

**RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:**

**Bid Receiving - PWGSC / Réception des
soumissions - TPSGC**
Place du Portage, Phase III
Core 0A1/Noyau 0A1
11 Laurier St./11, rue Laurier
Gatineau
Québec
K1A 0S5
Bid Fax: (819) 997-9776

**REQUEST FOR PROPOSAL
DEMANDE DE PROPOSITION**

**Proposal To: Public Works and Government
Services Canada**

We hereby offer to sell to Her Majesty the Queen in right of Canada, in accordance with the terms and conditions set out herein, referred to herein or attached hereto, the goods, services, and construction listed herein and on any attached sheets at the price(s) set out therefor.

**Proposition aux: Travaux Publics et Services
Gouvernementaux Canada**

Nous offrons par la présente de vendre à Sa Majesté la Reine du chef du Canada, aux conditions énoncées ou incluses par référence dans la présente et aux annexes ci-jointes, les biens, services et construction énumérés ici sur toute feuille ci-annexée, au(x) prix indiqué(s).

Comments - Commentaires

| | |
|--|--|
| Title - Sujet ICEMS 2 APPLICATION DEVELOPMENT | |
| Solicitation No. - N° de l'invitation G7421-090186/C | Date 2014-12-04 |
| Client Reference No. - N° de référence du client G7421-090186 | |
| GETS Reference No. - N° de référence de SEAG PW-\$\$XL-116-28251 | |
| File No. - N° de dossier 116xl.G7421-090186 | CCC No./N° CCC - FMS No./N° VME |
| Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2015-01-14 | |
| Time Zone Fuseau horaire Eastern Standard Time EST | |
| F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input type="checkbox"/> Other-Autre: <input type="checkbox"/> | |
| Address Enquiries to: - Adresser toutes questions à: Yang, Annie | Buyer Id - Id de l'acheteur 116xl |
| Telephone No. - N° de téléphone (819) 956-1560 () | FAX No. - N° de FAX (819) 953-3703 |
| Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: EMPLOYMENT AND SOCIAL DEVELOPMENT CANADA 140 PROMENADE DU PORTAGE GATINEAU QC J8X 4B6 CANADA | |

Instructions: See Herein

Instructions: Voir aux présentes

Vendor/Firm Name and Address

**Raison sociale et adresse du
fournisseur/de l'entrepreneur**

Issuing Office - Bureau de distribution

Shared Systems Division (XL)/Division des systèmes
partagés (XL)
4C1, Place du Portage Phase III
11 Laurier St./11, rue Laurier
Gatineau
Québec
K1A 0S5

| | |
|--|--|
| Delivery Required - Livraison exigée See Herein | Delivery Offered - Livraison proposée |
| Vendor/Firm Name and Address Raison sociale et adresse du fournisseur/de l'entrepreneur | |
| Telephone No. - N° de téléphone Facsimile No. - N° de télécopieur | |
| Name and title of person authorized to sign on behalf of Vendor/Firm (type or print) Nom et titre de la personne autorisée à signer au nom du fournisseur/ de l'entrepreneur (taper ou écrire en caractères d'imprimerie) | |
| Signature | Date |

Solicitation No. - N° de l'invitation

G7421-090186/C

Amd. No. - N° de la modif.

Buyer ID - Id de l'acheteur

116xl

Client Ref. No. - N° de réf. du client

G7421-090186

File No. - N° du dossier

116xIG7421-090186

CCC No./N° CCC - FMS No/ N° VME

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BID SOLICITATION
INTERPROVINCIAL COMPUTERIZED EXAMINATION MANAGEMENT
SYSTEM 2 (ICEMS 2)
FOR
EMPLOYMENT AND SOCIAL DEVELOPMENT CANADA (ESDC)

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List of Annexes to the Resulting Contract:

Annex A Statement of Work
Annex B Pricing Tables
Annex C Security Requirements Check List
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List of Attachments to Part 3 (Bid Preparation Instructions):

Attachment 3.1 - ICEMS 2 Procurement Client Reference Questions

Forms:

Form 1 - Bid Submission Form
Form 2 - Bidder Response Form

BID SOLICITATION FOR
INTERPROVINCIAL COMPUTERIZED EXAMINATION MANAGEMENT
SYSTEM 2 (ICEMS 2)
FOR
EMPLOYMENT AND SOCIAL DEVELOPMENT CANADA (ESDC)

PART 1 - GENERAL INFORMATION

1.1 Introduction

The bid solicitation and resulting contract document is divided into seven parts plus annexes and attachments as follows:

- Part 1** General Information: provides a general description of the requirement;
- Part 2** Bidder Instructions: provides the instructions, clauses and conditions applicable to the bid solicitation;
- Part 3** Bid Preparation Instructions: provides bidders with instructions on how to prepare their bid;
- Part 4** Evaluation Procedures and Basis of Selection: indicates how the evaluation will be conducted, the evaluation criteria that must be addressed in the bid, if applicable, and the basis of selection;
- Part 5** Certifications: includes the certifications to be provided;
- Part 6** Security, Financial and Other Requirements: includes specific requirements that must be addressed by bidders; and
- Part 7** Resulting Contract Clauses: includes the clauses and conditions that will apply to any resulting contract.

The annexes include the Statement of Work, the Pricing Tables and any other annexes.

1.2 Summary

This bid solicitation is being issued to satisfy the requirement of Employment and Social Development Canada (ESDC) (the "**Client**") for the development and hosting of the Interprovincial Computerized Examination Management System 2 (ICEMS 2), including planning, designing, developing, testing, implementing, hosting, enhancing, maintaining and supporting the system. It is intended to result in the award of a contract for an initial Contract Period of approximately 12 months, plus 9 one-year irrevocable options allowing Canada to extend the term of the contract. The development and hosting of the ICEMS 2 must be performed at the Contractor's or a third party (sub-contractor's) secure location.

Bidders must provide a list of names, or other related information as needed, pursuant to section 01 of Standard Instructions 2003.

There is a security requirement associated with this requirement. For additional information, see Part 6 - Security, Financial and Other Requirements, and Part 7 - Resulting Contract Clauses. Bidders should consult the "Security Requirements on PWGSC Bid Solicitations - Instructions for Bidders" (<http://tpsgc-pwgsc.gc.ca/app-acq/lc-pl/lc-pl-eng.html#a31>) document on the Departmental Standard Procurement Documents Website.

For services requirements, Bidders in receipt of a pension or a lump sum payment must provide the required information as detailed in article 3 of Part 2 of the bid solicitation.

The requirement is subject to the provisions of the World Trade Organization *Agreement on Government Procurement* (WTO-AGP), the *North American Free Trade Agreement* (NAFTA), the *Canada-Chile Free Trade Agreement* (CCFTA), the *Canada-Columbia Free Trade Agreement* (CCoFTA), the

Canada-Panama Free Trade Agreement (CPanFTA) if it is in force, and the *Agreement on Internal Trade* (AIT).

1.3 Debriefings

Bidders may request a debriefing on the results of the bid solicitation process. Bidders should make the request to the Contracting Authority within 15 working days of receipt of the result of the bid process. The debriefing may be provided in writing, by telephone or in person.

PART 2 - BIDDER INSTRUCTIONS

2.1 Standard Instructions, Clauses and Conditions

- (a) All instructions, clauses and conditions identified in the bid solicitation by number, date and title are set out in the Standard Acquisition Clauses and Conditions Manual issued by Public Works and Government Services Canada (PWGSC).
- (b) Bidders who submit a bid agree to be bound by the instructions, clauses and conditions of the bid solicitation and accept the clauses and conditions of the resulting contract.
- (c) The 2003 (2014-06-26) Standard Instructions - Goods or Services - Competitive Requirements are incorporated by reference into and form part of the bid solicitation. If there is a conflict between the provisions of 2003 and this document, this document prevails.
- (d) Subsection 5.4 of Standard Instructions - Goods or Services - Competitive Requirements 2003 is amended as follows:
 - (i) Delete: sixty (60) days
 - (ii) Insert: one hundred and eighty (180) days

2.2 Submission of Bids

- (a) Bids must be submitted only to Public Works and Government Services Canada Bid Receiving Unit by the date, time and place indicated on page 1 of the bid solicitation.
- (b) Due to the nature of the bid solicitation, bids transmitted by facsimile or electronic mail to Public Works and Government Services Canada will not be accepted.

2.3 Former Public Servant

- (a) Contracts awarded to former public servants (FPS) in receipt of a pension or of a lump sum payment must bear the closest public scrutiny, and reflect fairness in the spending of public funds. In order to comply with Treasury Board policies and directives on contracts awarded to FPS, bidders must provide the information required below before contract award. If the answer to the questions and, as applicable the information required have not been received by the time the evaluation of bids is completed, Canada will inform the Bidder of a time frame within which to provide the information. Failure to comply with Canada's request and meet the requirement within the prescribed time frame will render the bid non-responsive.

(b) Definitions

For the purposes of this clause, "former public servant" is any former member of a department as defined in the [Financial Administration Act](#), R.S., 1985, c. F-11, a former member of the Canadian Armed Forces or a former member of the Royal Canadian Mounted Police. A former public servant may be:

- (i) an individual;
- (ii) an individual who has incorporated;
- (iii) a partnership made of former public servants; or
- (iv) a sole proprietorship or entity where the affected individual has a controlling or major interest in the entity.

"lump sum payment period" means the period measured in weeks of salary, for which payment has been made to facilitate the transition to retirement or to other employment as a result of the implementation of various programs to reduce the size of the Public Service. The lump sum payment period does not include the period of severance pay, which is measured in a like manner.

"pension" means a pension or annual allowance paid under the [Public Service Superannuation Act](#) (PSSA), R.S., 1985, c.P-36, and any increases paid pursuant to the [Supplementary Retirement Benefits Act](#), R.S., 1985, c.S-24 as it affects the PSSA. It does not include pensions payable pursuant to the [Canadian Forces Superannuation Act](#), R.S., 1985, c.C-17, the [Defence Services Pension Continuation Act](#), 1970, c.D-3, the [Royal Canadian Mounted Police Pension Continuation Act](#), 1970, c.R-10, and the [Royal Canadian Mounted Police Superannuation Act](#), R.S., 1985, c.R-11, the [Members of Parliament Retiring Allowances Act](#), R.S., 1985, c.M-5, and that portion of pension payable to the [Canada Pension Plan Act](#), R.S., 1985, .C-8.

(c) Former Public Servant in Receipt of a Pension

As per the above definitions, is the Bidder a FPS in receipt of a pension? **Yes () No ()**

If so, the Bidder must provide the following information, for all FPS in receipt of a pension, as applicable:

- (i) name of former public servant;
- (ii) date of termination of employment or retirement from the Public Service.

By providing this information, Bidders agree that the successful Bidder's status, with respect to being a former public servant in receipt of a pension, will be reported on departmental websites as part of the published proactive disclosure reports in accordance with [Contracting Policy Notice](#): 2012-2 and the [Guidelines on the Proactive Disclosure of Contracts](#).

(d) Work Force Adjustment Directive

Is the Bidder a FPS who received a lump sum payment pursuant to the terms of the Work Force Adjustment Directive? **Yes () No ()**

If so, the Bidder must provide the following information:

- (i) name of former public servant;
- (ii) conditions of the lump sum payment incentive;
- (iii) date of termination of employment;
- (iv) amount of lump sum payment;
- (v) rate of pay on which lump sum payment is based;
- (vi) period of lump sum payment including start date, end date and number of weeks;
- (vii) number and amount (professional fees) of other contracts subject to the restrictions of a work force adjustment program.

For all contracts awarded during the lump sum payment period, the total amount of fees that may be paid to a FPS who received a lump sum payment is \$5,000, including Applicable Taxes.

2.4 Enquiries - Bid Solicitation

- (a) All enquiries must be submitted in writing to the Contracting Authority no later than 10 calendar days before the bid closing date. Enquiries received after that time may not be answered.
- (b) Bidders should reference as accurately as possible the numbered item of the bid solicitation to which the enquiry relates. Care should be taken by bidders to explain each question in sufficient detail in order to enable Canada to provide an accurate answer. Technical enquiries that are of a "proprietary" nature must be clearly marked "proprietary" at each relevant item. Items identified as proprietary will be treated as such except where Canada determines that the enquiry is not of a proprietary nature. Canada may edit the questions or may request that the Bidder do so, so that the proprietary nature of the question is eliminated, and the enquiry can be answered with copies to all bidders. Enquiries not submitted in a form that can be distributed to all bidders may not be answered by Canada.

2.5 Applicable Laws

Any resulting contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in Ontario, Canada.

Note to Bidders: A bidder may, at its discretion, substitute the applicable laws of a Canadian province or territory of their choice without affecting the validity of its bid, by deleting the name of the Canadian province or territory specified and inserting the name of the Canadian province or territory of its choice. If no change is made, it acknowledges that the applicable laws specified are acceptable to the Bidder. *Bidders are requested to indicate the Canadian province or territory they wish to apply to any resulting contract in their Bid Submission Form.*

2.6 Improvement of Requirement During Solicitation Period

Should bidders consider that the specifications or Statement of Work contained in the bid solicitation could be improved technically or technologically, bidders are invited to make suggestions, in writing, to the Contracting Authority named in the bid solicitation. Bidders must clearly outline the suggested improvement as well as the reasons for the suggestion. Suggestions that do not restrict the level of competition nor favour a particular bidder will be given consideration provided they are submitted to the Contracting Authority in accordance with the article entitled "Enquiries - Bid Solicitation". Canada will have the right to accept or reject any or all suggestions.

2.7 Basis for Canada's Ownership of Intellectual Property

Employment and Social Development Canada has determined that any intellectual property arising from the performance of the Work under the Contract will belong to Canada, on the following grounds:

statutes, regulations or previous obligations of Canada to a third party or parties preclude contractor ownership of the Intellectual Property Rights in Foreground Information

PART 3 - BID PREPARATION INSTRUCTIONS

3.1 Bid Preparation Instructions

- (a) Canada requests that bidders provide their bid in separately bound sections as follows:
- (i) Section I: Technical/Management Bid (8 hard copies) (*and 2 soft copies on USB Key*)
 - (ii) Section II: Financial Bid (2 hard copies) (*and 1 soft copy on USB Key*) (iii) Section III: Certifications (2 hard copies)
 - (iii) If there is a discrepancy between the wording of the soft copy and the hard copy, the wording of the hard copy will have priority over the wording of the soft copy.

Prices must appear in the financial bid only. No prices must be indicated in any other section of the bid.

- (b) **Format for Bid:** Canada requests that bidders follow the format instructions described below in the preparation of their bid:

- (i) use 8.5 x 11 inch (216 mm x 279 mm) paper;
- (ii) use a numbering system that corresponds to the bid solicitation;
- (iii) include a title page at the front of each volume of the bid that includes the title, date, bid solicitation number, bidder's name and address and contact information of its representative; and
- (iv) include a table of contents.

- (c) **Canada's Policy on Green Procurement:** In April 2006, Canada issued a policy directing federal departments and agencies to take the necessary steps to incorporate environmental considerations into the procurement process. See the Policy on Green Procurement (<http://www.tpsgc-pwgsc.gc.ca/ecologisation-greening/achats-procurement/politique-policy-eng.html>). To assist Canada in reaching its objectives, bidders should:

- (i) use paper containing fibre certified as originating from a sustainably-managed forest and/or containing a minimum of 30% recycled content; and
- (ii) use an environmentally-preferable format including black and white printing instead of colour printing, printing double sided/duplex, and using staples or clips instead of cerlox, duotangs or binders.

