.

The Contractor must allow the TA or their representatives to witness any or all qualification tests, inspections and demonstrations at the Contractor's facilities and at any third party testing facility subcontracted by the Contractor.

Following the completion of testing, the Contractor must prepare and submit the Qualification Test Report (QTR) for TA approval, IAW CDRL SE-304.

5.6.5 <u>Verification Acceptance Criteria</u>

The TA will accept, conditionally accept or reject verification results as follows:

- a. To be accepted, verification must have been conducted IAW the approved procedures and the reported results must meet the pass criteria stated in the approved procedures.
- b. Conditional acceptance means that the result(s) can be accepted as having met the pass criteria if specified corrective actions by the Contractor are implemented. The Contractor must record into the AIR all such corrective actions and resolve all pending issues before final acceptance is granted. The TA may require regression testing to verify the resolution.
- c. The results will be rejected if the unit under test did not meet the pass criteria stated in the procedures and no corrective action can resolve the deficiency.

The TA will reject any verification that was conducted using non-approved procedures or uncalibrated equipment.

5.6.6 Field Tests

As part of the Qualification Test, DRDC will conduct more extensive field tests, the main purpose of these tests is to demonstrate the field performance of ADIS, mainly the capacity for sensors to find a real gas cloud at long range in a realistic environment.

5.6.7 <u>Emissions Security (EMSEC)/TEMPEST Requirements</u>

The Contractor is responsible to make the necessary arrangements to fulfil the EMSEC requirements, should they be required.

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5.6.8 <u>Environmental Management System (EMS) Records Management</u>

The Contractor must keep accurate and complete EMS records, which must, upon request, be made available to the TA or Inspection Authority.

The Contractor must provide their EMS records upon formal request by the TA at any time during the performance of the contract and for a period of two years thereafter.

See also section 5.9.2 in this document.

5.7 Equipment Environmental Assessment (EEA)

The Contractor must prepare and submit an EEA for TA approval IAW CDRL SE-305 detailing environmental impacts of the equipment during its life-cycle.

5.8 Controlled Products

5.8.1 <u>Controlled Products Definition</u>

The definition of a controlled product is found in Appendix AE References Acronyms and Glossary (RAG).

5.8.2 <u>Controlled Products Compliance</u>

It is DND policy to restrict or eliminate the use of controlled products.

The Contractor and any Subcontractor(s) must avoid the use of any controlled products where feasible and as dictated by regulatory requirements. The use of controlled products must be reviewed in consultation with the TA, to determine whether replacement by other less hazardous products that meet performance requirements can be utilized, and if so, to replace these controlled products with products of less hazard.

The Contractor must not incorporate Polychlorinated Biphenyls (PCBs) into the equipment.

The Contractor must avoid the use of asbestos in the equipment where feasible and as dictated by regulatory requirements.

The Contractor must comply with the Products Containing Mercury Regulations, 2014 for the design, operation or maintenance of equipment, products or support services.

The Contractor must not incorporate into the design, operation or maintenance of equipment, products or support services, Halocarbons identified within Schedule 4 of the Ozone-Depleting Substances Regulations, with the exception of HCFC-123, and items 1 to 9 on Schedule 1 of the Federal Halocarbon Regulation, 2003.

The Contractor must ensure that all contract deliverables are reviewed for Environmental, Occupational Health and Safety risks and must include appropriate warnings and instructions to mitigate Environmental, Occupational Health and Safety Risks.

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5.9 Environmental Health and Safety (EHS)

5.9.1 <u>General</u>

Environmental Health and Safety (EHS) consideration must be incorporated and documented into the decision making process for the Work performed under this Contract. EHS documentation must be maintained within the project file throughout the life of this Contract. The Contractor must provide for and allow DND inspection and monitoring of EHS documentation throughout the life of the contract.

Polychlorinated Biphenyls (PCBs), halocarbons (as identified within the SOR/99-7 - Ozone-Depleting Substances Regulations, 1998), and asbestos must not be incorporated into the design, operation and maintenance of the equipment, and products used in equipment support activities.

The Contractor must identify and report all sources of mercury contained and used within the design, operation and maintenance of the equipment, and products used in equipment support activities.

The Department is committed to the Federal programs to reduce and eliminate emissions from toxic substances. Contractors must identify and submit justifications for the use of all regulated products and those containing substances identified within the Accelerated Reduction/Elimination of Toxics (ARET, http://www.ec.gc.ca/nopp/aret/en/list.cfm), National Pollutant Release Inventory (NPRI, http://www.ec.gc.ca/pdb/npri/npri home e.cfm) and List of Challenge Substances (http://www.chemicalsubstanceschimiques.gc.ca/challenge-defi/list e.html), and also for products containing heavy metals (heavy metals are those identified within Schedule 1 of the Canadian Environmental Protection Act (CEPA)) to the technical authority for approval.

Canada Labour Code, Part II dictates that the least hazardous materials should be used at the workplace. Therefore, the Contractor is to strive to use the least hazardous product that meets the requisite performance requirements.

The Contractor must incorporate EHS warnings and instructions in direct relation of the EHS risks presented in the contents into documentation.

5.9.2 Environmental Management System (EMS)

The Contractor must have a management system in place to control environmental, health and safety impacts resulting from their activities, products and services.

The Contractor must have a formalized set of procedures and control measures in place to achieve conformance with the requirements of this Work, while ensuring environmental, health and safety protection and pollution prevention.

The Contractor must also make reasonable effort to monitor that all subcontractors are in compliance with applicable environmental laws and regulations.

The Contractor and subcontractors must comply with all Canadian Environmental, Occupational Health and Safety legislation.

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The Contractor must implement and maintain an EMS which is consistent with the principles presented in ISO 14001. Certification to this standard is preferred but not mandatory. The Contractor must, however, have a formalized set of procedures and control measures in place to achieve compliance with the requirements of the Work.

The Contractor must have an Occupational Health and Safety Management System (OHSMS) consistent with the principles presented in OHSAS 18001.

The EMS and OHSMS requirement is applicable to the Contractor. The Contractor must make a reasonable effort to monitor and ensure that all subcontractors are in compliance with the applicable environmental, health and safety laws and regulations.

The TA has the right to make examinations and audits of the work and control processes/procedures and infrastructure with respect to the EMS and OHSMS as they may think fit.

5.10 Full Interchangeability

All ADIS kits submitted for delivery under this contract must be of the same make, model, and all assemblies, sub-assemblies as well as parts and major components must be fully interchangeable.

6. INTEGRATED LOGISTICS SUPPORT (ILS)

6.1 ILS Program

DND's objective for the Contractor's ILS Program is to ensure that the Contractor provides the required level of logistics support to achieve the operational requirements of the system.

The Contractor must develop during the contract an ILS Program to plan, control, implement and maintain the necessary logistics support requirements of ADIS throughout life under the ISS contract.

6.1.1. ILS Manager (ILSM)

The Contractor must designate an ILSM with authority to plan, execute and monitor all ILS work under the contract.

The Contractor's ILSM must be the point of contact between the Contractor and the DND ILSM.

6.2 Maintenance and Support Concept Overview

The ADIS Maintenance Concept embodies a "First Line Maintenance to Contractor" approach for completing maintenance support. This means that any system/subsystem of ADIS requiring maintenance beyond first line maintenance will be returned to the Contractor for repair.

Operators and Integral Support will perform preventive and simple corrective maintenance activities that do not require any of the ADIS LRUs e.g. detector head, processor etc., to be opened or the use of special tools. Items requiring maintenance beyond the simple corrective maintenance activities, requiring the LRUs to be opened, use of special tools and test equipment or requiring software upgrade, except for GFE, will be sent to the Contractor for repair.

The Maintenance and Support Concept is contained in Appendix AD.

6.3 Decals, Data Plates and Warnings

The Contractor must deliver all instruments, decals and data plates marked in metric units.

Where international symbols are not possible, the Contractor must provide bilingual markings in Canadian English and Canadian French, as per paragraph 3.3.

The Contractor must provide warning and precautionary data plates in both official languages of Canada (Canadian English and Canadian French) in order to protect personnel and equipment, as per paragraph 3.3.

6.4 ILS Plan (ILSP)

The Contractor must prepare and submit an ILSP to the TA, in accordance with CDRL IL-501.

The Contractor must execute the work in accordance with the approved ILSP for all acquisition and ISS activities. This includes but not limited to all Initial Product Support activities as well as strategies, methodologies, processes and organization that the Contractor will employ to complete the work requirements of acquisition and ISS contract.

6.5 Logistical Breakdown Structure (LBS)

The Contractor must prepare and submit an ADIS LBS IAW CDRL IL-526. The Contractor must submit an updated LBS when requested by the TA.

6.6 Configuration Items (CI)

The definition of CI is contained in the RAG. The Contractor must select the hardware CIs and Computer Software CI (CSCI) for the project. The CI/CSCI list must be approved by the TA.

CI/CSCI must be identified in the Logistical EBS, supporting provisioning documentation and listed in the Configuration Status Accounting Report (CSAR).

The Contractor must propose amendments and updates to the CI/CSCI list to match the support concept developed through the ILS Program.

The Contractor must establish and maintain a Configuration Status Accounting system.

The Contractor must prepare and submit a CSAR IAW CDRL IL-531.

6.7 Maintenance Plan

The Contractor must prepare and submit an ADIS Maintenance Plan in accordance with CDRL IL-502 and the maintenance and support concept contained Appendix AD- Maintenance and Support Concept.

6.8 Reliability Data

The Contractor must prepare and submit ADIS Reliability Data in accordance with CDRL IL-503.

The Contractor is not responsible for providing reliability data for GFE items.

6.9 Serial Number Register

The Contractor must establish and maintain a registry for all information associated with the serialization and delivery of ADIS IAW CDRL IL-504.

The Contractor must provide a revised copy of the register to the TA with each equipment shipment and upon request.

The Contractor must retain the serial number register until the end of the contract.

6.10 Marking and Labelling

6.10.1 Equipment Identification Plates

The Contractor must label and mark ADIS, including all associated major accessories with identification plates (ID plates) IAW D-02-002-001/SG-001.

The Contractor must prepare and submit Equipment Identification Plate drawings in accordance with CDRL IL-506.

The Contractor must arrange for the manufacture of all equipment identification plates and affix them prior to delivery.

6.10.2 Marking Data for Storage and Shipment

The Contractor must prepare and submit Marking Data for Storage and Shipment in accordance with CDRL IL-508.

The Contractor must affix labels to packages to be placed in stores and on shipping containers shipment in accordance with D-LM-008-002/SF-001 Specification for Marking and for Storage and Shipment.

6.11 Packaging and Handling for Transportation

6.11.1 <u>General</u>

The Contractor must use the most economical means for packaging of batch quantities as well as grouping of items / systems.

The Contractor must prepare and package all deliverable equipment, spare parts and consumables IAW D-LM-008-036/SF-000 Minimum Requirements for Manufacturer's Standard Pack.

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The Contractor must seek approval from the TA with regards to the packaging and shipping methods as it relates to issues such as batch quantities and grouping of items/systems.

Unless otherwise authorized by the TA, all spare parts must be individually packaged, with each package bearing a label with the item name, NATO Stock Number (NSN), manufacturer part number, quantity and shelf-life (if applicable).

The Contractor must label and ship goods falling within the Hazardous Products Act, R.S.C. 1985, C. H-3 and regulation(s) there under, IAW the said Act and regulation(s).

The Contractor must ship goods accompanied by the required Safety Data Sheets (SDS), completed in both Canadian English and Canadian French.

The Contractor must clearly identify the contents of the hazardous material with labels, and the SDS must explain what those hazards are IAW CDRL IL-529.

If Lithium or Lithium-polymer batteries are used, the procedures in C-02-008-001/TS-000, General Safety Lithium Batteries Handling, Storage Preservation and Disposal Instructions must be used.

6.11.2 Packaging Data

The Contractor must prepare and submit packaging data for all transit cases and shipping containers, spare parts, bulk items, training equipment and consolidation containers that are to be shipped to or stored in a facility owned by DND IAW CDRL IL-509/DID IL-509.

The Contractor must provide all the required Packaging Instructions IAW CAF Packaging Specification D-LM-008-001/SF-001.

6.12 Provisioning Support

6.12.1 <u>Provisioning Parts Breakdown (PPB)/ Recommended Spare Parts List (RSPL)</u>

The Contractor must prepare and submit the PPB/RSPL for ADIS IAW CDRL IL-510/DID IL-510.

6.12.2 <u>Supplementary Provisioning Technical Documentation (SPTD)</u>

The SPTD will be used in the cataloguing process to uniquely identify each item considered for provisioning so that it can be correctly catalogued and assigned an NSN.

The Contractor must prepare and submit SPTD IAW CDRL IL-511 for each CI, spare part, and consumable item procured by DND that has not already been assigned a NSN. Any item with an existing NSN and needing modifications in order to meet DND requirements will require a new NSN.

6.13 Material Change Notice (MCN) / Obsolescence

The Contractor must prepare and submit a MCN in accordance with CDRL IL-513 to inform the TA of each change to accepted provisioning data, including anticipated obsolescence for the duration of the contract.

For the duration of the contract, the Contractor must be aware of the availability of the parts comprising the system/equipment and must warn the TA of parts recommended for provisioning that are no longer manufactured, have become obsolete or are expected to become obsolete within two years.

Six months prior to the expiry date of the contract, the Contractor must prepare a detailed list of all parts that are expected to become obsolete within two years after the expiry of the contract. The Contractor must prepare and submit this information using the MCN.