- (d) **Submission of Multiple Bids from a Bidding Group:**

- (i) One bidding group may participate in the submission of:
 - (A) one bid from any member of the bidding group on its own and one bid from any member of the bidding group submitted in a joint venture that includes at least one party that is not related to any of the members of the bidding group;
 - (B) two bids submitted in joint venture, each of which contains one or more members of the bidding group, where at least one of the joint ventures includes at least one party that is not related to any of the members of the bidding group; or

- (C) two bids, each of which is from a different member of the bidding group on its own.
- (ii) The submission of any bids from one or more members of the same bidding group, except as set out in (i), is not permitted in response to this bid solicitation. If the members of a bidding group participate in additional bids, Canada will choose in its discretion which bids to consider. If the members of a bidding group choose to participate in two bids, each bid must be a physically separate document, clearly marked as a separate bid. Each bid will be evaluated independently without regard to other bids submitted and, therefore, every bid must be complete.
- (iii) For the purposes of this article, **"bidding group"** means all entities (whether those entities include one or more natural persons, corporations, partnerships, limited liability partnerships, etc.) that are related to one another. Regardless of the jurisdiction where any of the entities concerned is incorporated or otherwise formed as a matter of law, entities are considered **"related"** for the purposes of this bid solicitation if:
- (A) they are the same legal entity (i.e., the same natural person, corporation, partnership, limited liability partnership, etc.);
- (B) they are "related persons" or "affiliated persons" according to the Canada Income Tax Act;
- (C) the entities have now or in the two years before bid closing had a fiduciary relationship with one another (either as a result of an agency arrangement or any other form of fiduciary relationship); or
- (D) the entities otherwise do not deal with one another at arm's length, or each of them does not deal at arm's length with the same third party.
- (e) **Joint Venture Experience:**

Where a joint venture bidder wants to rely on the experience of its members, except where expressly provided otherwise, at least one member of a joint venture Bidder must meet any given mandatory requirement of this bid solicitation. Joint venture members cannot pool their abilities to satisfy a single mandatory requirement of this bid solicitation. Wherever substantiation of a mandatory requirement is required, the Bidder is requested to indicate which joint venture member satisfies the requirement. Any Bidder with questions regarding the way in which a joint venture bid will be evaluated should raise such questions through the Enquiries process as early as possible during the bid solicitation period.

Example: A bidder is a joint venture consisting of members X, Y and Z. If a bid solicitation requires: (a) that the bidder have 3 years of experience providing maintenance service, and (b) that the bidder have 2 years of experience integrating hardware with complex networks, then each of these two requirements can be met by a different member of the joint venture. However, for a single requirement, such as the requirement for 3 years of experience providing maintenance services, the bidder cannot include that each of members X, Y and Z has one year of experience, totaling 3 years. Such a response would be declared non-responsive.

3.2 Section I: Technical / Management Bid

The technical/management bid consists of the following:

- (a) **Bid Submission Form:** Bidders are requested to include the Bid Submission Form - Form 1 with their bids. It provides a common form in which bidders can provide information required

for evaluation and contract award, such as a contact name, the Bidder's Procurement Business Number, etc. Using the form to provide this information is not mandatory, but it is recommended. If Canada determines that the information required by the Bid Submission Form is incomplete or requires correction, Canada will provide the Bidder with an opportunity to do so.

- (b) **Security, Financial & Other Requirements:** Bidders are requested to submit the following security information for each of the proposed resources for IT Project Manager, Senior IT Architect, Senior Application Developer and Senior Business Analyst with their bids on or before the bid closing date:

| SECURITY INFORMATION | |
|---|--|
| Name of individual as it appears on security clearance application form | |
| Level of security clearance obtained | |
| Validity period of security clearance obtained | |
| Security Screening Certificate and Briefing Form file number | |

- (c) **Bidder Response Form:** The technical/management bid must substantiate the compliance of the Bidder and its proposed methodology and solution with the specific articles of Annex A (Statement of Work) identified in the Bidder Response Form – Form 2, which is the requested format for providing the substantiation. The Bidder Response Form is not required to address any parts of this bid solicitation not referenced in the form. The substantiation must not simply be a repetition of the requirement(s), but must explain and demonstrate how the Bidder will meet the requirements and carry out the required Work. Simply stating that the Bidder or its proposed solution or product complies is not sufficient. Where Canada determines that the substantiation is not complete, the Bidder will be considered non-responsive and disqualified. The substantiation may refer to additional documentation submitted with the bid - this information can be referenced in the "Reference" column of the Bidder Response Form, where bidders are requested to indicate where in the bid the reference material can be found, including the title of the document, and the page and paragraph numbers; where the reference is not sufficiently precise, Canada may request that the Bidder direct Canada to the appropriate location in the documentation.

References in a bid to additional information not submitted with the bid, such as, but not limited to:

- (i) website addresses where additional information can be found;
- (ii) technical manuals or brochures not submitted with the bid; and/or,
- (iii) existing standing offers, supply arrangements and contracts with the Government of Canada,

will not be considered and, therefore, references to them in response to any mandatory requirement may result in the bid being declared non-responsive.

Note to Bidders: MS Word version of Bidder Response Form is available upon request

- (d) **Executive Summary:** The Bidder must include an executive summary of the technical/management bid which should take no more than one page.
- (e) **Corporate Profile:** The Bidder is requested to provide a corporate profile, which should include an overview of the Bidder and any subcontractors, and/or authorized agents of the Bidder that would be involved in the performance of the Work on the Bidder's behalf. The Bidder is requested to provide a brief description of its size, corporate structure, years in business, business activities, major customers, number of employees and their geographic presence. This information is requested for information purposes only and will not be evaluated. The corporate profile should take no more than one page.
- (f) **Résumés for Proposed Resources:** The technical/management bid must include 1 résumé per category for IT Project Manager, Senior IT Architect, Senior Application Developer and Senior Business Analyst, that demonstrate that each proposed individual meets the qualification requirements described in Annex A, Section 7, Required Contractor Staffing Resources (including any educational requirements, work experience requirements, professional designation or membership requirements, and other requirements in the Bidder Response Form). With respect to résumés and resources:
- (i) Proposed resources may be employees of the Bidder or employees of a subcontractor, or these individuals may be independent contractors to whom the Bidder would subcontract a portion of the Work (refer to Part 5, Certifications).
 - (ii) For educational requirements for a particular degree, designation or certificate, PWGSC will only consider educational programmes that were successfully completed by the resource by the time of bid closing.
 - (iii) For requirements relating to professional designation or membership, the resource must have the required designation or membership by the time of bid closing and must continue, where applicable, to be a member in good standing of the profession or membership throughout the evaluation period and Contract Period. Where the designation or membership must be demonstrated through a certification, diploma or degree, such document must be current, valid and issued by the entity specified in this solicitation. If the entity is not specified, the issuer must be an accredited or otherwise recognized body, institution or entity.
 - (iv) For work experience, PWGSC will not consider experience gained as part of an educational programme, except for experience gained through a former co-operative programme at a post-secondary institution.
 - (v) For any requirements that specify a particular time period (e.g., 2 years) of work experience, PWGSC will disregard any information about experience if the individual's résumé does not include the relevant dates for the experience claimed (i.e., the start date and end date). PWGSC will evaluate only the duration that the resource actually worked on a project or projects (from his or her start date to end date), instead of the overall start and end date of a project or a combination of projects in which a resource has participated.
 - (vi) For work experience to be considered by PWGSC, the résumé must not simply indicate the title of the individual's position, but must demonstrate that the resource has the required work experience by explaining the responsibilities and work performed by the individual while in that position. In situations in which a proposed

resource worked at the same time on more than one project, only one project will be counted toward any requirements that relate to the individual's length of experience.

Only the résumés for IT Project Manager, Senior IT Architect, Senior Application Developer and Senior Business Analyst will be evaluated during the Technical Evaluation process.

(g) Description of Experience with Previous Similar Projects: The bid must include a description of at least 2 different previous similar projects as required in the Bidder Response Form that the Bidder has undertaken or completed by the bid closing date (if the bid includes descriptions of more than this number of projects, Canada will decide in its discretion which ones to evaluate). For this requirement:

- (i) The description of each similar project must, at a minimum, include the information required in the Bidder Response Form as well as the project scope, cost, timing (month-year to month-year) and work delivered. The Bidder must provide at least 1 customer reference for each project. For each customer reference, the Bidder must, at a minimum, provide the name and either the telephone number or e-mail address for a contact person.
- (ii) The project must have been undertaken or completed by the Bidder itself (and does not include the experience of any proposed subcontractor or any affiliate of the Bidder). However, several entities may combine their experience by submitting a bid as a joint venture; in that case, the bid can describe the previous experience of one or more joint venture members to meet the experience requirement - that is, one similar project could be described for one joint venture member and another different project could be described for another joint venture member, as long as the total number of projects is met (if two members of the joint venture worked on the same project, it will only be counted once).
- (iii) Projects considered "similar" to the Work to be performed under the resulting contract are defined in the Bidder Response Form.

(h) Customer Reference Contact Information:

- (i) The Bidder must provide customer references who must each confirm, if requested by PWGSC, the information set out in Attachment 3.1 ICEMS 2 Procurement Client Reference Questions.
- (ii) The form of question to be used to request confirmation from customer references is *set out in Attachment 3.1*.
- (iii) For each customer reference, the Bidder must, at a minimum, provide the name and either the telephone number or e-mail address for a contact person. If only the telephone number is provided, it will be used to call to request the e-mail address and the reference check will be done by e-mail.
- (iv) Bidders are also requested to include the title of the contact person. It is the sole responsibility of the Bidder to ensure that it provides a contact who is knowledgeable about the services the Bidder has provided to its customer and who is willing to act as a customer reference.
- (v) Crown references will be accepted.

3.3 Section II: Financial Bid

- (a) **Pricing:** Bidders must submit their financial bid in accordance with the Pricing Tables in Annex B. The total amount of Applicable Taxes must be shown separately. Unless otherwise indicated, bidders must include a single, firm, all-inclusive price quoted in Canadian dollars in each cell requiring an entry in the pricing tables.
- (b) **Variation in Professional Services Resource Rates By Time Period:** For any given resource category, where the financial tables provided by Canada allow different firm rates to be charged for a resource category during different time periods:
 - (i) the rate bid must not increase by more than 5% from one time period to the next, and
 - (ii) the rate bid for the same resource category during any subsequent time period must not be lower than the rate bid for the time period that includes the first month of the Initial Contract Period.
- (c) **Variation in Resource Rates By Level:** Where the financial tables provided by Canada allow different firm rates to be charged for different levels of experience within the same resource category and time period, for any such resource category and time period, the rate bid for senior level must be higher than that bid for non-senior level.
- (d) **All Costs to be Included:** The financial bid must include all costs for the requirement described in the bid solicitation for the entire Contract Period, including any option years. The identification of all necessary equipment, software, peripherals, cabling and components required to meet the requirements of the bid solicitation and the associated costs of these items is the sole responsibility of the Bidder.
- (e) **Blank Prices:** Bidders are requested to insert "\$0.00" for any item for which it does not intend to charge or for items that are already included in other prices set out in the tables. If the Bidder leaves any price blank, Canada will treat the price as "\$0.00" for evaluation purposes and may request that the Bidder confirm that the price is, in fact, \$0.00. No bidder will be permitted to add or change a price as part of this confirmation. Any bidder who does not confirm that the price for a blank item is \$0.00 will be declared non-responsive.

3.4 Section III: Certifications

Bidders must submit the certifications required under Part 5.

3.5 Section IV: Additional Information

(a) Bidder's Proposed Site or Premises Requiring Safeguard Measures

As indicated in Part 6 under Security Requirement, the Bidder **is to** provide the required information below, on the Bidder's proposed site or premises for which safeguard measures are required for Work Performance.

Address:

Street Number / Street Name, Unit / Suite / Apartment Number

City, Province, Territory / State

Postal Code / Zip Code

Country

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

4.1 Evaluation Procedures

- (a) Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical/management and financial evaluation criteria. There are several steps in the evaluation process, which are described below. Even though the evaluation and selection will be conducted in steps, the fact that Canada has proceeded to a later step does not mean that Canada has conclusively determined that the Bidder has successfully passed all the previous steps. Canada may conduct steps of the evaluation in parallel.
- (b) An evaluation team composed of representatives of the Client and PWGSC will evaluate the bids on behalf of Canada. Canada may hire any independent consultant, or use any Government resources, to evaluate any bid. Not all members of the evaluation team will necessarily participate in all aspects of the evaluation.
- (c) In addition to any other time periods established in the bid solicitation:
 - (i) **Requests for Clarifications:** If Canada seeks clarification or verification from the Bidder about its bid, the Bidder will have 2 working days (or a longer period if specified in writing by the Contracting Authority) to provide the necessary information to Canada. Failure to meet this deadline will result in the bid being declared non-responsive.
 - (ii) **Requests for Interviews:** If Canada wishes to interview the Bidder and/or any or all of the resources proposed by the Bidder to fulfill the requirements of the bid solicitation, the Bidder will have 5 working days following notice by the Contracting Authority to make any necessary arrangements (at the Bidder's sole cost) for the interview to take place at PWGSC in Gatineau, Québec.
 - (iii) **Requests for Survey:** If Canada wishes to survey the Bidder's facilities, the Bidder must make its facilities available for this purpose within 3 working days of a request by the Contracting Authority.
 - (iv) **Extension of Time:** If additional time is required by the Bidder, the Contracting Authority may grant an extension in his or her sole discretion.
 - (v) **Requests for Further Information:** If Canada requires additional information in order to do any of the following pursuant to the Section entitled "Conduct of Evaluation" in 2003, Standard Instructions - Goods or Services - Competitive Requirements:
 - (A) verify any or all information provided by the Bidder in its bid; or
 - (B) contact any or all references supplied by the Bidder (e.g., references named in the résumés of individual resources) to verify and validate any information submitted by the Bidder,

the Bidder must provide the information requested by Canada within 2 working days of a request by the Contracting Authority.

4.2 Technical/Management Evaluation

(a) Mandatory Technical/Management Criteria:

Each bid will be reviewed for compliance with the mandatory requirements of the bid solicitation. All elements of the bid solicitation that are identified specifically with the words "must" or "mandatory" are mandatory requirements. Bids that do not comply with each and every mandatory requirement will be considered non-responsive and be disqualified. Mandatory evaluation criteria include those listed in the Bidder Response Form.

(b) Point-Rated Technical/Management Criteria:

Each bid will be rated by assigning a score to the rated requirements, which are identified in the bid solicitation by the word "rated" or by reference to a score. Bidders who fail to submit complete bids with all the information requested by this bid solicitation will be rated accordingly. Point-rated evaluation criteria are described in the Bidder Response Form.

(c) Reference Checks:

- (i) For reference checks, Canada will conduct the reference check in writing by e-mail. Canada will send all e-mail reference check requests to contacts supplied by all the Bidders on the same day using the e-mail address provided in the bid. Canada will not award any points unless the response is received within 5 working days of the date that Canada's e-mail was sent.
- (ii) On the third working day after sending out the reference check request, if Canada has not received a response, Canada will notify the Bidder by e-mail, to allow the Bidder to contact its reference directly to ensure that it responds to Canada within 5 working days. If the individual named by a Bidder is unavailable when required during the evaluation period, the Bidder may provide the name and e-mail address of an alternate contact person from the same customer. Bidders will only be provided with this opportunity once for each customer, and only if the originally named individual is unavailable to respond (i.e., the Bidder will not be provided with an opportunity to submit the name of an alternate contact person if the original contact person indicates that he or she is unwilling or unable to respond). *The Bidder will have 24 hours to submit the name of a new contact. That contact will again be given 5 working days to respond once Canada sends its reference check request.*
- (iii) Wherever information provided by a reference differs from the information supplied by the Bidder, the information supplied by the reference will be the information evaluated.
- (iv) Points will not be allocated and/or a bidder will not meet the mandatory experience requirement (as applicable) if (1) the reference customer states he or she is unable or unwilling to provide the information requested, or (2) the customer reference is not a customer of the Bidder itself (for example, the customer cannot be the customer of an affiliate of the Bidder instead of being a customer of the Bidder itself). Nor will points be allocated or a mandatory met if the customer is itself an affiliate or other entity that does not deal at arm's length with the Bidder.
- (v) Whether or not to conduct reference checks is discretionary. However, if PWGSC chooses to conduct reference checks for any given rated or mandatory requirement, it will check the references for that requirement for all bidders who have not, at that point, been found non-responsive.

- (d) **Number of Resources Evaluated:** Canada will choose, in its discretion, how many resources to evaluate and at what level. The number and level of resources evaluated will be the same for all Bidders. Regardless of which resources are evaluated, all of the winning

bidder's proposed resources must be available to fulfill the requirements of the Contract after award. Additional resources will be assessed after contract award once specific tasks are requested of the Contractor. After contract award, the Task Authorization process will be in accordance with Part 7 - Resulting Contract Clauses, the Article titled "Task Authorization". When a Task Authorization Form (TA Form) is issued, the Contractor will be requested to propose a resource to satisfy the specific requirement based on the TA Form's Statement of Work. The proposed resource will then be assessed against the criteria identified in the Contract's Statement of Work.