6.14 Engineering Drawings and Associated Lists

The Contractor must prepare and submit Level 2 Provisioning Drawings and Associated Lists defining ADIS IAW CDRL IL-514.

6.15 Technical Publications

The Contractor must prepare and submit the following publications in bilingual, Canadian English and Canadian French format:

- a. Operators Manual IAW CDRL IL-515.
- b. First Line Maintenance Manual IAW CDRL IL-516.
- c. User Guide IAW CDRL IL-517.
- d. ADIS Kit List IAW CDRL IL-518.

6.16 Safety Data Sheets

The Contractor must prepare and submit Safety Data Sheets IAW CDRL IL-529.

6.17 Laser Safety Data Sheets

The Contractor must identify and classify each laser that is an element of ADIS, providing this information to DND initially as part of the Kick-Off Meeting documentation package (CDRL PM-105) and confirming the information as part of the CDR documentation package.

For each laser the Contractor must:

- a. Prepare and deliver a Laser Safety Data Sheet IAW CDRL IL-530; and
- b. Ensure that the equipment, of which the laser is a component, is appropriately marked with the laser type and appropriate hazard classification.

6.18 Training

6.18.1 <u>General</u>

Training programs are designed to achieve the development of CAF members with the right qualifications, at the right time, to ensure the success of operations. Training is specification driven, standardized, cohesive and responsive and is integrated with occupation management such as career progression.

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6.18.2 <u>Scope of Training</u>

The training program encompasses all aspects of the training for the operators and maintainers including Courseware, Course Control Documentation (CCD) and Training Aids.

The Contractor must provide the following:

- a. Training Need Analysis (TNA);
- b. Analysis, design and development of the Training Program including:
 - i) CCD to include Qualification Standards (QS) and Training Plans (TP);
 - ii) Courseware including Training /Job Aids; and
 - iii) Conduct of the Initial Cadre Training (ICT) courses at the Training Centre as detailed by this Contract.

6.18.3 Training Management Plan

The Contractor must prepare and submit a Training Management Plan (TMP) IAW CDRL IL-525.

6.18.4 Course Control Documentation

The Contractor must produce a QS IAW CDRL IL-528.

The Contractor must produce a TP IAW CDRL IL-521.

6.18.5 Standards

The Contractor must adhere to the Canadian Forces Individual Training and Education System (CFITES) in the performance of Training Program Work, as identified in the applicable DIDs.

Once training package has been accepted by DND, the Contractor must produce and deliver bilingual QSs, TPs, and Courseware (including Training and Job Aids) in accordance with DAOD 5039-6, Delivery of Training and Education in Both Official Languages.

In the event that distance learning is an identified training method, the Contractor must adhere to the Interactive Multimedia Instruction (IMI) standards in accordance with MIL-HDBK-29612-3, Department of Defense Handbook: Development of Interactive Multimedia Instruction (IMI) throughout the development of all Courseware.

The Contractor must utilize the following references for the development of interactive multimedia courseware:

- a. Shareable Content Object Reference Model (SCORM) Users Guide for Instructional Designers;
- b. Technical Specification SCORM Version 1.2;
- c. Using SCORM Compliant Content with SABA; and
- d. Defence Learning Network (DLN) Course Development Guide.

6.18.6 <u>Training Developers and Instructors</u>

The Contractor must provide training developers and instructors.

The training course instructors must have a Canadian Society for Training and Development (CSTD) designation, or have demonstrated equivalent experience and qualifications which prove knowledge and experience conducting training using either a Systems Approach to Training, or Instructional Systems Design (ISD) model or the CFITES model.

The instructional design officers must have a CSTD designation, or have demonstrated equivalent experience and qualifications which prove knowledge and experience in designing and developing training using any of a Systems Approach to Training, or ISD model or the CFITES model.

6.18.7 Training Needs Analysis (TNA)

The Contractor must prepare and submit a TNA Report IAW CDRL IL-520.

The Contractor must incorporate needs and requirements from the TNA into the design and development of all CCD.

6.18.8 <u>Training Development Working Group (TDWG)</u>

The TDWG is a forum through which the Contractor's Instructor, Instructional Design Officer, the DND Training Development Officer and the DND Subject Matter Experts (SME) will advise on the development, production, delivery and quality assurance of the training deliverables.

The purpose of the TDWG is to:

- a. Discuss DND training methodology;
- b. Discuss and review draft training items;
- c. Discuss preferred training processes; and
- d. Discuss DND's training concept and requirements.

The Contractor must organise a TDWG to provide the Contractor and DND a regular forum to discuss and resolve training program issues.

The Contractor must convene TDWG meetings as a minimum on a quarterly basis and at the direction of the PM.

6.18.9 <u>Training Program</u>

The Training Program will ensure that all personnel who will be involved in the operation and maintenance of the ADIS, have the skills and qualifications necessary to perform their work. The Training Program consists of the following two types of training as well as the coordination thereof:

- a. Operator Training, to produce fully qualified operators; and
- b. Maintenance Training, to produce fully qualified maintenance staff.

The Training Program will be carried out in the following phases:

- a. Initial Cadre Training 1 (ICT 1) in English only;
- b. Initial Cadre Training 2 (ICT 2) in both French and English; and
- c. Steady State Training (SST) in both French and English.

6.18.10 Initial Cadre Training 1 and 2 (ICT 1 and 2)

6.18.10.1 *General*

The Contractor must develop and provide ICT to DND Operators and Maintainers.

The ICT Training must be modular in order to provide the ability to deliver operator ICT and first line maintenance ICT in a combined course package without duplication.

The QS must indicate which Performance Objectives (PO) must be completed to obtain each qualification.

The POs in the QS and the Enabling Objectives (EO) in the TP must include comments sections with information which would aid instructors with the training. The Contractor must evaluate students IAW guidance of CFITES A-P9-050-000/PT-007.

The Contractor must provide trainee records after the delivery of the ICTs IAW DAOD 5031-9, Course Reporting and Certificates to allow for the training establishment to produce a CF 289, *Certificate of Military Achievement* for each trainee.

The Contractor must provide Training Courseware IAW CDRL IL-522.

The Contractor must conduct the ICT in accordance with the approved CCD and in the numbers and types of course serials specified in the Training Management Plan (TMP). DND personnel, both trainees and observers, selected to attend the Contractor delivered ICT courses will help the PM staff to evaluate the training material and provide feedback to the Contractor. CCD shall be updated IAW CDRL IL-528 and CDRL IL-521. Training Courseware must be updated IAW CDRL IL-522.

The Contractor must conduct training in accordance with guidance of CFITES A-P9-050-000/PT-006.

6.18.10.2 Scheduling

The Contractor must deliver the first operator ICT 1 after the delivery of sufficient systems to conduct ICT, with the actual date subject to approval by the TA.

The Contractor must deliver the first maintenance ICT 1 immediately following the first operator ICT, with the actual date subject to approval by the TA.

The Contractor must deliver the operator ICT 2 no later than 9 months after successful completion of operator ICT 1.

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The Contractor must deliver the maintenance ICT 2 no later than 9 months after successful completion of maintenance ICT 1.

The Contractor must provide optional additional serials of Operator and Maintainer ICT as and when the option is exercised by the TA. The TA will provide a minimum of 20 working days' notice for such request.

6.18.10.3 *Course Duration*

The course duration will be determined in the TP. ICT design will be based on a daily format as follows: a Training Day is defined as 4 morning training periods, one 50 minute lunch break, and 3 afternoon training periods.

6.18.10.4 *Course Location*

Each ICT will be conducted at CFB Borden, ON.

6.18.10.5 *Operator ICT*

Each class will consist of up to 20 students.

DND will provide the training facilities for the ICT.

The Operator ICT must cover operation of the equipment, as per the approved QS and TP.

6.18.10.6 Maintainer ICT

Each class will consist of up to 20 students.

DND will provide the training facilities for the ICT.

The Maintainer ICT must cover first line maintenance of the equipment, as per the approved QS and TP.

6.18.10.7 Support for ICT

The Contractor must provide the following resources for all ICT courses:

- a. Instructional staff;
- b. Support personnel; and
- c. Course materials (one (1) soft copy on both operator and maintainer ICT and 20 hard copies per class).

6.18.10.8 *Course Evaluation*

Following each ICT serial, the Contractor must complete a course evaluation, IAW CDRL IL-524. Approved changes must be actioned in respective QS (IAW CDRL IL-528) and TP (IAW CDRL IL-521) and be implemented in subsequent ICT courses. Courseware shall be updated IAW CDRL IL-522 and implemented in subsequent courses.

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6.18.11 Steady-State Training (SST) Courseware

6.18.11.1 General

The Contractor must develop SST Courseware following the completion of ICT 2 for DND Operators and Maintainers, in accordance with the approved QS as outlined in CDRL IL-528.

The SST Courseware must be modular in order to provide the ability to deliver operator SST and first line maintenance SST in a combined course package without duplication.

The SST Courseware must be designed to allow DND instructors to deliver the course material in a classroom setting.

6.18.11.2 *Course Duration*

The course duration will be determined in the TP. SST design will be based on a daily format as follows: a Training Day is defined as 4 morning training periods, one 50 minute lunch break, and 3 afternoon training periods.

6.18.11.3 *Course Location*

Each SST will be conducted at a Canadian Military Base, with the exception of any Distance Learning Training approved in the TNA.

6.18.12 Operator SST

The Operator SST must cover operation of the equipment, as per the approved QS and TP.

DND will conduct the SST and will provide the training facilities.

Each class will consist of up to 20 students.

6.18.13 Maintainer SST

The Maintainer SST must cover first line maintenance of the equipment, as per the approved QS and TP.

DND will conduct the SST and will provide the training facilities.

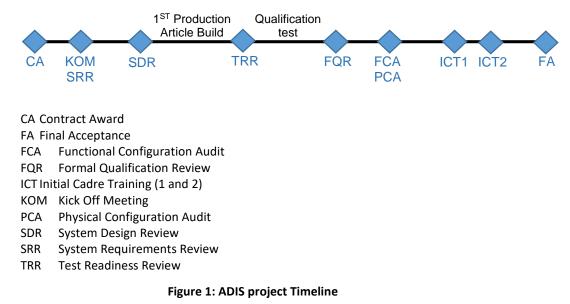
Each class will consist of up to 20 students.

7. **PROJECT MILESTONES**

7.1 Overview

The Contractor must coordinate the delivery of data and equipment with the project milestones below. The Contractor must have completed the entrance criteria below before the meeting can be scheduled. Additional entrance and exit criteria can be requested by the TA as required. All follow-on action items resulting from each meeting must be completed and closed, and all meeting documentation required in the applicable milestone exit criteria in section 7 must be delivered to the TA before the subsequent milestone can take place. Action items are closed only by the TA.

Figure 1 provides a pictorial depiction of the proposed timeline for the delivery of ADIS.



7.2 Kick-off Meeting (KOM)

7.2.1 <u>Purpose</u>

The purpose of this meeting is to ensure agreement on the requirements of the Contract and the SysRS.

7.2.2 <u>Entrance Criteria</u>

The Contractor must have the following ready for the KOM:

- a. Accepted Agenda;
- b. Initial Meeting Documentation;
- c. Proposed PMP;
- d. Proposed MPS;
- e. Proposed ILSP;
- f. Initial PPB/RSPL;
- g. Proposed Quality Assurance Plan (QAP);

- h. The initial LBS; and,
- i. Initial Risk Register.

7.2.3 <u>Activities</u>

As a minimum, the following items, must be presented and discussed as part of the KOM:

- a. Presentation by the TA of the ADIS project;
- b. Contractor briefing on the company and how it will be organized to manage the contract;
- c. Roles and responsibilities of key personnel and points of contact;
- d. Engineering, ILS and ISS processes;
- e. Quality Assurance (QA) and Quality Control (QC);
- f. Timelines;
- g. Planned progress review meetings and working groups;
- h. Deliverables and CDRLs;
- i. Communication procedures for monitoring and reporting progress;
- j. Procedures for managing risks and issues;
- k. Contract administration and contract change procedures;
- I. Key contract terms and project objectives;
- m. Review of all draft plans submitted with bid; and,
- n. Facility tour, if possible and deemed necessary by the TA.

7.2.4 <u>Outputs</u>

The Contractor must complete the following deliverables:

- a. Approved Meeting Minutes;
- b. Approved Meeting Documentation;
- c. Updated AIR;
- d. Approved PMP;
- e. Approved MPS;
- f. Approved ILSP;
- g. Revised PPB/RSPL;
- h. Approved QAP;
- i. Revised LPS;
- j. Initial Monthly Progress Report;
- k. Initial Lexicon (Lex);
- I. Initial Reliability Data;
- m. Initial Training Needs Analysis (TNA)
- n. Initial Training Management Plan (TMP)
- o. SDS;
- p. LSDS; and,
- q. Updated Risk Register

7.2.5 Exit Criteria

In order to obtain the TA's approval or conditional approval of the KOM, the Contractor must:

- a. Have delivered all outputs as specified; and
- b. Have tracked all KOM AIR entries to closure.

7.3 System Requirements Review (SRR)

7.3.1 <u>Purpose</u>

The purpose of this meeting is to ensure clear understanding of the requirements documented in the SysRS and associated verification criteria, including ILS requirements. This meeting is held at the KOM.

7.3.2 Entrance Criteria

The Contractor must have the following ready for the SRR:

- a. The KOM must have been conducted to the satisfaction of DND; and
- b. The KOM exit criteria are not required to have been met prior to the commencement of this meeting.