4.3 Financial Evaluation

- (a) The financial evaluation will be conducted by calculating the Total Bid Price using the Pricing Tables in Annex B Pricing Tables, completed by the bidders.
- (b) The price of the bid will be evaluated in Canadian dollars, the Goods and Services Tax or the Harmonized Sales Tax excluded, FOB destination, Canadian customs duties and excise taxes included.

- (c) **Formulae in Pricing Tables**

If the pricing tables provided to bidders include any formulae, Canada may re-input the prices provided by bidders into a fresh table, if Canada believes that the formulae may no longer be functioning properly in the version submitted by a bidder.

- (d) **Substantiation of Professional Services Rates**

- (e) In Canada's experience, bidders will from time to time propose rates at the time of bidding for one or more categories of resources that they later refuse to honour, on the basis that these rates do not allow them to recover their own costs and/or make a profit. When evaluating the rates for professional services bid, Canada may, but will have no obligation to, require price support in accordance with this Article. If Canada requests price support, it will be requested from all other- wise responsive bidders who have proposed a rate that is at least 20% lower than the median rate bid by all responsive bidders for the relevant resource category or categories. If Canada requests price support, the following information is required:
 - (i) an invoice (referencing a contract serial number or other unique contract identifier) that shows that the Bidder has recently provided and invoiced another customer (with whom the Bidder deals at arm's length) for services performed for that customer similar to the services that would be provided in the relevant resource category, where those services were provided for at least three months within the twelve months before the bid solicitation closing date, and the fees charged are equal to or less than the rate offered to Canada ;
 - (ii) in relation to the invoice in (i), evidence from the bidder's customer that the services identified in the invoice include at least 50% of the tasks listed in the Statement of Work for the category of resource being assessed for an unreasonably low rate. This evidence must consist of either a copy of the contract (which must describe the services to be provided and demonstrate that at least 50% of the tasks to be performed are the same as those to be performed under the Statement of Work in this bid solicitation) or the customer's signed certification that the services subject to the charges in the invoice included at least 50% of the same tasks to be performed under the Statement of Work in this bid solicitation ;
 - (iii) in respect of each contract for which an invoice is submitted as substantiation, a résumé for the resource that provided the services under that contract that demonstrates that, in relation to the resource category for which the rates are being

substantiated, the resource would meet the mandatory requirements and achieve any required pass mark for any rated criteria; and

- (iv) the name, telephone number and, if available, e-mail address of a contact person at the customer who received each invoice submitted under (i), so that Canada may verify any information provided by the Bidder. .

Once Canada requests substantiation of the rates bid for any resource category, it is the sole responsibility of the Bidder to submit information (as described above and as otherwise may be requested by Canada, including information that would allow Canada to verify information with the resource proposed) that will allow Canada to determine whether it can rely, with confidence, on the Bidder's ability to provide the required services at the rates bid. If Canada determines that the information provided by the Bidder does not adequately substantiate the unreasonably low rates, the bid will be declared non-responsive.

4.4 Basis of Selection

- (a) To be declared responsive, a bid must:
 - (i) comply with all the requirements of the bid solicitation; and
 - (ii) meet all mandatory criteria.
 - (iii) obtain the required minimum of 25 points overall for the technical/management evaluation criteria which are subject to point rating. The rating is performed on a scale of 100 points.

Bids not meeting (i) or (ii) or (iii) will be declared non-responsive.

- (b) The evaluation will be based on the highest responsive combined rating of technical /management merit and price. The ratio will be 60% for the technical/management merit and 40% for the price.
- (c) To establish the technical/management merit score, the overall technical/management score for each responsive bid will be determined as follows: total number of points obtained / maximum number points available multiplied by the ratio of 60%.
- (d) To establish the pricing score, each responsive bid will be prorated against the lowest evaluated price and the ratio of 40%.
- (e) For each responsive bid, the technical/management merit score and the pricing score will be added to determine its combined rating.
- (f) Neither the responsive bid obtaining the highest technical/management score nor the one with the lowest evaluated price will necessarily be accepted. The responsive bid with the highest combined rating of technical/management merit and price will be recommended for award of a contract.

The table below illustrates an example where all three bids are responsive and the selection of the contractor is determined by a 60/40 ratio of technical/management merit and price, respectively. The total available points equals 100 and the lowest evaluated price is \$45,000 (45).

Basis of Selection - Highest Combined Rating Technical/Management Merit (60%) and Price (40%)

| | Bidder 1 | Bidder 2 | Bidder 3 |
|---|---------------------------|---------------------------|---------------------------|
| Overall Technical/Management Score | 85/100 | 66/100 | 68/100 |
| Bid Evaluated Price Calculations | \$55,000.00 | \$50,000.00 | \$45,000.00 |
| Technical/Management Merit Score | $85/100 \times 60 = 51$ | $66/100 \times 60 = 39.6$ | $68/100 \times 60 = 40.8$ |
| Pricing Score | $45/55 \times 40 = 32.73$ | $45/50 \times 40 = 36$ | $45/45 \times 40 = 40$ |
| Combined Rating | 83.73 | 75.6 | 80.8 |
| Rank | 1st | 3rd | 2nd |

- (g) Bidders should note that all contract awards are subject to Canada's internal approvals process, which includes a requirement to approve funding in the amount of any proposed contract. Despite the fact that the Bidder may have been recommended for contract award, a contract will only be awarded if internal approval is granted according to Canada's internal policies. If approval is not granted, no contract will be awarded.
- (h) If more than one bidder is ranked first because of identical overall scores, then the bidder with the best financial score will become the top-ranked bidder.

PART 5 - CERTIFICATIONS

Bidders must provide the required certifications to be awarded a contract. The certifications provided by bidders to Canada are subject to verification by Canada at all times. Canada will declare a bid non-responsive or will declare a contractor in default if any certification made by the Bidder is found to be untrue, whether made knowingly or unknowingly, during the bid evaluation period or during the contract period.

The Contracting Authority will have the right to ask for additional information to verify bidders' certifications. Failure to comply with this request will also render the bid non-responsive or will constitute a default under the Contract.

5.1 Mandatory Certifications Required Precedent to Contract Award

(a) Code of Conduct and Certifications - Related Documentation

By submitting a bid, the Bidder certifies that the Bidder and its affiliates are in compliance with the provisions as stated in Section 01 Code of Conduct and Certifications - Bid of Standard Instructions 2003. The related documentation therein required will assist Canada in confirming that the certifications are true.

(b) Federal Contractors Program for Employment Equity - Bid Certification

By submitting a bid, the Bidder certifies that the Bidder, and any of the Bidder's members if the Bidder is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "FCP Limited Eligibility to Bid" list

(http://www.labour.gc.ca/eng/standards_equity/eq/emp/fcp/list/inelig.shtml) available from Employment and Social Development Canada (ESDC) - Labour's website.

Canada will have the right to declare a bid non-responsive if the Bidder, or any member of the Bidder if the Bidder is a Joint Venture, appears on the "FCP Limited Eligibility to Bid" list at the time of contract award.

Canada will also have the right to terminate the Contract for default if a Contractor, or any member of the Contractor if the Contractor is a Joint Venture, appears on the "FCP Limited Eligibility to Bid" list during the period of the Contract.

The Bidder must provide the Contracting Authority with a completed Form in Annex, Federal Contractors Program for Employment Equity - Certification, before contract award. If the Bidder is a Joint Venture, the Bidder must provide the Contracting Authority with a completed annex Federal Contractors Program for Employment Equity - Certification, for each member of the Joint Venture.

5.2 Additional Certifications Precedent to Contract Award

The certifications listed below should be completed and submitted with the bid, but may be submitted afterwards. If any of these required certifications is not completed and submitted as requested, the Contracting Authority will inform the Bidder of a time frame within which to provide the information. Failure to comply with the request of the Contracting Authority and to provide the certifications within the time frame provided will render the bid non-responsive.

(a) Professional Services Resources

- (i) By submitting a bid, the Bidder certifies that, if it is awarded a contract as a result of the bid solicitation, every individual proposed in its bid will be available to perform the

Work as required by Canada's representatives and at the time specified in the bid solicitation or agreed to with Canada's representatives.

- (ii) By submitting a bid, the Bidder certifies that all the information provided in the résumés and supporting material submitted with its bid, particularly the information pertaining to education, achievements, experience and work history, has been verified by the Bidder to be true and accurate. Furthermore, the Bidder warrants that every individual proposed by the Bidder for the requirement is capable of performing the Work described in the resulting Contract.
- (iii) If the Bidder is unable to provide the services of an individual named in its bid due to the death, sickness, extended leave (including parental leave or disability leave), retirement, resignation or dismissal for cause of that individual, within five business days of Canada's knowledge of the unavailability of the individual the Bidder may propose a substitute to the Contracting Authority, providing:
 - (A) the reason for the substitution with substantiating documentation acceptable to the Contracting Authority;
 - (B) the name, qualifications and experience of a proposed replacement immediately available for work; and
 - (C) proof that the proposed replacement has the required security clearance granted by Canada, if applicable.

No more than one substitute will be considered for any given individual proposed in the bid. In response to the Bidder's proposed substitution, the Contracting Authority may elect in its sole discretion either to:

- (A) set aside the bid and give it no further consideration; or
- (B) evaluate the replacement in accordance with the requirements of the bid solicitation in the place of the original resource as if that replacement had originally been proposed in the bid, with any necessary adjustments being made to the evaluation results, including the rank of the bid vis-à-vis other bids.

If no substitute is proposed the Contracting Authority will set aside the bid and give it no further consideration.

- (iv) If the Bidder has proposed any individual who is not an employee of the Bidder, by submitting a bid, the Bidder certifies that it has the permission from that individual to propose his/her services in relation to the Work to be performed and to submit his/her résumé to Canada. The Bidder must, upon request from the Contracting Authority, provide a written confirmation, signed by the individual, of the permission given to the Bidder and of his/her availability. Failure to comply with the request may result in the bid being declared non-responsive.

(b) Certification of Language - *English Essential*

By submitting a bid, the Bidder certifies that, should it be awarded a contract as result of the bid solicitation, every individual proposed in its bid will be fluent in English. The individual(s) proposed must be able to communicate orally and in writing in English without any assistance and with minimal errors.

(c) Education and Experience

SACC Manual Clause A3010T (2010-08-16) Education and Experience

(d) Bidder Certifies that All Equipment and Third Party Software is “Off-the-Shelf”

Any equipment and third party software bid to meet this requirement must be “off-the-shelf” (unless otherwise stated in this bid solicitation), meaning that each item of equipment and third party software is commercially available and requires no further research or development and is part of an existing product line with a field-proven operational history (that is, it has not simply been tested in a laboratory or experimental environment). If any of the equipment or third party software bid is a fully compatible extension of a field-proven product line, it must have been publicly announced on or before the bid closing date. By submitting a bid, the Bidder is certifying that all the equipment and third party software bid is off-the-shelf.

PART 6 - SECURITY, FINANCIAL AND OTHER REQUIREMENTS

6.1 Security Requirement

- (a) All the resources identified in Annex A Statement of Work will require access to classified or protected information, assets or sensitive work site(s).
- (b) Before award of a contract, the following conditions must be met:
 - (i) the Bidder must hold a valid organization security clearance as indicated in Part 7 - Resulting Contract Clauses;
 - (ii) the Bidder's proposed individuals for IT Project Manager, Senior IT Architect, Senior Application Developer and Senior Business Analyst positions must each meet the security requirement as indicated in Part 7 - Resulting Contract Clauses;
 - (iii) the Bidder must provide the name of all individuals proposed for IT Project Manager, Senior IT Architect, Senior Application Developer and Senior Business Analyst;
 - (iv) the Bidder's proposed location of work performance or document safeguarding must meet the security requirement as indicated in Part 7 - Resulting Contract Clauses; and
 - (v) the Bidder must provide the address(es) of proposed location(s) of work performance or document safeguarding as indicated in Part 3 - Section IV Additional Information.
- (c) All the other resources identified in Annex A Statement of Work must obtain the required clearance as indicated in Part 7 - Resulting Contract Clauses, before start of the Work under a Task Authorization.
- (d) Bidders are reminded to obtain the required security clearance promptly. Any delay in the award of a contract to allow the successful bidder to obtain the required clearance will be at the entire discretion of the Contracting Authority.
- (e) For additional information on security requirements, bidders should consult the "Security Requirements for PWGSC Bid Solicitations - Instructions to Bidders" document on the Departmental Standard Procurement Documents Website (<http://tpsgc-pwgsc.gc.ca/app-acq/lc-pl/lc-pl-eng.html#a31>).
- (f) In the case of a joint venture bidder, each member of the joint venture must meet the security requirements.

6.2 Financial Capability

- (a) SACC Manual clause A9033T (2012-07-16) Financial Capability; except that subsection 3 is deleted and replaced with the following: "If the Bidder is a subsidiary of another company, then any financial information required by the Contracting Authority in 1(a) to (f) must also be provided by each level of parent company, up to and including the ultimate parent company. The financial information of a parent company does not satisfy the requirement for the provision of the financial information of the Bidder; however, if the Bidder is a subsidiary of a company and, in the normal course of business, the required financial information is not generated separately for the subsidiary, the financial information of the parent company must be provided. If Canada determines that the Bidder is not financially capable but the parent company is, or if Canada is unable to perform a separate assessment of the Bidder's financial capability because its financial information has been combined with its parent's, Canada may, in its sole discretion, award the contract to the Bidder on the condition that one or more the parent companies grant a performance guarantee to Canada."

- (b) In the case of a joint venture bidder, each member of the joint venture must meet the financial capability requirements.

PART 7 - RESULTING CONTRACT CLAUSES

The following clauses apply to and form part of any contract resulting from the bid solicitation. Except where specifically set out in the bid solicitation, acceptance by the Bidder of all the clauses is a mandatory requirement of the bid solicitation. No modification or other terms and conditions included in a bid will apply to any resulting contract even if the bid is incorporated into that contract. Any bid that contains statements implying that the bid is conditional on modification of these clauses, or containing terms and conditions that purport to supersede these clauses, will be considered non-responsive. Bidders with concerns about these clauses should raise their concerns in accordance with the Enquiries provision of this bid solicitation. If additional legal issues are raised by a bid, Canada may address those issues in any resulting contract; if the resulting modifications are unacceptable to the Bidder, the Bidder may withdraw its bid.

7.1 Requirement

- (a) _____ (the "**Contractor**") agrees to supply to the Client the goods and services described in the Contract, including the Statement of Work, in accordance with, and at the prices set out in, the Contract. This includes to:
- (i) plan, design, develop, test and implement the Interprovincial Computerized Examination Management System 2 (ICEMS 2), including 12 months of Warranty, as described in the Contract, as and when requested by Canada;
 - (ii) provide and maintain ICEMS 2 IT hosting facilities, infrastructure technologies and supplies (as set out in the SOW) as well as provide ICEMS 2 hosting services as described in the Contract at the Contractor's or a third party (sub-contractor's) secure location, from acceptance of the Project Plan and ICEMS 2 systems and application architecture design by the Client until the end of the Initial Contract Period;
 - (iii) implement the Client owned hardware and software located in the IT hosting facility and replace such client owned hardware and software, as and when requested by Canada;
 - (iv) provide maintenance and support for Client owned hardware and software, as and when requested by Canada;
 - (v) provide maintenance and support services for ICEMS 2, as and when requested by Canada;
 - (vi) provide enhancements to ICEMS 2, as and when requested by Canada;
 - (vii) provide Transition In Services during the implementation of ICEMS 2 and Transition Out Services before Contract expires, as and when requested by Canada; and
 - (viii) provide third party application development and management tools specific for ICEMS 2, as and when requested by Canada.
- (b) **Client:** Under the Contract, the "**Client**" is Employment and Social Development Canada (ESDC) .
- (c) **Reorganization of Client:** The Contractor's obligation to perform the Work will not be affected by (and no additional fees will be payable as a result of) the renaming, reorganization, reconfiguration, or restructuring of any Client. The reorganization, reconfiguration and restructuring of the Client includes the privatization of the Client, its

merger with another entity, or its dissolution, where that dissolution is followed by the creation of another entity or entities with mandates similar to the original Client. In connection with any form of reorganization, Canada may designate another department or government body as the Contracting Authority or Technical Authority, as required to reflect the new roles and responsibilities associated with the reorganization.