7.3.3 <u>Inputs</u>

The Contractor must have the following ready for the SRR:

- a. Accepted SRR Agenda; and
- b. Initial Meeting Documentation.

7.3.4 <u>Activities</u>

As a minimum, the following items, at minimum, must be presented and discussed as part of the agenda:

- a. Review of completeness and accuracy of all technical documentation;
- b. Identify main areas of technical concern and possible resolutions; and
- c. Identify technical constraints of the project.

7.3.5 <u>Outputs</u>

The Contractor must complete the following deliverables:

- a. Approved SRR Minutes;
- b. Accepted Meeting Documentation; and
- c. Revised AIR.

7.3.6 Exit Criteria

In order to obtain the TA's approval or conditional approval of the SRR, the Contractor must:

- a. Have delivered all outputs as specified; and,
- b. Have tracked all SRR AIR entries to closure.

7.4 System Design Review (SDR)

7.4.1 <u>Purpose</u>

The purpose of this review is to evaluate the optimization, correlation, completeness, and risks associated with the allocated technical requirements. Also included is review of basic manufacturing considerations will be reviewed and planning for production engineering in subsequent phases.

7.4.2 <u>Entrance Criteria</u>

The Contractor must have the following ready for the SDR:

- a. The SRR must have been conducted to the satisfaction of DND; and
- b. The SRR exit criteria are not required to have been met prior to the commencement of this meeting.

7.4.3 Inputs

As a minimum, the Contractor must have the following ready for the SDR as a minimum:

- a. Accepted SDR Agenda & Meeting Documentation;
- b. Updated Risk Register
- c. Initial VTM;
- d. Initial Equipment Specification;
- e. Updated AIR;
- f. Maintainance Plan;
- g. Updated Reliability Data;
- h. Initial Equipment ID Plate Drawings;
- i. Initial Provisioning Drawings & Associated Lists;
- j. Equipment Environmental Assessment (EEA);
- k. Preliminary SVDD; and
- I. Initial QS (Unilingual Canadian English).

7.4.4 <u>Activities</u>

As a minimum, the following items must be presented and discussed as part of the agenda:

- a. Traceability to requirements;
- b. Completeness of system architecture/design; and,
- c. Technical Risk.

7.4.5 <u>Outputs</u>

The Contractor must complete the following deliverables:

- a. Approved SDR Minutes and Meeting Documentation;
- b. Revised Risk Register;
- c. Revised VTM;

- d. Updated Equipment Specification;
- e. Revised AIR;
- f. Updated Maintenance Plan;
- g. Updated Reliability Data;
- h. Updated Equipment ID Plate Drawings;
- i. Updated Provisioning Drawings & Associated Lists;
- j. Approved EEA;
- k. Updated SVDD;
- I. Initial Test and Evaluation Master Plan (TEMP);
- m. Initial Qualification Test Procedures (QTP);
- n. Initial Operators Manual (Op Man);
- o. Initial First Line Maintenance Manual (Maint Man);
- p. Updated QS (Unilingual Canadian English); and,
- q. Initial Training Plan (TP) (Unilingual Canadian English).

7.4.6 Exit Criteria

In order to obtain the TA's approval or conditional approval of the SDR, the Contractor must:

- a. Have delivered all outputs as specified; and
- b. Have tracked all SDR AIR entries to closure.

7.5 Test Readiness Review (TRR)

7.5.1 <u>Purpose</u>

The purpose of this meeting is to ensure that the system/sub-system is ready for testing and to ensure the activity (facility and personnel) are prepared for formal testing. The Contractor must not conduct any formal testing until the TRR is approved by the TA.

7.5.2 Entrance Criteria

The Contractor must have the following ready for the TRR:

a. The SDR must have been conducted to the satisfaction of DND; and

b. The SDR exit criteria are not required to have been met prior to the commencement of this meeting; and,

c. Sufficient ADIS unit ready to undergo qualifications testing.

7.5.3 <u>Inputs</u>

The Contractor must have the following ready for the TRR:

- a. Approved TEMP;
- b. Updated QTP;
- c. Reports from previously conducted tests as described in SysRS;
- d. Revised VTM;
- e. Accepted TRR Agenda and Meeting Documentation.

7.5.4 <u>Activities</u>

As a minimum, the following items must be presented and discussed as part of the agenda:

- a. Requirements and design changes since SDR;
- b. Known problems;
- c. The results of informal testing;
- d. Test plans, procedures and test cases;
- e. Test limitations and constraints; and
- f. Test facility, equipment and computer tool readiness (including test equipment calibration records).

7.5.5 <u>Outputs</u>

The Contractor must complete the following deliverables:

- a. Approved TRR Minues and Meeting Documentation;
- b. Accepted test reports from previously conducted tests as described in SysRS;,
- c. Revised AIR;
- d. Revised VTM; and,
- e. Approved QTP.

7.5.6 Exit Criteria

In order to obtain the TA's approval or conditional approval of the TRR, the Contractor must:

- a. Have delivered all outputs as specified; and,
- b. Have tracked all TRR AIR entries to closure.

7.6 Formal Qualification Review (FQR)

7.6.1 <u>Purpose</u>

The purpose of the FQR is to review and evaluate the results of the ADIS qualification effort. This is accomplished by the examination of the Contractor provided test reports.

7.6.2 <u>Entrance Criteria</u>

The following must be completed before FQR can commence:

- a. All qualification tests including field tests; and,
- b. Updated VTM with the results of the qualification testing.

7.6.3 <u>Inputs</u>

The Contractor must have the following ready for the FQR:

- a. Accepted Agenda and Meeting Documentation;
- b. Updated QTR; and,
- c. Updated VTM.

7.6.4 <u>Activities</u>

As a minimum, the following items must be presented and discussed as part of the agenda:

a. Line-by-line review of each SysRS requirement tracing a direct link to a specific result in the test reports that demonstrates ADIS compliance with the ADIS SysRS; and,

b. Identification of compliance gaps.

7.6.5 <u>Outputs</u>

The Contractor must complete the following deliverables:

- a. Approved FQR Minutes and Meeting Documentation;
- b. Approved QTR;
- c. Updated VTM;
- d. Initial Marking Data for Storage and Shipment;
- e. Initial Packaging Data;
- f. Initial User Guide;
- g. Initial ADIS Kit List;
- i. Initial Configuration Status Account Report (CSAR); and,
- j. Approved Lex.

7.6.6 Exit Criteria

In order to obtain the TA's approval or conditional approval of the FQR, the Contractor must ensure that:

- a. All required tests have been completed and passed;
- b. All required test reports have been submitted and accepted by the TA; and,
- c. All TRR meeting AIR entries have been tracked to closure.