- (d) **Defined Terms:** Words and expressions defined in the General Conditions or Supplemental General Conditions and used in the Contract have the meanings given to them in the General Conditions or Supplemental General Conditions.

7.2 Optional Goods and/or Services

- (a) The Contractor grants to Canada the irrevocable option to extend the term of the Contract by 9 additional one-year period(s) under the same terms and conditions. The Contractor agrees that, during the extended period of the Contract, it will be paid in accordance with the applicable provisions set out in the Basis of Payment.
- (b) The Contractor grants to Canada the irrevocable option(s) to extend the period for the provision and maintenance of ICEMS 2 IT hosting facilities, infrastructure technologies, supplies (as set out in the SOW) and hosting services under the same terms and conditions and at the prices stated in the Contract, by 9 additional 1-year periods, exercisable at any time during the Contract Period.
- (c) The options may only be exercised by the Contracting Authority by notice in writing and will be evidenced, for administrative purposes only, by a contract amendment. The Contracting Authority may exercise the option at any time before the expiry of the Contract by sending a written notice to the Contractor.

7.3 Task Authorization

- (a) **As-and-when-requested Task Authorizations:** The Work or a portion of the Work to be performed under the Contract will be on an "as-and-when-requested basis" using a Task Authorization ("TA"). The Work described in the TA must be in accordance with the scope of the Contract. The Contractor must not commence work until a validly issued TA has been issued by Canada and received by the Contractor. The Contractor acknowledges that any work performed before such issuance and receipt will be done at the Contractor's own risk.
- (b) **Assessment of Resources Proposed at TA Stage:** The process for the assessment of the additional resources and the approval of TA responses is described in detail in Appendix 1 to Annex A.
- (c) **Form and Content of Task Authorization:**
- (A) the task number;
 - (B) the date by which the Contractor's response must be received (which will appear in the draft Task Authorization, but not the issued Task Authorization);
 - (C) the details of any financial coding to be used;
 - (D) the categories of resources and the number required;
 - (E) a description of the work for the task outlining the activities to be performed and identifying any deliverables (such as reports);
 - (F) the start and completion dates;
 - (G) milestone dates for deliverables and payments (if applicable);

- (H) the number of person-days of effort required;
 - (I) whether the work requires on-site activities and the location;
 - (J) the language profile of the resources required;
 - (K) the level of security clearance required of resources;
 - (L) the price payable to the Contractor for performing the task, with an indication of whether it is a firm price or a maximum TA price (and, for maximum price task authorizations, the TA must indicate how the final amount payable will be determined; where the TA does not indicate how the final amount payable will be determined, the amount payable is the amount, up to the maximum, that the Contractor demonstrates was actually worked on the project, by submitting time sheets filled in at the time of the work by the individual resources to support the charges); and
 - (M) any other constraints that might affect the completion of the task.
- (d) **Contractor's Response to Draft Task Authorization:** The Contractor must provide the Technical Authority, within 2 working days of receiving the draft Task Authorization (or within any longer time period specified in the draft TA), the proposed total price for performing the task and a breakdown of that cost, established in accordance with the Basis of Payment specified in the Contract. The Contractor's quotation must be based on the rates set out in the Contract. The Contractor will not be paid for preparing or providing its response or for providing other information required to prepare and validly issue the TA.
- (e) **Task Authorization Limit and Authorities for Validly Issuing Task Authorizations:** To be validly issued, a TA must include the following signatures:
- (i) For any TA, inclusive of revisions, with a value less than or equal to \$50,000.00 (including Applicable Taxes), the TA must be signed by the Technical Authority; and
 - (ii) For any TA with a value greater than this amount, a TA must be signed by the Technical Authority and Contracting Authority.
- Any TA that does not bear the appropriate signature(s) is not validly issued by Canada. Any work performed by the Contractor without receiving a validly issued TA is done at the Contractor's own risk. If the Contractor receives a TA that is not appropriately signed, the Contractor must notify the Contracting Authority. By providing written notice to the Contractor, the Contracting Authority may suspend the Client's ability to issue TAs at any time, or reduce the dollar value threshold described in sub-article (i) above; any suspension or reduction notice is effective upon receipt.
- (f) **Consolidation of TAs for Administrative Purposes:** The Contract may be amended from time to time to reflect all validly issued Task Authorizations to date, to document the Work performed under those TAs for administrative purposes.
- (g) **Periodic Usage Reports**
- (i) The Contractor must compile and maintain records on its provision of services to the federal government under authorized Task Authorizations issued under the Contract.
 - (ii) The Contractor must provide this data in accordance with the reporting requirements detailed below. If some data is not available, the reason must be indicated. If services are not provided during a given period, the Contractor must still provide a "NIL" report.

- (iii) The data must be submitted on a quarterly basis to the Contracting Authority. From time to time, the Contracting Authority may also require an interim report during a reporting period.

The quarterly periods are defined as follows:

1st quarter: April 1 to June 30;
2nd quarter: July 1 to September 30;
3rd quarter: October 1 to December 31; and
4th quarter: January 1 to March 31.

- (iv) The data must be submitted to the Contracting Authority no later than 15 calendar days after the end of the reporting period.

- (v) Each report must contain the following information for each validly issued TA (as amended):

- (A) the authorized task number or task revision number(s), if applicable;
- (B) a title or a brief description of each authorized task;
- (C) the name, resource category and level of each resource involved in performing the TA, as applicable;
- (D) the total estimated cost specified in the authorized Task Authorization (TA) of each task, exclusive of Applicable Taxes;
- (E) the total amount, exclusive of Applicable Taxes, expended to date against each authorized task;
- (F) the start and completion date for each authorized task; and
- (G) the active status of each authorized task, as applicable (e.g., indicate whether work is in progress or if Canada has cancelled or suspended the TA, etc.).

Each report must also contain the following cumulative information for all the validly issued TAs (as amended):

- (H) the amount (exclusive of Applicable Taxes) specified in the contract (as last amended, as applicable) as Canada's total liability to the contractor for all authorized TAs; and
- (I) the total amount, exclusive of Applicable Taxes, expended to date against all validly issued TAs.

7.4 Standard Clauses and Conditions

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

(a) General Conditions:

- (i) 2035 (2014-06-26), General Conditions - Higher Complexity - Services, apply to and form part of the Contract.

(b) Supplemental General Conditions:

The following Supplemental General Conditions:

- (i) 4001 (2013-01-28), Supplemental General Conditions - Hardware Purchase, Lease and Maintenance;
- (ii) 4002 (2010-08-16), Supplemental General Conditions - Software Development or Modification Services;
 - Subsection 12(1) is amended as follows:
 - Delete: ninety (90) days
 - Insert: twelve (12) months;
- (iii) 4003 (2010-08-16), Supplemental General Conditions - Licensed Software;
- (iv) 4004 (2013-04-25), Supplemental General Conditions - Maintenance and Support Services for Licensed Software;
- (v) 4007 (2010-08-16), Supplemental General Conditions - Canada to Own Intellectual Property Rights in Foreground Information;

apply to and form part of the Contract.

7.5 Security Requirement

The following security requirement (SRCL and related clauses) applies and forms part of the Contract.

- (a) The Contractor must, at all times during the performance of the Contract, hold a valid Designated Organization Screening (DOS) with approved Document Safeguarding at the level of PROTECTED B, issued by the Canadian Industrial Security Directorate, Public Works and Government Services Canada.
- (b) The Contractor personnel requiring access to PROTECTED information, assets or work site(s) must EACH hold a valid RELIABILITY STATUS, granted or approved by the Canadian Industrial Security Directorate (CISD), Public Works and Government Services Canada (PWGSC).
- (c) The Contractor MUST NOT utilize its Information Technology systems to electronically process, produce or store PROTECTED information until the CISD/PWGSC has issued written approval. After approval has been granted or approved, these tasks may be performed at the level of PROTECTED B.
- (d) Subcontracts which contain security requirements are NOT to be awarded without the prior written permission of CISD/PWGSC.
- (e) The Contractor must comply with the provisions of the:
 - (i) Security Requirements Check List and security guide (if applicable), attached at Annex C;
 - (ii) Industrial Security Manual (Latest Edition)

(f) Contractor's Site or Premises Requiring Safeguard Measures

The Contractor must diligently maintain up-to-date, the information related to the Contractor's site or premises, where safeguard measures are required in the performance of the Work, for the following addresses:

Address:

Street Number / Street Name, Unit / Suite / Apartment Number

City, Province, Territory / State Postal Code / Zip Code Country

7.6 Contract Period

(a) Contract Period: The "**Contract Period**" is the entire period of time during which the Contractor is obliged to perform the Work, which includes:

- (i)** The "**Initial Contract Period**", which begins on the date the Contract is awarded and ends upon Client Acceptance of ICEMS 2.0; and
- (ii)** The period during which the Contract is extended, if Canada chooses to exercise any options set out in the Contract.

(b) Option to Extend the Contract:

- (i)** The Contractor grants to Canada the irrevocable option to extend the term of the Contract by up to 9 additional 1-year period(s) under the same terms and conditions. The Contractor agrees that, during the extended period of the Contract, it will be paid in accordance with the applicable provisions set out in the Basis of Payment.
- (ii)** Canada may exercise this option at any time by sending a written notice to the Contractor at least 5 calendar days before the expiry date of the Contract. The option may only be exercised by the Contracting Authority, and will be evidenced, for administrative purposes only, through a contract amendment.

7.7 Authorities

(a) Contracting Authority

The Contracting Authority for the Contract is:

Name: **Annie Yang**

Title: Supply Team Leader

Public Works and Government Services Canada

Acquisitions Branch

Address: 11 Laurier Street, Gatineau, QC K1A 0S5 (Phase III, 4C1)

Telephone: (819) 956-1560

E-mail address: annie.yang@tpsgc-pwgsc.gc.ca

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.

(b) Project Authority

The Project Authority for the Contract is:

Name: _____
Title: _____
Organization: _____
Address: _____
Telephone: _____
Facsimile: _____
E-mail address: _____

The Project Authority is the representative of the department or agency and is responsible for the administrative management of the Project. The Project Authority is the point of contact for PWGSC and the Technical Authority.

Note to Bidders: *The Project Authority will be identified at the time of Contract award.*

(c) Technical Authority

The Technical Authority for the Contract is:

Name: _____
Title: _____
Organization: _____
Address: _____
Telephone: _____
Facsimile: _____
E-mail address: _____

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 of the Work under the 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.

Note to Bidders: *The Technical Authority will be identified at the time of Contract award.*

(d) Contractor's Representative

Note to Bidders: *The Contractor's Representative will be identified at the time of Contract award.*

7.8 Proactive Disclosure of Contracts with Former Public Servants

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

7.9 Payment

(a) Basis of Payment

- (i) **Maintenance and Support for the Client Owned Hardware and Software and Replacement of Such Client Owned Hardware and Software under a Task Authorization:** For maintenance and support services for the client owned Hardware and Software and replacement of such client owned Hardware and Software , the Contractor will be paid an all inclusive price made up of the "Laid Down Cost" as defined below plus the Contractor's firm mark-up, which includes any overhead and profit. Mark-up must not exceed___ [to be inserted at Contract award as proposed in Table 5] percent, as set out in Annex B, Pricing Tables.

Laid Down Cost: The "laid down cost" is defined as the cost incurred by the Contractor to acquire a specific product or service for resale to Canada. This includes the price invoiced to the Contractor (less trade discounts), plus any applicable charges for incoming transportation, foreign exchange, customs duty and brokerage, but excludes the Applicable Taxes.

Canada reserves the right to obtain copies of invoices for goods and services to which the Contractor has applied mark-up.

- (ii) **Third Party Application Development and Management Tools under a Task Authorization:** For third party ICEMS 2 specific application development and management tools, the Contractor will be paid an all inclusive price made up of the "Laid Down Cost" as defined above plus the Contractor's firm mark-up, which includes any overhead and profit. Mark-up must not exceed___ [to be inserted at Contract award as proposed in Table 6] percent, as set out in Annex B, Pricing Tables. Canada reserves the right to obtain copies of invoices for goods and services to which the Contractor has applied mark-up.
- (iii) **Professional Services provided under a Task Authorization with a Maximum Price:** For professional services requested by Canada, in accordance with an approved Task Authorization, Canada will pay the Contractor, in arrears, up to the Maximum Price for the TA, for actual time worked and any resulting deliverables in accordance with the firm all-inclusive per diem rates set out in Annex B, Pricing Tables, Applicable Taxes extra. Partial days will be prorated based on actual hours worked based on a 7.5-hour workday.
- (iv) **Professional Services provided under a Task Authorization with a Firm Price:** For professional services requested by Canada, in accordance with an approved Task Authorization, Canada will pay the Contractor the firm price set out in the Task Authorization (based on the firm, all-inclusive per diem rates set out in Annex B, Pricing Tables), Applicable Taxes extra.
- (v) **IT Hosting Facilities, Infrastructure Technologies and Supplies and Hosting Services:** For the provision and maintenance of ICEMS 2 IT hosting facilities, infrastructure technologies and supplies (as set out in the SOW) and for the provision of ICEMS 2 hosting services, from acceptance of the Project Plan and ICEMS 2 systems and application architecture design by Canada until the end of the Initial Contract Period, in accordance with the Contract, Canada will pay the Contractor, in arrears, the firm monthly price(s) set out in Annex B, Pricing Tables, FOB destination, including all customs duties, Applicable Taxes extra.
- (vi) **Optional IT Hosting Facilities, Infrastructure Technologies and Supplies and Hosting Services:** If Canada exercises its option to extend the period for the provision and maintenance of ICEMS 2 IT hosting facilities, infrastructure

technologies, supplies (as set out in the SOW) and hosting services, Canada will pay the Contractor, in arrears, the firm monthly price(s) set out in Annex B, Pricing Tables, FOB destination, including all customs duties, Applicable Taxes extra.

- (vii) **Pre-Authorized Travel and Living Expenses:** Canada will reimburse the Contractor for its pre-authorized travel and living expenses reasonably and properly incurred in the performance of the Work at the Client's location, at cost, without any allowance for profit and/or administrative overhead, in accordance with the meal, private vehicle and incidental expenses provided in Appendices B, C and D of the Treasury Board Travel Directive, and with the other provisions of the directive referring to "travellers", rather than those referring to "employees". All travel must have the prior authorization of the Project Authority. All payments are subject to government audit. The Contractor will be able to charge for time spent travelling at the per diem rates set out in the Contract.
 - (viii) **Competitive Award:** The Contractor acknowledges that the Contract has been awarded as a result of a competitive process. No additional charges will be allowed to compensate for errors, oversights, misconceptions or underestimates made by the Contractor when bidding for the Contract.
 - (ix) **Professional Services Rates:** In Canada's experience, bidders from time to time propose rates at the time of bidding for one or more categories of resources that they later refuse to honour, on the basis that these rates do not allow them to recover their own costs and/or make a profit. This denies Canada of the benefit of the awarded contract. If the Contractor does not respond or refuses, to provide an individual with the qualifications described in the Contract within the time described in the Contract (or proposes instead to provide someone from an alternate category at a different rate), whether or not Canada terminates the Contract as a whole, or in part or chooses to exercise any of the rights provided to it under the general conditions, Canada may impose sanctions or take other measures in accordance with the PWGSC Vendor Performance Corrective Measure Policy (or equivalent) then in effect, which may include an assessment that results in conditions applied against the Contractor to be fulfilled before doing further business with Canada, or full debarment of the Contractor from bidding on future requirements.
 - (x) **Purpose of Estimates:** All estimated costs contained in the Contract are included solely for the administrative purposes of Canada and do not represent a commitment on the part of Canada to purchase goods or services in these amounts. Any commitment to purchase specific amounts or values of goods or services are described elsewhere in the Contract.
- (b) Limitation of Expenditure
- (i) Canada's total liability to the Contractor under the Contract, excluding Task Authorizations, must not exceed ____ [to be identified at the time of Contract award]. Customs duties are included and Applicable Taxes are extra. 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.
 - (ii) Canada's total liability to the Contractor under the Contract for all validly issued Task Authorizations (TAs), inclusive of any revisions, must not exceed the sum of \$____ [to be identified at the time of Contract award]. Customs duties are included and Applicable Taxes are extra.
 - (iii) No increase in the total liability of Canada will be authorized or paid to the Contractor unless an increase has been approved, in writing, by the Contracting Authority.