7.7 Functional Configuration Audit (FCA)

7.7.1 <u>Purpose</u>

The purpose of this meeting is for the TA to approve the functional baseline of the ADIS Production Model. The FCA ensures that the functionality of the product as demonstrated by the verification effort is in conformance with the requirements documented in SysRS.

7.7.2 Entrance Criteria

FCA cannot commence until the FQR has been conducted and closed to the satisfaction of the TA.

7.7.3 <u>Inputs</u>

The Contractor must have the following ready for the FCA:

- a. Accepted Agenda and Meeting Documentation;
- b. Complete first article production ADIS available for inspection;
- c. Approved Equipment Specification;
- d. Updated SVDD;
- e. Approved QTR; and,
- f. Updated VTM.

7.7.4 <u>Activities</u>

As a minimum, the following items must be presented and discussed as part of the FCA agenda:

- a. Review System Configuration;
- b. Review of deviations and waivers;
- c. Review of the test results;
- d. Discussion of test incidents; and,
- e. To approved the VTM.

7.7.5 <u>Outputs</u>

The Contractor must complete the following deliverables:

- a. Approved FCA Minutes and Meeting Documentation;
- b. Approved Functional Baseline;
- c. Approved VTM; and
- d. Approved SVDD.

7.7.6 Exit Criteria

During the FCA, DND will produce non-conformance reports (NCR). The Contractor must resolve all non-conformities before DND accepts the ADIS and authorises full production.

In order to obtain the TA's approval or conditional approval of the FCA, the Contractor must:

- a. Have delivered all outputs as specified; and
- b. Have tracked FCA meeting AIR entries and NCR to closure; and,
- c. All Specification Change Notice (SCN), ECP, MCN, RFD, and RFW raised prior to FCA are closed.

7.8 Physical Configuration Audit (PCA)

7.8.1 <u>Purpose</u>

The PCA is the formal examination of the "as-built" product against its technical documentation to establish and verify Product Baseline (PBL).

Full production of ADIS will not commence until the PCA is closed.

7.8.2 <u>Entrance Criteria</u>

PCA cannot commence until the following criteria are achieved:

- a. The FCA has been conducted and closed to the satisfaction of the TA;
- b. The ADIS first article is built and approved; and,
- c. All ILS deliverables have been accepted according to the applicable CDRLs.

7.8.3 <u>Inputs</u>

The Contractor must have the following ready for the PCA:

- a. Accepted Agenda and Meeting Documentation;
- b. Complete first article production ADIS available for inspection;
- c. Approved Equipment ID Plate Drawings;
- d. Updated Marking Data for Storage and Equipment;
- e. Updated Packaging Data;
- f. Approved PPB/RSPL;
- g. Approved Provisioning Drawings and Associated Lists;
- h. Updated Op Man (Unilingual Canadian English);
- i. Updated First Line Maint Man (Unilingual Canadian English);
- j. Updated User Guide (Unilingual Canadian English);
- k. Approved ADIS Kit List;
- I. Updated TP (Unilingual Canadian English);
- m. Updated TMP;
- n. Approved LBS;
- o. Updated CSAR;
- p. Updated QS (Unilingual Canadian English); and,
- q. Initial Courseware (Operator & Maintainer) (Unilingual Canadian English)

7.8.4 <u>Activities</u>

At a minimum, the following items must be presented and discussed as part of the PCA agenda:

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- a. Review of the ADIS design including any foreground information as a standalone document with respect to intellectual property;
- b. Review of the Provisioning Drawings and Associated Lists;
- c. Physical examination of the ADIS against the Provisioning Drawings and Associated Lists, changes, deviations and waivers.

7.8.5 <u>Outputs</u>

The Contractor must complete the following deliverables:

- a. Approved PCA Minutes and Meeting Documentation;
- b. Accepted First Article ADIS;
- c. Approved Marking Data for Storage and Shipment;
- d. Approved Packaging Data;
- e. Accepted Physical Baseline;
- f. Accepted Op Man (Unilingual Canadian English);
- g. Accepted First Line Maint Man (Unilingual Canadian English);
- h. Accepted User Guide (Unilingual Canadian English);
- i. Updated TP;
- j. Accepted Courseware (Operator & Maintainer) (Unilingual Canadian English);
- k. Approved TMP;
- I. Approved Baseline; and,
- m. Approved CSAR.

7.8.6 Exit Criteria

During the PCA, DND will produce NCR. The Contractor must resolve all non-conformities before DND accepts the ADIS and authorises full production.

In order to obtain the TA's approval or conditional approval of the PCA, the Contractor must have:

- a. delivered all outputs as specified;
- b. tracked all PCA meeting AIR entries to closure; and,
- c. closed off all NCRs.

7.9 Training Development Working Group (TDWG)

7.9.1 <u>Purpose</u>

The purpose of the TDWG is to allow the Contractor and DND ILS team to:

- a. Coordinate and facilitate the provision of DND advice to the Contractor in regard to the training support to aid the program deliverables;
- b. Coordinate and facilitate the provision of DND and SME advice to the contractor in regard to the syllabi and courseware of the ICT courses
- c. Facilitate the provision of SME input to support the Contractor's conduct and evaluation of initial serials of each course for ICT;

- d. Facilitate the provision of SME input to support the Contractor's development of required operator training;
- e. Discuss DND training methodology with a DND Training Development Officer (TDO);
- f. Discuss and review draft training items;
- g. Discuss preferred training processes; and
- h. Discuss DND's training concept and requirements.

Unless otherwise directed by the TA, TDWG must occur monthly with face-to-face meetings on a quarterly basis.

7.9.2 <u>Input</u>

The Contractor must have the following ready for the initial TDWG:

- a. Approved Agenda;
- b. Initial Meeting Documentation;
- c. Initial TNA; and
- d. Initial TMP.

The Contractor must have the following ready for subsequent TDWGs:

- a. Approved Agenda;
- b. Meeting Documentation as required by the TA.

7.9.3 <u>Resources Available</u>

The TA will provide a minimum of one DND TDO, who will be working with the training deliverables, and one CBRN SME.

7.9.4 <u>Outputs</u>

The Contractor must deliver the following items to DND:

- a. Approved Meeting minutes;
- b. Approved Meeting Documentation; and
- c. Updated AIR.

7.9.5 Exit Criteria

The TDWG will conclude when:

- a. all agenda items are addressed;
- b. all new training issues have been raised and discussed; and,
- c. the next TDWG has been scheduled.

7.10 Initial Cadre Training 1 (ICT 1)

7.10.1 Purpose

The Contractor must complete ICT 1 after successful completion of FCA/PCA and once CAF accepts the sufficient ADIS to run ICT at a date approved by the CAF.

7.10.2 Entrance Criteria

The Contractor must have the following ready for ICT 1:

- a. The PCA has been conducted and closed to the satisfaction of the TA;
- b. Unilingual English Training package for ICT Operator qualification has been produced;
- c. Unilingual English Training package for ICT Maintainer qualification has been produced;
- d. ISS contract has been initiated;
- e. Sufficient ADIS delivered to and accepted by CAF to conduct training;
- f. Unilingual English Operator's Manual;
- g. Unilingual English User Guide; and
- h. Unilingual English First Line Maintenance Manual.