- (iv) The Contractor must notify the Contracting Authority in writing as to the adequacy of this sum when:
 - (A) it is 75 percent committed, or
 - (B) 4 months before the Contract expiry date, or
 - (C) as soon as the Contractor considers that the sum is inadequate for the completion of the Work required in all authorized TAs, inclusive of any revisions,whichever comes first.
- (v) If the notification is for inadequate contract funds, the Contractor must provide to the Contracting Authority a written estimate for the additional funds required. Providing this information does not increase Canada's liability.
- (c) **Method of Payment for Replacement of the Client Owned Hardware and Software and Third Party Application Development and Management Tool under Task Authorizations with a Firm Price:** Canada will pay the Contractor upon completion and delivery of all the Work associated with the Task Authorization in accordance with the payment provisions of the Contract if:
 - (i) 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;
 - (ii) all such documents have been verified by Canada;
 - (iii) the Work delivered has been accepted by Canada
- (d) **Method of Payment for Maintenance and Support of the Client Owned Hardware under Task Authorizations with a Firm Price:** Canada will pay the Contractor on a quarterly basis for work performed during the quarter covered by the invoice in accordance with the payment provisions of the Contract if:
 - (i) 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;
 - (ii) all such documents have been verified by Canada;
 - (iii) the Work performed has been accepted by Canada.
- (e) **Method of Payment for Professional Services Task Authorizations with a Maximum Price:** For each Task Authorization issued under the Contract that contains a maximum price:
 - (i) Canada will pay the Contractor no more frequently than once a month in accordance with the Basis of Payment. The Contractor must submit time sheets for each resource showing the days and hours worked to support the charges claimed in the invoice.
 - (ii) Once Canada has paid the maximum TA price, Canada will not be required to make any further payment, but the Contractor must complete all the work described in the TA, all of which is required to be performed for the maximum TA price. If the work described in the TA is completed in less time than anticipated, and the actual time worked (as supported by the time sheets) at the rates set out in the Contract is less

than the maximum TA price, Canada is only required to pay for the time spent performing the work related to that TA.

- (f) **Method of Payment for Professional Services Task Authorizations with a Firm Price - Lump Sum Payment on Completion:** Canada will pay the Contractor upon completion and delivery of all the Work associated with the Task Authorization in accordance with the payment provisions of the Contract if:

- (i) 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;
- (ii) all such documents have been verified by Canada;
- (iii) the Work delivered has been accepted by Canada.

- (g) **Method of Payment for Professional Services Task Authorizations with a Firm Price - Milestone Payments**

For any task authorization issued under the Contract that includes a schedule of milestone payments to be made once specific portions of the work have been completed and accepted, Canada will make milestone payments in accordance with the schedule of milestones detailed in that TA and the payment provisions of the Contract, if:

- (i) an accurate and complete claim for milestone payment using form PWGSC-TPSGC 1111 <http://www.tpsgc-pwgsc.gc.ca/app-acq/forms/1111-eng.html> and any other documents required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract.
- (ii) all the certificates appearing on form PWGSC-TPSGC 1111 have been signed by the respective authorized representatives; and
- (iii) all work associated with the milestone and any deliverable required have been completed, delivered, and accepted by Canada.

- (h) **Method of Payment for IT Hosting Facilities, Infrastructure Technologies and Supplies and Hosting Services – Monthly Payment**

Canada will pay the Contractor on a monthly basis for work performed during the month covered by the invoice in accordance with the payment provisions of the Contract if:

- (i) 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;
- (ii) all such documents have been verified by Canada;
- (iii) the Work performed has been accepted by Canada.

- (i) **Method of Payment - Advance Payment for Maintenance and Support of Client Owned Software under a Task Authorization**

- (i) Canada will pay the Contractor in advance for the third party software maintenance and support services 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.

- (ii) Payment in advance does not prevent Canada from exercising any or all potential remedies in relation to this payment or any of the Work, if the Work performed later proves to be unacceptable.

(j) Time Verification

C0711C (2008-05-12) Time Verification, applies to and forms part of the Contract

7.10 Invoicing Instructions

- (a) The Contractor must submit invoices in accordance with the information required in the General Conditions.

Each invoice must be supported ,as applicable, by:

- (i) a copy of time sheets to support the time claimed;
 - (ii) a copy of the release document and any other documents as specified in the Contract;
 - (iii) a copy of the invoices, receipts, vouchers for all direct expenses, and all travel and living expenses;
 - (iv) a copy of the invoices from the third party for goods and services to which the Contractor has applied mark-up;
 - (v) a copy of the monthly progress report
- (b) The Contractor's invoice must include a separate line item for each subparagraph in the Basis of Payment provision.
 - (c) By submitting invoices (other than for any items subject to an advance payment), the Contractor is certifying that the goods and services have been delivered and that all charges are in accordance with the Basis of Payment provision of the Contract, including any charges for work performed by subcontractors.
 - (d) The Contractor must provide the original of each invoice to the Project Authority, and a copy to the Contracting Authority.

7.11 Certifications

Compliance with the certifications provided by the Contractor in its bid is a condition of the Contract and subject to verification by Canada during the entire Contract Period. If the Contractor does not comply with any certification or it is determined that any certification made by the Contractor in its bid is untrue, whether made knowingly or unknowingly, Canada has the right, under the default provision of the Contract, to terminate the Contract for default.

7.12 Federal Contractors Program for Employment Equity - Default by 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.

7.13 Applicable Laws

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

7.14 Priority of Documents

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

- (a) these Articles of Agreement, including any individual SACC clauses incorporated by reference in these Articles of Agreement;
- (b) supplemental general conditions, in the following order:
 - (i) 4001 (2013-01-28);
 - (ii) 4002 (2010-08-16);
 - (iii) 4003 (2010-08-16);
 - (iv) 4004 (2013-04-25);
 - (v) 4007 (2010-08-16);
- (c) general conditions 2035 (2014-06-26) General Conditions - Higher Complexity - Services;
- (d) Annex A, Statement of Work;
- (e) Annex B, Pricing Tables;
- (f) Annex C, Security Requirements Check List;
- (g) Annex D, Federal Contractors Program for Employment Equity – Certification;
- (h) Annex E, Insurance Requirements;
- (i) the signed Task Authorizations;
- (j) the Contractor's bid dated _____, as amended _____, not including any software publisher license terms and conditions that may be included in the bid, not including any provisions in the bid with respect to limitations on liability, and not including any terms and conditions incorporated by reference (including by way of a web link) in the bid.

7.15 Foreign Nationals (Canadian Contractor)

SACC Manual clause A2000C (2006-06-16) Foreign Nationals (Canadian Contractor)

Note to Bidders: *Either this clause or the one that follows, whichever applies (based on whether the successful bidder is a Canadian Contractor or Foreign Contractor), will be included in any resulting contract*

7.16 Foreign Nationals (Foreign Contractor)

SACC Manual clause A2001C (2006-06-16) Foreign Nationals (Foreign Contractor)

7.17 Insurance Requirements

- (a) The Contractor must comply with the insurance requirements specified in Annex E. The Contractor must maintain the required insurance coverage for the duration of the Contract. Compliance with the insurance requirements does not release the Contractor from or reduce its liability under the Contract.
- (b) The Contractor is responsible for deciding if additional insurance coverage is necessary to fulfill its obligation under the Contract and to ensure compliance with any applicable law. Any additional insurance coverage is at the Contractor's expense, and for its own benefit and protection.
- (c) The Contractor must forward to the Contracting Authority within ten (10) days after the date of award of the Contract, a Certificate of Insurance evidencing the insurance coverage and confirming that the insurance policy complying with the requirements is in force. For Canadian-based Contractors, coverage must be placed with an Insurer licensed to carry out business in Canada, however for Foreign-based Contractors, coverage must be placed with an Insurer with an A.M. Best Rating no less than "A-". The Contractor must, if requested by the Contracting Authority, forward to Canada a certified true copy of all applicable insurance policies.

7.18 Limitation of Liability - Information Management/Information Technology

- (a) This section applies despite any other provision of the Contract and replaces the section of the general conditions entitled "Liability". Any reference in this section to damages caused by the Contractor also includes damages caused by its employees, as well as its subcontractors, agents, and representatives, and any of their employees. This section applies regardless of whether the claim is based in contract, tort, or another cause of action. The Contractor is not liable to Canada with respect to the performance of or failure to perform the Contract, except as described in this section and in any section of the Contract pre-establishing any liquidated damages. The Contractor is only liable for indirect, special or consequential damages to the extent described in this Article, even if it has been made aware of the potential for those damages.
- (b) **First Party Liability:**
 - (i) The Contractor is fully liable for all damages to Canada, including indirect, special or consequential damages, caused by the Contractor's performance or failure to perform the
 - (A) any infringement of intellectual property rights to the extent the Contractor breaches the section of the General Conditions entitled "Intellectual Property Infringement and Royalties";
 - (B) physical injury, including death.
 - (ii) The Contractor is liable for all direct damages affecting real or tangible personal property owned, possessed, or occupied by Canada.

- (iii) Each of the Parties is liable for all direct damages resulting from any breach of confidentiality under the Contract. Each of the Parties is also liable for all indirect, special or consequential damages in respect of any unauthorized disclosure of the other Party's trade secrets (or trade secrets of a third party provided by one Party to another under the Contract) relating to information technology.
- (iv) The Contractor is liable for all direct damages relating to any encumbrance or claim relating to any portion of the Work for which Canada has made any payment. This does not apply to encumbrances or claims relating to intellectual property rights, which are addressed under (i)(A) above.
- (v) The Contractor is also liable for any other direct damages to Canada caused by the Contractor in any way relating to the Contract, including:
 - (A) any breach of the warranty obligations under the Contract, up to the total amount paid by Canada (including any applicable taxes) for the goods and services affected by the breach of warranty; and
 - (B) any other direct damages, including all identifiable direct costs to Canada associated with re-procuring the Work from another party if the Contract is terminated either in whole or in part for default, up to an aggregate maximum for this subparagraph (B) of the greater of 0.75 times the total estimated cost (meaning the dollar amount shown on the first page of the Contract in the cell titled "Total Estimated Cost" or shown on each call-up, purchase order or other document used to order goods or services under this instrument), or \$1,000,000.00.

In any case, the total liability of the Contractor under subparagraph (v) will not exceed the total estimated cost (as defined above) for the Contract or \$1,000,000.00, whichever is more.

- (vi) If Canada's records or data are harmed as a result of the Contractor's negligence or willful act, the Contractor's only liability is, at the Contractor's own expense, to restore Canada's records and data using the most recent back-up kept by Canada. The Contractor is responsible for maintaining an adequate back-up of its records and data for Canada.

(c) Third Party Claims:

- (i) Regardless of whether a third party makes its claim against Canada or the Contractor, each Party agrees that it is liable for any damages that it causes to any third party in connection with the Contract as set out in a settlement agreement or as finally determined by a court of competent jurisdiction, where the court determines that the Parties are jointly and severally liable or that one Party is solely and directly liable to the third party. The amount of the liability will be the amount set out in the settlement agreement or determined by the court to have been the Party's portion of the damages to the third party. No settlement agreement is binding on a Party unless its authorized representative has approved the agreement in writing.
- (ii) If Canada is required, as a result of joint and several liability, to pay a third party in respect of damages caused by the Contractor, the Contractor must reimburse Canada by the amount finally determined by a court of competent jurisdiction to be the Contractor's portion of the damages to the third party. However, despite Sub-article (i), with respect to special, indirect, and consequential damages of third parties covered by this Section, the Contractor is only liable for reimbursing Canada for the Contractor's portion of those damages that Canada is required by a court to pay to a third party as a result of joint and several liability that relate to the infringement of a

third party's intellectual property rights; physical injury of a third party, including death; damages affecting a third party's real or tangible personal property; liens or encumbrances on any portion of the Work; or breach of confidentiality.

- (iii) The Parties are only liable to one another for damages to third parties to the extent described in this Sub-article (c).

7.19 Joint Venture Contractor

- (a) The Contractor confirms that the name of the joint venture is ___and that it is comprised of the following members:
- (b) With respect to the relationship among the members of the joint venture Contractor, each member agrees, represents and warrants (as applicable) that:
- (i) _____ has been appointed as the "representative member" of the joint venture Contractor and has fully authority to act as agent for each member regarding all matters relating to the Contract;
- (ii) by giving notice to the representative member, Canada will be considered to have given notice to all the members of the joint venture Contractor; and
- (iii) all payments made by Canada to the representative member will act as a release by all the members.
- (c) All the members agree that Canada may terminate the Contract in its discretion if there is a dispute among the members that, in Canada's opinion, affects the performance of the Work in any way.
- (d) All the members are jointly and severally or solidarily liable for the performance of the entire Contract.
- (e) The Contractor acknowledges that any change in the membership of the joint venture (i.e., a change in the number of members or the substitution of another legal entity for an existing member) constitutes an assignment and is subject to the assignment provisions of the General Conditions.
- (f) The Contractor acknowledges that all security and controlled goods requirements in the Contract, if any, apply to each member of the joint venture Contractor.

Note to Bidders: This Article will be deleted if the bidder awarded the contract is not a joint venture. If the contractor is a joint venture, this clause will be completed with information provided in its bid.

7.20 Client Owned Hardware Replacement

- (a) With respect to the provisions of Supplemental General Conditions 4001:

| | |
|---|-----|
| Part III of 4001 applies to the Contract (Additional Conditions: Purchase) | Yes |
| Part IV of 4001 applies to the Contract (Additional Conditions: Lease) | No |

| | |
|--|---|
| Part V of 4001 applies to the Contract (Additional Conditions: Maintenance) | Only Section 25 (1), 25(2), 25 (3), 25(8) and 25 (9) apply to the Contract |
| Delivery Location | Contractor or Sub-contractor's Hosting Facility |
| Delivery Date | To be specified in the Task Authorization |
| Contractor must deliver Hardware Documentation | Yes |
| Contractor must update Hardware Documentation throughout Contract Period | Yes |
| Hardware Documentation must include maintenance documentation | No |
| Language of Hardware Documentation | <i>The Hardware Documentation is only required to be delivered in English.</i> |
| Format and Medium on which Hardware Documentation must be Delivered | <i>Electronic</i> |
| Special Delivery Requirements | No |
| Special Site Delivery or Installation Requirements | No |
| Contractor must Install Hardware at time of Delivery | No - to be requested under a separate Task Authorization |
| Contractor must Integrate and Configure Hardware at time of Installation | No - to be requested under a separate Task Authorization |
| Hardware is part of a System | Yes |
| Availability-level Testing will be performed before Acceptance | No |

| | |
|---|----|
| Minimum Availability Level for Hardware | No |
| Minimum Availability Level Reporting Requirements | No |

(b) Termination for Convenience of Hardware Maintenance Services

Regardless of the Contract Period and despite the Termination for Convenience provisions contained in the General Conditions, Canada may terminate for convenience, at no cost to Canada, any Hardware maintenance and support services being provided under the Contract. Canada will provide the Contractor 30 calendar days of advance written notice if it terminates the maintenance and support services for convenience and will be liable to the Contractor to pay only any unpaid maintenance and support charges that have accrued up to and including the date of termination.

7.21 Client Owned Software Replacement and Other Third Party Software

(a) With respect to the provisions of Supplemental General Conditions 4003:

| | |
|--|---|
| Licensed Software | The Licensed Software, which is defined in 4003, includes all the products offered by the Contractor through Task Authorizations, and any other software code required for those products to function in accordance with the Software Documentation and the Specifications. Authorizations. |
| Delivery Location | Contractor or Sub-contractor's Hosting Facility |
| Media on which Licensed Software must be Delivered | CD-ROM or Internet Download. |
| Software Warranty Period | 12 months |

(b) **On-going Maintenance of Software Code:** The Contractor must continue to maintain the version of the Licensed Software (i.e., the version or "build" originally licensed under the Contract) as a commercial product (i.e., the Contractor or the software publisher must be continuing to develop new code in respect of the Licensed Software to maintain its functionality, enhance it, and deal with Software Errors) for at least 2 years from the date a Task Authorization is issued for the Software. After that time, if the Contractor or the software publisher decides to discontinue or no longer maintain the then-current version or "build" of the Licensed Software and, instead, decides to provide upgrades to the Licensed Software as part of the Software Support, the Contractor must provide written notice to Canada at least 12 months in advance of the discontinuation.

7.22 Client Owned Third Party Software Maintenance and Support

- (a) With respect to the provisions of Supplemental General Conditions 4004:

| | |
|---|---|
| Licensed Programs | The Licensed Programs to be supported and maintained includes all the products offered by the Contractor through Task Authorizations, and any other software code required for those products to function in accordance with the Software Documentation and the Specifications. |
| Software Support Period | To be requested under a separate Task Authorization |
| Software Support Period when Additional Licenses added during Contract Period | For any additional licenses purchased in accordance with the Contract, the Software Support Period currently underway will apply to the additional licenses purchased, so that the Software Support Period ends on the same date for all licences supported under the Contract. |
| Contractor must install Software Error corrections and Maintenance Releases and upgrades | Yes |
| Contractor must keep track of software releases for the purpose of configuration control | Yes |

- (b) Termination For Convenience For Third Party Software Maintenance and Support Services

Notwithstanding the Termination for Convenience provisions contained at Section 32 of 2030 - General Conditions - Higher Complexity - Goods, the parties agree that in the event of termination of services for the convenience of Canada for which an advance payment has been made, charges up to the date of termination will be calculated on a prorata basis of a twelve month year and a thirty day month. The Contractor shall immediately refund to Canada the unliquidated portion of the advance payment and pay to Canada interest thereon, from the date of the advance payment to the date of the refund, at the discount rate of interest per annum set by the Bank of Canada and prevailing on the date of the advance payment, plus 1 ¼ percent per annum.

7.23 Professional Services - General

- (a) The Contractor must provide professional services on request as specified in this Contract.
- (b) Once a requirement for a resource is identified by Canada (including any resources required under the Contract to be available immediately following award or once a task authorization is issued), the Contractor must make the resource available to Canada within 5 working days. If an individual resource is named in this Contract with respect to any portion of the Work, the Contractor must provide that resource, except to the extent that a replacement is permitted under the General Conditions (in which case the replacement must be provided within the time period described above). This obligation applies despite any changes that Canada may have made to any hardware, software or any other aspect of the Client's operating environment.

- (c) All resources provided by the Contractor must meet the qualifications described in the Contract (including those relating to previous experience, professional designation, education, and language proficiency and security clearance) and must be competent to provide the required services by any delivery dates described in the Contract.
- (d) If the Contractor fails to deliver any deliverable (excluding delivery of an individual) or complete any task described in the Contract on time, in addition to any other rights or remedies available to Canada under the Contract or the law, Canada may notify the Contractor of the deficiency, in which case the Contractor must submit a written plan to the Technical Authority within 10 working days detailing the actions that the Contractor will undertake to remedy the deficiency. The Contractor must prepare and implement the plan at its own expense.
- (e) In General Conditions 2035, Section 08 titled "Replacement of Specific Individuals" is deleted and the following applies instead:

Replacement of Specific Individuals

- (i) If the Contractor is unable to provide the services of any specific individual identified in the Contract to perform the services, the Contractor must within five working days of the individual's departure or failure to commence Work (or, if Canada has requested the replacement, within ten working days of Canada's notice of the requirement for a replacement) provide to the Contracting Authority:

- (A) the name, qualifications and experience of a proposed replacement immediately available for Work; and
- (B) security information on the proposed replacement as specified by Canada, if applicable.

The replacement must have qualifications and experience that meet or exceed the score obtained for the original resource.

- (ii) Subject to an Excusable Delay, where Canada becomes aware that a specific individual identified under the Contract to provide the services has not been provided or is not performing, the Contracting Authority may elect to:

- (A) exercise Canada's rights or remedies under the Contract or at law, including terminating the Contract for default under the Section titled "Default of the Contractor", or
- (B) assess the information provided under (i) above or, if it has not yet been provided, require the Contractor propose a replacement to be rated by the Technical Authority. The replacement must have qualifications and experience that meet or exceed those obtained for the original resource and be acceptable to Canada. Upon assessment of the replacement, Canada may accept the replacement, exercise the rights in (ii) (A) above, or require another replacement in accordance with this sub-article.

Where an Excusable Delay applies, Canada may require (ii) (B) above instead of terminating under the Excusable Delay Section. An Excusable Delay does not include resource unavailability due to allocation of the resource to another Contract or project (including those for the Crown) being performed by the Contractor or any of its affiliates.

- (iii) The Contractor must not, in any event, allow performance of the Work by unauthorized replacement persons. The Contracting Authority may order that a resource stop

performing the Work. In such a case, the Contractor must immediately comply with the order. The fact that the Contracting Authority does not order that a resource stop performing the Work does not relieve the Contractor from its responsibility to meet the requirements of the Contract.

- (iv) The obligations in this article apply despite any changes that Canada may have made to the Client's operating environment. The Contractor is responsible for any costs associated with the training or orientation required to familiarize the substitute resource with the Work to be performed.

7.24 Safeguarding Electronic Media

- (a) Before using them on Canada's equipment or sending them to Canada, the Contractor must use a regularly updated product to scan electronically all electronic media used to perform the Work for computer viruses and other coding intended to cause malfunctions. The Contractor must notify Canada if any electronic media used for the Work are found to contain computer viruses or other coding intended to cause malfunctions.
- (b) If magnetically recorded information or documentation is damaged or lost while in the Contractor's care or at any time before it is delivered to Canada in accordance with the Contract, including accidental erasure, the Contractor must immediately replace it at its own expense.

7.25 Representations and Warranties

The Contractor made statements regarding its and its proposed resources experience and expertise in its bid that resulted in the award of the Contract and the issuance of TA's. The Contractor represents and warrants that all those statements are true and acknowledges that Canada relied on those statements in awarding the Contract and adding work to it through TA's. The Contractor also represents and warrants that it has, and all its resources and subcontractors that perform the Work have, and at all times during the Contract Period they will have, the skills, qualifications, expertise and experience necessary to perform and manage the Work in accordance with the Contract, and that the Contractor (and any resources or subcontractors it uses) has previously performed similar services for other customers.

7.26 Government Property

- (a) Canada agrees to supply the Contractor with the items listed below (the "Government Property"). The section of the General Conditions entitled "Government Property" also applies to the use of the Government Property by the Contractor.
 - (i) Hardware, network technologies and software products as described in section 10.3 of the SOW
- (b) The Contractor must keep a separate inventory of the Government Property.
- (c) On request, the Contractor must provide a report to the Technical Authority (updated as necessary from time to time) that includes the description, manufacturer, model number, serial number, supplier, price, and location of all deliverables it uses to perform the Work.

ANNEX A
STATEMENT OF WORK

(As attached)

ANNEX B

PRICING TABLES

Financial Proposal

[Note to bidders:

Bidders must bid prices as detailed in the Tables below. Prices must be included in the Financial Proposal only. The Financial Proposal should include tables in a format similar to those shown below.

Columns that are highlight in [REDACTED] will be used for the Financial Evaluation and shall be completed by the Contracting Authority.

Bidders must provide the information required in tables 1 to 6 below and are requested to insert "\$0.00" for any item for which it does not intend to charge or for items that are already included in other prices set out in the tables. Failure to provide all of the required Prices and Rates may result in the Bidder's Proposal being declared non-responsive, as set out in the section entitled Blank Prices of the RFP.

Each item in tables 1 to 6 is Mandatory in its entirety. No modification or other terms and conditions included in a bid will apply to any resulting contract even if the bid is incorporated into that contract. Any bid that contains statements implying that the bid is conditional on modification of these Pricing Tables, or containing terms and conditions that purport to supersede these Pricing Tables will be considered non-responsive. Bidders with concerns about these Pricing Tables should raise their concerns in accordance with the Enquiries provision of this bid solicitation.

A financial evaluation will be performed only on bids that are technically responsive. A technically responsive bid is a bid that complies with all the requirements of the bid solicitation, meets all mandatory criteria and obtains the required minimum pass marks specified in the solicitation criteria that are subject to point rating.

The PWGSC Contracting Authority will evaluate the Financial Proposals.

Total Bid Price (TBP) for evaluation purposes = (\$ Total Table 1) + (\$ Total Table 2) + (\$ Total Table 3) + (\$ Total Table 4) + (\$ Total Table 5) + (\$ Total Table 6)]

| TABLE 1 - PROFESSIONAL SERVICES FOR THE INITIAL CONTRACT PERIOD (FROM THE DATE OF CONTRACT AWARD TO CLIENT ACCEPTANCE OF ICEMS 2) | | | | |
|--|---|---|------------------------------------|---|
| ITEM NO. | RESOURCE CATEGORY (AS DESCRIBED IN ARTICLE 7 IN THE SOW) | ESTIMATED NUMBER OF DAYS FOR EVALUATION PURPOSES (A) | PROPOSED FIRM PER DIEM RATE (B) | EXTENDED PRICE FOR EVALUATION PURPOSES (C) = (A) X (B) |
| 1 | IT Project Manager | 200 | \$ | \$ |
| 2 | Senior IT Architect | 50 | \$ | \$ |
| 3 | Senior Application Developer | 200 | \$ | \$ |
| 4 | Application Developer | 800 | \$ | \$ |
| 5 | Senior Infrastructure Support Analyst | 100 | \$ | \$ |
| 6 | Infrastructure Support Analyst | 1 | \$ | \$ |
| 7 | Senior Database Analyst | 200 | \$ | \$ |
| 8 | IT Services Management Analyst | 60 | \$ | \$ |
| 9 | Security Systems Consultant | 40 | \$ | \$ |
| 10 | Tester | 100 | \$ | \$ |
| 11 | Services Manager | 1 | \$ | \$ |
| 12 | Senior Business Analyst | 100 | \$ | \$ |
| 13 | Business Analyst | 150 | \$ | \$ |
| 14 | IBM Cognos Analyst | 1 | \$ | \$ |
| 15 | Technical Writer | 1 | \$ | \$ |
| 16 | French Translation Analyst | 1 | \$ | \$ |
| FOR EVALUATION PURPOSES, THE SUM OF THE EXTENDED PRICE UNDER COLUMN (C) FROM ITEM 1 to 16, WILL BE USED TO CALCULATE THE TOTAL BID PRICE: | | | | Total \$ |

| TABLE 2 - PROFESSIONAL SERVICES FOR THE FIRST 1-YEAR OPTION PERIOD | | | | |
|--|--|---|---------------------------------------|--|
| ITEM NO. | RESOURCE CATEGORY (AS DESCRIBED IN ARTICLE 7 IN THE SOW) | ESTIMATED NUMBER OF DAYS FOR EVALUATION PURPOSES (A) | PROPOSED FIRM PER DIEM RATE (B) | EXTENDED PRICE FOR EVALUATION PURPOSES (C) = (A) X (B) |
| 1 | IT Project Manager | 100 | \$ | \$ |
| 2 | Senior IT Architect | 20 | \$ | \$ |
| 3 | Senior Application Developer | 200 | \$ | \$ |
| 4 | Application Developer | 800 | \$ | \$ |
| 5 | Senior Infrastructure Support Analyst | 50 | \$ | \$ |
| 6 | Infrastructure Support Analyst | 50 | \$ | \$ |
| 7 | Senior Database Analyst | 200 | \$ | \$ |
| 8 | IT Services Management Analyst | 1 | \$ | \$ |
| 9 | Security Systems Consultant | 1 | \$ | \$ |
| 10 | Tester | 50 | \$ | \$ |
| 11 | Services Manager | 60 | \$ | \$ |
| 12 | Senior Business Analyst | 100 | \$ | \$ |
| 13 | Business Analyst | 100 | \$ | \$ |
| 14 | IBM Cognos Analyst | 50 | \$ | \$ |
| 15 | Technical Writer | 20 | \$ | \$ |
| 16 | French Translation Analyst | 10 | \$ | \$ |
| FOR EVALUATION PURPOSES, THE SUM OF THE EXTENDED PRICE UNDER COLUMN (C) FROM ITEM 1 to 16, WILL BE USED TO CALCULATE THE TOTAL BID PRICE: | | | | Total \$ |

**TABLE 3 - PROFESSIONAL SERVICES
FOR THE SECOND 1-YEAR OPTION PERIOD TO THE NINTH 1-YEAR OPTION PERIOD**

| ITEM NO. | RESOURCE CATEGORY (AS DESCRIBED IN ARTICLE 7 IN THE SOW) | ESTIMATED NUMBER OF DAYS FOR EVALUATION PURPOSES (A) | PROPOSED FIRM PER DIEM RATE FOR THE SECOND YEAR OPTION PERIOD (B) | PROPOSED FIRM PER DIEM RATE FOR THE THIRD 1-YEAR OPTION PERIOD (C) | PROPOSED FIRM PER DIEM RATE FOR THE FOURTH 1-YEAR OPTION PERIOD (D) | PROPOSED FIRM PER DIEM RATE FOR THE FIFTH 1-YEAR OPTION PERIOD (E) | PROPOSED FIRM PER DIEM RATE FOR THE SIXTH 1-YEAR OPTION PERIOD (F) | PROPOSED FIRM PER DIEM RATE FOR THE SEVENTH 1-YEAR OPTION PERIOD (G) | PROPOSED FIRM PER DIEM RATE FOR THE EIGHTH 1-YEAR OPTION PERIOD (H) | PROPOSED FIRM PER DIEM RATE FOR THE NINTH 1-YEAR OPTION PERIOD (I) | AVERAGE PER DIEM RATE FOR EVALUATION PURPOSES (J) = ((B) + (C) + (D) + (E) + (F) + (G) + (H) + (I))/8 | EXTENDED PRICE FOR EVALUATION PURPOSES (K) = (A) X (J) |
|----------|--|--|---|--|---|--|--|--|---|--|---|--|
| 1 | IT Project Manager | 6 | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 2 | Senior IT Architect | 6 | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 3 | Senior Application Developer | 1,200 | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 4 | Application Developer | 1,200 | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 5 | Senior Infrastructure Support Analyst | 6 | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 6 | Infrastructure Support Analyst | 600 | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 7 | Senior Database Analyst | 300 | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 8 | IT Services Management Analyst | 6 | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 9 | Security Systems Consultant | 6 | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 10 | Tester | 6 | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 11 | Services Manager | 120 | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |

| | | | | | | | | | | | | | | | | | | | | |
|---|----------------------------|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----------|----|
| 12 | Senior Business Analyst | 6 | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 13 | Business Analyst | 360 | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 14 | IBM Cognos Analyst | 300 | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 15 | Technical Writer | 6 | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| 16 | French Translation Analyst | 6 | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| FOR EVALUATION PURPOSES, THE SUM OF THE EXTENDED PRICE UNDER COLUMN (K) FROM ITEM 1 TO 16, WILL BE USED TO CALCULATE THE TOTAL BID PRICE. | | | | | | | | | | | | | | | | | | | Total \$ | |

| TABLE 4 – IT HOSTING FACILITIES, INFRASTRUCTURE TECHNOLOGIES AND SUPPLIES AND HOSTING SERVICES | | | | |
|--|---|--|---------------------------------|--|
| ITEM NO. | DESCRIPTION | NUMBER OF MONTHS FOR EVALUATION PURPOSES (A) | PROPOSED FIRM MONTHLY PRICE (B) | EXTENDED PRICE FOR EVALUATION PURPOSES (C) = (A) X (B) |
| 1 | For the provision and maintenance of ICEMS 2 IT hosting facilities, infrastructure technologies and supplies (as set out in the SOW) and for the provision of ICEMS 2 hosting services as described in 10.1 and 10.2 in the SOW, from acceptance of the Project Plan and ICEMS 2 systems and application architecture design to the end of the initial contract period. | 10 | \$ | \$ |
| 2 | For the provision and maintenance of ICEMS 2 IT hosting facilities, infrastructure technologies and supplies (as set out in the SOW) and for the provision of ICEMS 2 hosting services as described in 10.1 and 10.2 in the SOW, for the first 1-year option period. | 12 | \$ | \$ |