7.10.3 Inputs

The Contractor must have the following ready for ICT 1:

- a. Approved Unilingual English ICT Operator lesson package;
- b. Approved Unilingual English ICT Maintainer lesson package;
- c. Qualified training personnel;
- d. Unilingual English Operator's Manual;
- e. Unilingual English User Guide;
- f. Unilingual English First Line Maintenance Manual;
- g. Updated Unilingual English TP; and,
- h. Updated Unilingual English QS.

7.10.4 Activities

The following items, at minimum, must be delivered as part of ICT 1:

- a. Delivery of one ICT 1 Operator Course in English only;
- b. Delivery of one ICT 1 Maintainer Course in English only; and
- c. Validation of Manuals and User Guide.

7.10.5 <u>Outputs</u>

The Contractor must complete the following deliverables as part of ICT 1:

a. Completion of ICT 1 Operator Course IAW Section 6.17.10;

- b. Completion of ICT 1 Maintainer Course IAW Section 6.17.10;
- c. Course Evaluation Report IAW CDRL IL-524;
- d. Modifications/Improvements to the ICT Operator qualification lesson package as approved by the TA;
- e. Modifications/Improvements to the ICT Maintainer qualification lesson package as approved by the TA;
- f. Updated Unilingual Manuals and User Guide as approved by the TA; and
- g. Approved Unilingual English TP; and,
- h. Approved Unilingual English QS.

7.10.6 Exit Criteria

In order to obtain the TA's approval or conditional approval of the ICT 1, the Contractor must have delivered all outputs as specified.

7.11 Initial Cadre Training 2 (ICT 2)

7.11.1 Purpose

The Contractor must complete ICT 2 no later than 9 months after successful completion of ICT 1.

7.11.2 Entrance Criteria

The Contractor must have the following ready for ICT 2:

- a. ICT 1 has been conducted and closed to the satisfaction of the TA;
- b. Bilingual (Canadian English and Canadian French) Training package for ICT 2 Operator qualification has been produced; and,
- c. Bilingual (Canadian English and Canadian French) Training package for ICT 2 Maintainer qualification has been produced.

7.11.3 Inputs

The Contractor must have the following ready for ICT 2:

- a. Accepted Bilingual (Canadian English and Canadian French) ICT 2 Operator lesson package;
- b. Accepted Bilingual (Canadian English and Canadian French) ICT 2 Maintainer lesson package; and,
- c. Qualified training personnel.
- d. Accepted Bilingual (Canadian English and Canadian French) Operator's Manual;
- e. Accepted Bilingual (Canadian English and Canadian French) User Guide;
- f. Acceped Bilingual (Canadian English and Canadian French) First Line Maintenance Manual;
- g. Accepted Bilingual (Canadian English and Canadian French) TP; and,
- h. Accepted Bilingual (Canadian English and Canadian French) QS.

7.11.4 Activities

At a minimum, the following items must be delivered as part of ICT 2:

- a. Delivery of one ICT 2 Operator Course in English;
- b. Delivery of one ICT 2 Maintainer Course in English;
- c. Delviery of one ICT 2 Operator Course in French; and
- d. Delivery of one ICT 2 Maintainer Course in French.

7.11.5 <u>Outputs</u>

The Contractor must complete the following deliverables as part of ICT 2:

- a. Completion of ICT 2 Operator Course (in English and in French) IAW Section 6.17.10;
- b. Completion of ICT 2 Maintainer Course (in English and in French) IAW Section 6.17.10;
- c. Course Evaluation Report IAW CDRL IL-524;

d. Modifications/Improvements to the ICT Bilingual Operator qualification lesson package as approved by the TA;

e. Modifications/Improvements to the ICT Bilingual Maintainer qualification lesson package as approved by the TA;

- f. Updated Bilingual Manuals and User Guide as approved by the TA;
- g. Approved Bilingual TP; and,
- h. Approved Bilingual QS.

7.11.6 Exit Criteria

In order to obtain the TA's approval or conditional approval of the ICT 2, the Contractor must have delivered all outputs as specified.

7.12 Progress Review Meeting (PRM)

The purpose of the PRM is to discuss project progress and to track and resolve project or technical issues that arise throughout the execution of the Contract.

Unless otherwise directed by the TA, Contractor must schedule, plan and organize PRMs on a quarterly basis. The PRM must occur via teleconference and, to the extent possible, these meetings should encompass or coincide with other required scheduled meetings to enable face to face meetings. Face to face meetings must be held at the Contractor's facility unless an alternative location is agreed to between the Contractor and DND.

7.12.1 Entrance Criteria

The Contractor must have the following ready for each PRM:

- a. Accepted Agenda
- b. Initial Meeting Documentation;
- c. Approved Monthly Progress Report; and
- d. Risk Registry.

7.12.2 <u>Activities</u>

Each PRM must address, as necessary, the following items:

- a. Project Progress, including ADIS build;
- b. MPS status of milestones and data item completion;
- c. Project Risks and associated mitigation;
- d. AIR items arising from previous PRMs, other meetings and correspondence;
- e. Environmental Health and Safety;
- f. Engineering and technical issues;
- g. ILS issues;
- h. Quality assurance;
- i. Contractual issues;
- j. Financial issues;
- k. Update of working groups; and
- I. Scheduling of the next PRM.

7.12.3 <u>Outputs</u>

The Contractor must deliver the following items to DND:

- a. Approved meeting minutes;
- b. Approved meeting documentation;
- c. Updated AIR.

7.12.4 Exit Criteria

The PRM will conclude when all agenda items are addressed, all new project and technical issues have been raised and discussed, and the next PRM is scheduled.

7.13 Final Acceptance

All deliverables must have been received and accepted by the TA.

8. QUALITY ASSURANCE (QA)

8.1 Quality Management System (QMS)

While it is not required that the Contractor be registered to CAN/CSA-ISO 9001:16, the Contractor must have a QMS that addresses all of the requirements of CAN/CSA-ISO 9001:16.

QA is performed at the Contractor's facility. The Contractor must abide by all of the QA clauses of the contract and flow all of the QA requirements of the contract to its sub-contractors.

8.2 Quality Assurance Plan (QAP)

The Contractor must produce and implement a QAP IAW CDRL PM-109.

The Contractor must implement and comply with the QAP upon acceptance by the TA.

8.3 QA Inspections, Audits and Tests

The Contractor must allow DND's authorized representatives to conduct QA inspections and audits at any time throughout the contract to verify the Contractor's QA procedures, practices and methods.

DND reserves the right to conduct testing to verify product compliance with any or all of the performance requirements defined in the specifications at the SysRS.