| | | | | |
|---|--|----|----|----|
| 3 | For the provision and maintenance of ICEMS 2 IT hosting facilities, infrastructure technologies and supplies (as set out in the SOW) and for the provision of ICEMS 2 hosting services as described in 10.1 and 10.2 in the SOW, for the second 1-year option period. | 12 | \$ | \$ |
| 4 | For the provision and maintenance of ICEMS 2 IT hosting facilities, infrastructure technologies and supplies (as set out in the SOW) and for the provision of ICEMS 2 hosting services as described in 10.1 and 10.2 in the SOW, for the third 1-year option period. | 12 | \$ | \$ |
| 5 | For the provision and maintenance of ICEMS 2 IT hosting facilities, infrastructure technologies and supplies (as set out in the SOW) and for the provision of ICEMS 2 hosting services as described in 10.1 and 10.2 in the SOW, for the fourth 1-year option period. | 12 | \$ | \$ |
| 6 | For the provision and maintenance of ICEMS 2 IT hosting facilities, infrastructure technologies and supplies (as set out in the SOW) and for the provision of ICEMS 2 hosting services as described in 10.1 and 10.2 in the SOW, for the fifth 1-year option period. | 12 | \$ | \$ |
| 7 | For the provision and maintenance of ICEMS 2 IT hosting facilities, infrastructure technologies and supplies (as set out in the SOW) and for the provision of ICEMS 2 hosting services as described in 10.1 and 10.2 in the SOW, for the sixth 1-year option period. | 12 | \$ | \$ |
| 8 | For the provision and maintenance of ICEMS 2 IT hosting facilities, infrastructure technologies and supplies (as set out in the SOW) and for the provision of ICEMS 2 hosting services as described in 10.1 and 10.2 in the SOW, for the seventh 1-year option period. | 12 | \$ | \$ |

| | | | | |
|---|---|----|----|----------|
| 9 | For the provision and maintenance of ICEMS 2 IT hosting facilities, infrastructure technologies and supplies (as set out in the SOW) and for the provision of ICEMS 2 hosting services as described in 10.1 and 10.2 in the SOW, for the eighth 1-year option period. | 12 | \$ | \$ |
| 10 | For the provision and maintenance of ICEMS 2 IT hosting facilities, infrastructure technologies and supplies (as set out in the SOW) and for the provision of ICEMS 2 hosting services as described in 10.1 and 10.2 in the SOW, for the ninth 1-year option period. | 12 | \$ | \$ |
| FOR EVALUATION PURPOSES, THE SUM OF THE EXTENDED PRICE UNDER COLUMN (C) FROM ITEM 1 to 10, WILL BE USED TO CALCULATE THE TOTAL BID PRICE: | | | | |
| | | | | Total \$ |

| TABLE 5 - CLIENT OWNED HARDWARE AND SOFTWARE MAINTENANCE AND SUPPORT AND REPLACEMENT OF THE HARDWARE AND SOFTWARE UNDER TASK AUTHORIZATION PROCESS | | | | |
|--|---|--|--------------------------------------|---|
| ITEM NO. | DESCRIPTION | TOTAL ESTIMATED LAID DOWN COST FOR EVALUA- TION PURPOSES (A) | PROPOSED FIRM MARK-UP PERCENTAGE (B) | ESTIMATED TOTAL PRICE FOR EVALUATION PURPOSES (C) = (A) X (B) + (A) |
| 1 | For maintenance and support services for the client owned Hardware and Software and replacement of the Hardware and Software as described in Article 11 in the SOW. | \$450,000.00 | % | \$ |

| TABLE 6 - THIRD PARTY APPLICATION DEVELOPMENT AND MANAGEMENT TOOLS UNDER TASK AUTHORIZATION PROCESS | | | | |
|---|--|--|--------------------------------------|---|
| ITEM NO. | DESCRIPTION | TOTAL ESTIMATED LAID DOWN COST FOR EVALUA- TION PURPOSES (A) | PROPOSED FIRM MARK-UP PERCENTAGE (B) | ESTIMATED TOTAL PRICE FOR EVALUATION PURPOSES (C) = (A) X (B) + (A) |
| 1 | For the provision of the third party application development and management tools specific to ICEMS 2, as described in Article 10.5 and 10.6 in the SOW. | \$200,000.00 | % | \$ |

ANNEX C

SECURITY REQUIREMENTS CHECK LIST

(As attached)

ANNEX D

FEDERAL CONTRACTORS PROGRAM FOR EMPLOYMENT EQUITY - CERTIFICATION

I, the Bidder, by submitting the present information to the Contracting Authority, certify that the information provided is true as of the date indicated below. The certifications provided to Canada are subject to verification at all times. I understand that Canada will declare a bid non-responsive, or will declare a contractor in default, if a certification is found to be untrue, whether during the bid evaluation period or during the contract period. Canada will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply with such request by Canada will also render the bid non-responsive or will constitute a default under the Contract.

For further information on the Federal Contractors Program for Employment Equity visit ESDC-Labour's website.

Date: _____ (YYYY/MM/DD) (If left blank, the date will be deemed to be the bid solicitation closing date.)

Complete both A and B.

A. Check only one of the following:

☐ A1. The Bidder certifies having no work force in Canada.

☐ A2. The Bidder certifies being a public sector employer.

☐ A3. The Bidder certifies being a federally regulated employer being subject to the *Employment*

Equity Act.

☐ A4. The Bidder certifies having a combined work force in Canada of less than 100 employees (combined work force includes: permanent full-time, permanent part-time and temporary employees [temporary employees only includes those who have worked 12 weeks or more during a calendar year and who are not full-time students]).

A5. The Bidder has a combined workforce in Canada of 100 or more employees; and

☐ A5.1. The Bidder certifies already having a valid and current Agreement to Implement

Employment Equity (AIEE) in place with ESDC-Labour.

OR

☐ A5.2. The Bidder certifies having submitted the Agreement to Implement Employment Equity

(LAB1168) to ESDC-Labour. As this is a condition to contract award, proceed to completing the form Agreement to Implement Employment Equity (LAB1168), duly signing it, and transmit it to ESDC-Labour.

B. Check only one of the following:

☐ B1. The Bidder is not a Joint Venture.

OR

☐ B2. The Bidder is a Joint venture and each member of the Joint Venture must provide the Contracting Authority with a completed annex Federal Contractors Program for Employment Equity - Certification. (Refer to the Joint Venture section of the Standard Instructions). -

ANNEX E

INSURANCE REQUIREMENTS

1 Commercial General Liability Insurance

1.1 The Contractor must obtain Commercial General Liability Insurance, and maintain it in force throughout the duration of the Contract, in an amount usual for a contract of this nature, but for not less than \$2,000,000 per accident or occurrence and in the annual aggregate.

1.2 The Commercial General Liability policy must include the following:

- (a) Additional Insured: Canada is added as an additional insured, but only with respect to liability arising out of the Contractor's performance of the Contract. The interest of Canada should read as follows: Canada, as represented by Public Works and Government Services Canada.
- (b) Bodily Injury and Property Damage to third parties arising out of the operations of the Contractor.
- (c) Products and Completed Operations: Coverage for bodily injury or property damage arising out of goods or products manufactured, sold, handled, or distributed by the Contractor and/or arising out of operations that have been completed by the Contractor.
- (d) Personal Injury: While not limited to, the coverage must include Violation of Privacy, Libel and Slander, False Arrest, Detention or Imprisonment and Defamation of Character.
- (e) Cross Liability/Separation of Insureds: Without increasing the limit of liability, the policy must protect all insured parties to the full extent of coverage provided. Further, the policy must apply to each Insured in the same manner and to the same extent as if a separate policy had been issued to each.
- (f) Blanket Contractual Liability: The policy must, on a blanket basis or by specific reference to the Contract, extend to assumed liabilities with respect to contractual provisions.
- (g) Employees and, if applicable, Volunteers must be included as Additional Insured.
- (h) Employers' Liability (or confirmation that all employees are covered by Worker's compensation (WSIB) or similar program)
- (i) Broad Form Property Damage including Completed Operations: Expands the Property Damage coverage to include certain losses that would otherwise be excluded by the standard care, custody or control exclusion found in a standard policy.
- (j) Notice of Cancellation: The Insurer will endeavour to provide the Contracting Authority thirty (30) days written notice of policy cancellation.
- (k) If the policy is written on a claims-made basis, coverage must be in place for a period of at least 12 months after the completion or termination of the Contract.

- (l) Owners' or Contractors' Protective Liability: Covers the damages that the Contractor becomes legally obligated to pay arising out of the operations of a subcontractor.
- (m) Non-Owned Automobile Liability - Coverage for suits against the Contractor resulting from the use of hired or non-owned vehicles.
- (n) Litigation Rights: Pursuant to subsection 5(d) of the Department of Justice Act, S.C. 1993, c. J-2, s.1, if a suit is instituted for or against Canada which the Insurer would, but for this clause, have the right to pursue or defend on behalf of Canada as an Additional Named Insured under the insurance policy, the Insurer must promptly contact the Attorney General of Canada to agree on the legal strategies by sending a letter, by registered mail or by courier, with an acknowledgement of receipt.

For the province of Quebec, send to:

Director Business Law Directorate,
Quebec Regional Office (Ottawa),
Department of Justice,
284 Wellington Street, Room SAT-6042, Ottawa, Ontario, K1A 0H8

For other provinces and territories, send to: Senior General Counsel,

Civil Litigation Section, Department of Justice
234 Wellington Street, East Tower
Ottawa, Ontario K1A 0H8

A copy of the letter must be sent to the Contracting Authority. Canada reserves the right to co-defend any action brought against Canada. All expenses incurred by Canada to co-defend such actions will be at Canada's expense. If Canada decides to co-defend any action brought against it, and Canada does not agree to a proposed settlement agreed to by the Contractor's insurer and the plaintiff(s) that would result in the settlement or dismissal of the action against Canada, then Canada will be responsible to the Contractor's insurer for any difference between the proposed settlement amount and the amount finally awarded or paid to the plaintiffs (inclusive of costs and interest) on behalf of Canada.

2 Errors and Omissions Liability Insurance

- 2.1 The Contractor must obtain Errors and Omissions Liability (a.k.a. Professional Liability) insurance, and maintain it in force throughout the duration of the Contract, in an amount usual for a contract of this nature but for not less than

\$1,000,000 per loss and in the annual aggregate, inclusive of defence costs.
- 2.2 If the policy is written on a claims-made basis, coverage must be in place for a period of at least 12 months after the completion or termination of the Contract.
- 2.3 The following endorsement must be included:

Notice of Cancellation: The Insurer will endeavour to provide the Contracting Authority thirty (30) days written notice of cancellation.

ATTACHMENT 3.1

ICEMS 2 PROCUREMENT CLIENT REFERENCE QUESTIONS

(As attached)

BIDDER FORMS

Form 1

| BID SUBMISSION FORM | |
|---|--|
| Bidder's full legal name <i>[Note to Bidders: Bidders who are part of a corporate group should take care to identify the correct corporation as the Bidder.]</i> | |
| Authorized Representative of Bidder for evaluation purposes (e.g., clarifications) | Name |
| | Title |
| | Address |
| | Telephone # |
| | Fax # |
| | Email |
| Bidder's Procurement Business Number (PBN) <i>[see the Standard Instructions 2003]</i> <i>[Note to Bidders: Please ensure that the PBN you provide matches the legal name under which you have submitted your bid. If it does not, the Bidder will be determined based on the legal name provided, not based on the PBN, and the Bidder will be required to submit the PBN that matches the legal name of the Bidder.]</i> | |
| Jurisdiction of Contract: Province in Canada the bidder wishes to be the legal jurisdiction applicable to any resulting contract (if other than as specified in solicitation) | |
| Former Public Servants See the Article in Part 2 of the bid solicitation entitled Former Public Servant Certification for a definition of "Former Public Servant". | Is the Bidder a FPS in receipt of a pension as defined in the bid solicitation? Yes ____ No ____ If yes, provide the information required by the Article in Part 2 entitled "Former Public Servant Certification" |
| | Is the Bidder a FPS who received a lump sum payment under the terms of a work force reduction program? Yes ____ No ____ If yes, provide the information required by the Article in Part 2 entitled "Former Public Servant Certification" |
| Number of FTEs [Bidders are requested to indicate, the total number of full-time-equivalent positions that would be created and maintained by the bidder if it were awarded the Contract. This information is for information purposes only and will not be evaluated.] | |
| Security Clearance Level of Bidder <i>[include both the level and the date it was granted] [Note to Bidders: Please ensure that the security clearance matches the legal name of the Bidder. If it does not, the security clearance is not valid for the Bidder.]</i> | |

On behalf of the bidder, by signing below, I confirm that I have read the entire bid solicitation including the documents incorporated by reference into the bid solicitation and I certify that:

1. The bidder considers itself and its products able to meet all the mandatory requirements described in the bid solicitation;
2. This bid is valid for the period requested in the bid solicitation;
3. All the information provided in the bid is complete, true and accurate; and
4. If the bidder is awarded a contract, it will accept all the terms and conditions set out in the resulting contract clauses included in the bid solicitation.

Signature of Authorized Representative of Bidder

FORM 2

BIDDER RESPONSE FORM

(As attached)

ANNEX A

Interprovincial Computerized Examination Management System 2

(ICEMS 2)

Statement of Work (SoW)

for Employment and Social Development Canada (ESDC)

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1. Requirements Overview

- 1.1. Employment and Social Development Canada (ESDC), on behalf of the Canadian Council of Directors of Apprenticeship (CCDA), has a requirement for a new Interprovincial Computerized Examination Management System (ICEMS) (Application) to replace the existing ICEMS application. The existing ICEMS is referred to as ICEMS 1 throughout this Statement of Work (SoW) and the replacement ICEMS is referred to as ICEMS 2.
- 1.2. ICEMS streamlines the administration of the Red Seal Program (www.red-seal.ca) by allowing provincial/territorial (P/T) governments and the Government of Canada (specifically, ESDC) to do the following:
 - 1.2.1. Maintain banks of secure bilingual examination questions (Item Banks);
 - 1.2.2. Generate interprovincial examinations, score them and report results;
 - 1.2.3. Provide statistics and analytical information related to the Red Seal Program; and
 - 1.2.4. Store and maintain anonymous Red Seal client information and data.
- 1.3. The requirement, further described in detail throughout this document, includes the following:
 - 1.3.1. Develop an ICEMS 2 application that is a fully functioning subset (as described in 1.14 of this SoW) of the existing ICEMS application that will take advantage of Contractor innovative solutions, modern technologies, techniques and standards, then test and implement this resultant new Application. The first version of the new Application is referred to as ICEMS 2.0. For evaluation purposes, it has been estimated that it will take approximately 2,000 person-days of effort to develop and implement ICEMS 2.0. It was determined that the existing application cannot be converted to a modern computing language to meet the requirements. Information to date indicates that there is no Commercial Off-the-Shelf (COTS) item and exam management application that will satisfactorily meet the Red Seal Program's requirements, however, there may be existing tools/approaches that can be customized to meet part or all of the requirements;
 - 1.3.2. Host, manage, operate, support, and maintain the ICEMS 2 System and Application to meet defined Service Levels (as described in section 12 of this SoW) after ICEMS 2.0 has been implemented and is operational using live data (the Production version);
 - 1.3.3. Implement and use ICEMS 1 in conjunction with ICEMS 1 Functional Specifications, for the development of the ICEMS 2 Business Rule specifications.
 - 1.3.4. To temporarily host, manage, operate, support and maintain the ICEMS 1 System and application to meet defined Service Levels (as described in section 12 of this SoW) if required.
 - 1.3.5. Immediately after ICEMS 2.0 has been implemented, enhance the Application, resulting in ICEMS 2.1, 2.2, etc. For evaluation purposes, it has been estimated that the enhancement Work will take approximately 1,000 person-days of effort; and
 - 1.3.6. Further enhance ICEMS 2 throughout the ICEMS 2 management periods.