8.4 DND Quality Assurance Representative (QAR)

The Contractor must provide the DND QAR, or his representative, with access to their facility, within 48 hours of receiving a visit request, to ensure the operations performed by the Contractor are IAW the Contractor's quality processes and procedures.

All quality control, procedures, inspection and test records, including records of corrective actions, must be made available to the QAR upon request.

The Contractor must deliver ADIS only with QAR approval.

8.5 Quality Records Retention

The Contractor must retain all quality control, inspection and test records that substantiate conformity to the specified requirements, including records of corrective actions, for three years from the date of completion or termination of the contract.

The Contractor must make available the documents referenced in the QAP when requested by DND.

9. DELIVERABLES

9.1 Equipment Deliveries

For the purpose of equipment deliveries, a complete ADIS consists of:

a. All ADIS components (including GFE and Contractor supplied equipment), consumables and cables packed into their respective transit cases;

b. All software installed onto their respective components;

c. One hard copy (in both Canadian English and Canadian French)each of:

- i. Operators Manual;
- ii. First Line Maintenance Manual;
- iii. User Guide;
- iv. SDS;
- v. Kit List;

d. One complete set of ADIS software on installable media; and

e. Certificate of Conformance.

9.1.1 First ADIS Delivery

The first delivery of ADIS will be accepted when all action items from the FCA and PCA have been closed, with the exception of final versions of Technical Publication and Training Material, which will be finalized and accepted after ICT 1.

The first delivery of ADIS must occur no later than 3 months after closure of the AI from FCA and PCA.

The final delivery of ADIS must occur no later than 12 months after closure of the AI from FCA and PCA.

The Contractor must deliver 32 ADIS, all spare parts and consumables to the following address (by appointment only):

Attn: Receipt Section 25 Canadian Forces Supply Depot (25 CFSD) 6363, Rue Notre-Dame Est Montréal, Québec, Canada H1N 3V9

9.2 Contract Deliverable Data

The Contractor must prepare and deliver the data required under the Contract IAW the Appendix AB CDRL and the Appendix AC DIDs listed in paragraph 11.3 above.

The Contractor must maintain and update all data deliverables, including plans and documents, as required for the duration of the Contract.

The Contractor must deliver all data deliverables in format listed in section 3.2.

The Contractor must deliver MPR IAW the description in paragraph 4.4.2.

The Contractor must deliver all KOM deliverables IAW the description in paragraph 7.2.4.

The Contractor must deliver all SRR deliverables IAW the description in paragraph 7.3.5.

The Contractor must deliver all SDR deliverables IAW the description in paragraph 7.4.5.

The Contractor must deliver all TRR deliverables IAW the description in paragraph 7.5.5

The Contractor must deliver all FQR deliverables IAW the description in paragraph 7.6.5.

The Contractor must deliver all FCA deliverables IAW the description in paragraph 7.7.5.

The Contractor must deliver all PCA deliverables IAW the description in paragraph 7.8.5.

The Contractor must deliver all TDWG deliverables IAW the description in paragraph 7.9.4.

Public Services and Procurement Canada (PSPC)

The Contractor must deliver all ICT 1 deliverables IAW the description in paragraph 7.10.5.

The Contractor must deliver all ICT 2 deliverables IAW the description in paragraph 7.11.5.

The Contractor must deliver all PRM deliverables IAW the description in paragraph 7.12.4.3.

The Contractor must submit all data deliverables to the following address:

Attn: Project Manager, Chemical Agent Sensors Project DCSEM 12-5 National Defence Headquarters (Richelieu Building) MGen G.R. Pearkes Building 101 Colonel By Ottawa, Ontario, Canada K1A 0K2

ANNEX B BASIS OF PAYMENT

All Inclusive rates or prices include Overhead and Profit.

1. LABOUR

For the professional services detailed at Annex A, Statement of Requirement, the Contractor will be paid the following Firm, All-Inclusive Hourly Rates, applicable taxes extra:

1.1 Integration and Training Development	Unit of	Estimated	Firm, All-Inclusive	
Category of Work	Measure	Level of Effort	Hourly Rate	Sub-Total
Project Manager	hours		\$	\$
ILS Manager	hours		\$	\$
Training Developer	hours		\$	\$
Training Instructor	hours		\$	\$

Total Estimated Cost to a Limitation of Expenditure: \$

1.2 Training

For the delivery of training and associated documentation, the Contractor will be paid the following Firm, All-Inclusive Unit Price per Session (of 20 individuals), travel and living expenses and applicable taxes extra:

	Unit of	Firm, All-Inclusive		
Category of Work	Measure	Quantity	Unit Price	Total
ICT1 - Operator	session	1	\$	\$
ICT1 - Maintainer	session	1	\$	\$
ICT2 - Operator	session	1	\$	\$
ICT2 - Maintainer	session	1	\$	\$
Steady State	session	1	\$	\$

Total Firm Price: \$

2. DIRECT COSTS

2.1 Equipment

The Contractor will be paid the following Firm Unit Prices, applicable taxes extra, for the following goods:

Description	Unit of Measure	Quantity	Firm Unit Price	Total
Base Unit Chemical Detection &				
Identification System including Software	each	32	\$	\$
Optional Base Chemical Detection &				
Identification System including Software	each	12	\$	\$

Total Firm Price: \$

Public Services and Procurement Canada (PSPC)

2. DIRECT COSTS (Cont'd)

2.2 Spare and Replacement Parts

A. Goods - The Contractor will be paid the following Firm Unit Prices, applicable taxes extra, for the Spare and Replacement Parts:

B. Services - The Contractor will be paid the following firm, All-Inclusive Fixed Fee per Repair of the Spare and Replacement Parts listed below, applicable taxes extra:

Unit of Measure	Firm Unit Price	All-Inclusive Fixed Fee per Repair
each	\$	\$

A. Total Estimated Cost to a Limitation of Expenditure: \$

B. Total Estimated Cost to a Limitation of Expenditure: \$

2.3 Subcontractors

Description

Description

The Contractor will be paid its actual costs with no provision for markup for the following goods and services, applicable taxes extra:

Unit of Measure	Actual Cost	All-Inclusive Fixed Fee per Repair
	\$	\$
	\$	\$
	\$	\$
	\$	\$
	\$	\$

Total Estimated Cost to a Limitation of Expenditure: _\$

2.4 Travel & Living

The Contractor will be paid its actual costs with no provision for markup for the following goods and services, applicable taxes extra to a limitation of expenditure of:

\$

Total Contract Cost to a Limitation of	
Expenditure:	

\$

applicable taxes extra

The following Annexes are appended to this bid solicitation package and form part of this document:

ANNEX C SECURITY REQUIREMENTS CHECK LIST

ANNEX D INDUSTRIAL AND TECHNOLOGICAL BENEFITS (ITB) VALUE PROPOSITION TERMS AND CONDITIONS