- 1.4. ICEMS 2 must allow an ICEMS 2 User to use either Canadian English or Canadian French or both.
- 1.5. ICEMS 2 must incorporate usability designs that are compliant with the following standards, as applicable:
 - Standard on Web Usability
<http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?section=text&id=24227>
 - Standard on Web Accessibility
<http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?section=text&id=23601>
 - Web Content Accessibility Guidelines (WCAG 2.0)
<http://www.w3.org/TR/WCAG20/>
- 1.6. ICEMS 2 must only allow an ICEMS User to access the ICEMS 2 functionality over the Internet via an Internet Browser.
- 1.7. The ICEMS 2 database and system must be securely hosted on Dedicated servers (and other Dedicated technology) in a secure commercial data centre IT facility.
- 1.8. ICEMS 2 must work, be complete and comply with the mandatory requirements as described in this SoW.
- 1.9. Only one qualified IT Services Supplier (the Contractor) will be contracted for the Work described in this SoW for the duration of the contract.
- 1.10. The Contractor through the Task Authorization (TA) process (as described in Appendix 1) will supply all of the professional services provided under this Contract.
- 1.11. It is estimated that there will be approximately 50 ICEMS Users across Canada.
- 1.12. It must be possible to move ICEMS 2 to another IT facility at any time during, or at the end of, the Contract Period.
- 1.13. The following will be made available to the Contractor upon Contract award:
 - 1.13.1. Detailed functional specifications for ICEMS 2.0;
 - 1.13.2. The ICEMS 2 risk analysis;
 - 1.13.3. A set of potential architecture documents for ICEMS 2;
 - 1.13.4. The technologies (computing hardware, networking devices and third-party software) needed to initially user test ICEMS 2, train ICEMS Users, and operate and support ICEMS 2 in Production.
 - 1.13.5. Proposed ICEMS 2 User Presentation Guidelines;
 - 1.13.6. The ICEMS 1 User Reference Guide;
 - 1.13.7. The ICEMS 1 Business Procedures Guide;
 - 1.13.8. A copy of the ICEMS 1 Production application software (source and run time), database and all of the associated documentation (Appendix 7);

- 1.13.9. Subject to the approval of the ICEMS 2 Technical Authority, the services of the current ICEMS 1 IT Services Supplier, as required, to provide information on ICEMS 1; and
- 1.13.10. The ICEMS 1 database Entity Relationship Diagram (ERD)
- 1.14. The functional scope of ICEMS 1 is defined in Appendix 4. This scope is the subset of the existing ICEMS 1 application that serves as a guideline for what is initially required for full Production operations of ICEMS 2.0 (at which time Production operations of ICEMS 1 will cease).
- 1.15. Appendix 5 provides a sample section from the ICEMS 1 Business Procedures Guide. The sample includes screen shots from the existing ICEMS 1 application.
- 1.16. **No tradespersons' personal identifiable data will be uploaded into, or accepted by, ICEMS.**
- 1.17. The Contractor's Project Team must be available to physically meet with the ICEMS 2 Stakeholders' Representative Team (as described in 5.8 of this SoW), on a daily basis from Task 1 through Task 10 , and up to once a month during Tasks 11, 12 and 13.
- 1.18. The data centre IT facilities must be accessible to the Stakeholders' Representative Team at least once a month throughout Tasks 3 to 13.

2. ICEMS Background Information

- 2.1. The Interprovincial Standards Red Seal Program (hereinafter referred to as the Red Seal Program) was established in the early 1950s to provide greater mobility across Canada for skilled workers. Through the program, qualified tradespersons who successfully complete the Red Seal examination will have a Red Seal endorsement affixed on their trade certificates.
- 2.2. ICEMS 1 is a bilingual national certification system that was custom developed for the Red Seal Program by an IT Services Supplier. ICEMS is operated by the CCDA. ESDC is a member of the CCDA and will be administering the project on behalf of the CCDA.
- 2.3. The CCDA is composed of P/T senior apprenticeship officials and representatives of ESDC. The CCDA is responsible for the management and delivery of the Red Seal Program.
- 2.4. The CCDA encourages harmonization of P/T apprenticeship training and certification programs. As an organization, it does not have vested regulatory powers regarding training and certification in the skilled trades. However, the individual CCDA senior apprenticeship officials, as the persons responsible for apprenticeship and trade certification in their home jurisdictions, hold regulatory powers through specific P/T legislation.
- 2.5. The Red Seal represents a standard of excellence for industry. The Red Seal Program ensures that the qualifications of certified tradespersons are recognized throughout Canada based on nationally accepted industry standards.
- 2.6. The program encourages standardization of P/T apprenticeship training and certification programs. The Red Seal allows qualified tradespersons to practise their trade in any

province or territory in Canada where the trade is designated. There are currently 55 designated Red Seal trades.

- 2.7. In March 1995, the Forum of Labour Market Ministers (FLMM) approved the ICEMS project. In 2000, a contract was awarded to DMR Consulting (now Fujitsu Consulting) for the development of the ICEMS 1 web-based application, and the subsequent hosting, support and management of ICEMS 1.
- 2.8. Since ICEMS' implementation in 2001, more than 800 different Red Seal exams have been generated using the software. Approximately 40,000 candidates write ICEMS generated exams each year.

3. Purpose, Objectives and Goal

The purpose, objectives and goals of this project are as follows.

3.1. Purpose

- 3.1.1. To replace the existing ICEMS application with a modernized application, then to host, manage, operate, support, maintain and enhance the resultant ICEMS 2 application; and
- 3.1.2. To ensure Canada achieves the purpose, objectives and goals as stated in section 3 of the Request for Proposals Statement of Requirements.

3.2. Objectives

- 3.2.1. To develop the ICEMS 2.0 application using modern technologies/techniques, and possibly using the Contractor's innovative solutions (ESDC reserves the right to authorize the use of any suggested innovations during the development, or thereafter, for ICEMS 2 at its sole discretion), and to provide a full year of warranty support after full Production release;
- 3.2.2. To host, support and maintain the technologies (as listed in Appendix 7 of this SoW) required to develop and operate the ICEMS 2 application;
- 3.2.3. To supply replacement technologies when requested by Canada;
- 3.2.4. To host, manage, operate, support and maintain the ICEMS 2 application;
- 3.2.5. To host, manage, operate, support and maintain the ICEMS 1 application, if required by the Client;
- 3.2.6. To enhance ICEMS 2 immediately after the initial version of the application (ICEMS 2.0) is in Production (subject to budget constraints); and,
- 3.2.7. To further enhance the Application each year as required, subject to budget availability.

3.3. Goal

- 3.3.1. The current version of ICEMS has served the Red Seal Program since it was implemented in 2001. Due to its age, a new application must be developed (ICEMS

- 2). The newly developed application should take advantage of innovative tools/approaches, current IT technologies, standards and Industry Best Practices.
- 3.3.2. The goal of this project is to develop, and manage ICEMS 2 so that the Application is able to support the Red Seal Program in a significantly improved way as the program evolves.

4. Scope and Future Direction

- 4.1. The original design of ICEMS addressed the business requirements of the Red Seal Program when item banking was in its infancy in that program. Since its implementation, the exam and item bank development process and the Red Seal Program itself have evolved, and they will continue to evolve. A multi-phased approach to the development of ICEMS 2 will provide an opportunity to streamline ICEMS and bring new efficiencies to its operations, while ensuring program continuity. This will also ensure that ICEMS 2 is sustainable into the future, with the intention that future enhancements can be easily integrated into the newly developed Application software.
- 4.2. Initially, a subset of the ICEMS functions and Business Rules that exist within ICEMS 1 must be reproduced on a modern hardware and software platform, resulting in the ICEMS 2.0 version of the Application. The expected Production operations target date for the final ICEMS 2.0 is within 12 months of the award of the ICEMS 2 Contract.
- 4.3. The Contractor must host, manage and support the technologies required to develop and implement ICEMS 2. This will include providing a complete ICEMS 2 computing environment that encompasses the development, User Acceptance Testing (as described in 6.11 of this SoW), training and Production environments.
- 4.4. The Contractor must host, manage, operate, support and maintain ICEMS 2 that will commence after the developed ICEMS 2.0 application is accepted.
- 4.5. The Contractor must provide replacements for the initial ICEMS 2.0 technologies as those technologies reach the end of their useful life cycles.
- 4.6. The Contractor must manage ICEMS 2 by providing the required services and must ensure that Service Levels (as described in 12.20 of this SoW) are met.
- 4.7. The Contractor must provide qualified personnel resources (as described in section 7 of this SoW) to undertake ICEMS 2 work in accordance with approved Task Authorizations.
- 4.8. The ICEMS 2 architecture will require a design that can accommodate current requirements and potential future enhancements. Potential future enhancements could include functions such as, but not limited to, the generation of multiple assessment and tracking tools, and links to third party and/or jurisdiction on-line exam management providers.

5. Key Working Relationships and Definitions

- 5.1. Contracting Authority: Public Works and Government Services Canada (PWGSC) is the Contracting Authority, on behalf of Employment and Social Development Canada. 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. Employment and Social Development Canada (ESDC, also referred to as the Client): ESDC is a member of the CCDA, which administers the Red Seal program. ESDC is responsible for the ongoing operations of ICEMS.
- 5.3. Canadian Council of Directors of Apprenticeship (CCDA): The CCDA is responsible for the policies, management and delivery of the Red Seal Program, of which ICEMS is a key supporting component.
- 5.4. ICEMS Working Group (WG): The ICEMS WG is a user group composed of a number of managers and experienced Users from several jurisdictions and ESDC. Members of this group have considerable experience in administering the Red Seal Program and using the ICEMS application. WG members support, guide and advise ESDC in defining the system's detailed requirements, prioritizing those requirements, and reviewing project deliverables through the design, development and implementation of ICEMS 2. The WG also prioritizes changes/enhancements required for ICEMS 2 for the duration of the contract
- 5.5. ESDC ICEMS Program Manager: In consultation with the ICEMS WG, the ESDC ICEMS Program Manager provides overall coordination of the project. The Program Manager is responsible for the development of ICEMS business models, policies, evaluation and strategic plans; ICEMS financial management; and coordination of daily operations, in consultations with ICEMS partners and stakeholders.
- 5.6. ICEMS 2 Technical Authority: The ICEMS 2 Technical Authority is the representative of ESDC for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters must be discussed with the ICEMS 2 Technical Authority; however, the ICEMS 2 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. The ICEMS 2 Technical Authority has the right to audit the Contractor's work-in-progress.
- 5.7. Project Authority: The Project Authority is the representative of the Client and is responsible for the administrative management of the project. The Project Authority is the point of contact for PWGSC and the ICEMS 2 Technical Authority.
- 5.8. Stakeholders' Representative Team: The Stakeholders' Representative Team is composed of the ESDC Program Manager, the ICEMS 2 Technical Authority, other members of the ICEMS WG and any person designated by the ICEMS WG.
- 5.9. Current ICEMS 1 IT Services Supplier: The current ICEMS 1 IT Services Supplier designed, developed and implemented ICEMS 1, and has been responsible for hosting, operating, supporting and sustaining ICEMS since its inception.
- 5.10. ICEMS Users: The Users of ICEMS are provincial, territorial and federal government employees. They are the current users of the ICEMS 1 software.

6. Tasks and Deliverables

6.1. Overview

- 6.1.1. The Work will be divided into a number of Tasks. All of the Work described below for Tasks 1 through 13 will be requested through the TA process, except for hosting services, as described in section 10 of this SoW. Before Work on any Task commences, there will be a preliminary meeting with the Contractor. At this time, the scope, deliverables, staffing, effort and timeframes for that Task will be refined and finalized between the ICEMS 2 Technical Authority and the Contractor (as per the TA process described in the Contract).
- 6.1.2. This project is linked to other corporate initiatives and time is of the essence, thus some Tasks will have to be done concurrently in order to meet project timeframes. In most cases, the Tasks described below will be broken down into further sub-tasks, and each of those will be managed as a separate TA. Elements of some Tasks may be combined with elements of other Tasks on a TA.
- 6.1.3. The first 10 Tasks (as described in 6.2 to 6.11 of this SoW) define the ICEMS 2.0 development and implementation work to be performed under the Contract. The functional scope of the ICEMS 2.0 application is defined in Appendix 4.
- 6.1.4. Tasks 11, 12 and 13 (as described in 6.12 to 6.14 of this SoW) define the subsequent Work.
- 6.1.5. Refer to 1.13 of this SoW for a list of the supporting information and resources that will be made available to the Contractor.
- 6.1.6. The Contractor must provide the tools and IT facilities as described in 10.4 of this SoW for all Tasks below.

6.2. Task 1 Project Plan and Supporting Practices

- 6.2.1. The Contractor must produce and deliver an ICEMS 2.0 development and implementation project management plan (the Project Plan). ICEMS 2.0 development and implementation is referred to as the Project Phase within this SoW. The delivered Project Plan must be reasonable, logical and attainable from a management, technical and user perspective.
- 6.2.2. The Project Plan and supporting practices must use formal project management and Software Development Life Cycle (SDLC) methodologies. The project management methodology must conform to the Project Management Body of Knowledge (PMBOK Guide – Fourth Edition or newer) of the Project Management Institute (PMI).
- 6.2.3. The Project Plan must describe how the Contractor will follow software engineering Industry Best Practices.
- 6.2.4. The Contractor must use a formal systematic method for estimating the project Work to be performed.
- 6.2.5. The Contractor's inputs to, and outputs from, the estimating method must be made available to the ICEMS 2 Technical Authority so that sensitivity analyses can be performed on certain estimates. Providing information on proprietary internal logic of any related tool is not mandatory.
- 6.2.6. The Contractor must deliver, enable and support a Project Plan that delivers all of the requirements specified in this SoW.

6.2.7. The Contractor must update and keep current the Project Plan throughout the Project Phase. At a minimum, the Project Plan must be updated on a monthly basis.

6.2.7.1. The required Project Plan must set out the following:

- a. Project sub-phases;
- b. Project tasks;
- c. Project timelines;
- d. Project milestones;
- e. Project deliverables;
- f. Project cost estimates; and
- g. Project resources and efforts required.

6.2.7.2. The Project Plan must address all of the following factors:

- a. Project scope;
- b. Project time management;
- c. Project cost control;
- d. Project planning, coordination, requirements tracking, and cost and effort tracking;
- e. Software engineering;
- f. The testing requirements for the Production-ready, bilingual (Canadian English and Canadian French) Application;
- g. Critical Path activities; and
- h. Key milestones.

6.2.8. An organizational chart showing the structure and detailing members' roles, responsibilities and position titles within the Contractor's Project Team (as described in section 7.1 of this SoW) must accompany the Project Plan.

6.2.9. The Contractor must have a formal documented process, as agreed with the ICEMS 2 Technical Authority that sets out how the Contractor will:

- 6.2.9.1. Identify tools and management processes to enable the ICEMS 2 Technical Authority to select and/or approve Contractor resources;
- 6.2.9.2. Use a documented process to identify, select and deploy the appropriate resource in a timely manner;
- 6.2.9.3. Manage quality assurance practices;
- 6.2.9.4. Manage contingency plans/practices to ensure resource availability and resource replacement;
- 6.2.9.5. Manage the Contract tracking, time sheet collection and invoicing process; and
- 6.2.9.6. Manage the process of issue escalation and dispute resolution to the Contractor's executive level, if required.

6.2.10. The Contractor must review the detailed functional specifications (to be provided after Contract award) for ICEMS 2.0, together with the ICEMS 1 application (copy of application to be provided after Contract award as described in 1.13.8 of this SoW) and user documentation, then produce any further detailed application specifications including the Business Rules that are required in order to complete the development of the Project Plan and the remaining tasks (as described in 6.3 to 6.11 of this SoW).

6.2.11. The Contractor must ensure that all of its documentation is delivered, in Canadian English, to mutually accepted standards and criteria, as approved by the ICEMS 2

Technical Authority when accepting the Project Plan, and managed under an acceptable document control system and procedures.

- 6.2.12. At final acceptance, all documentation must be current.
- 6.2.13. During the Project Phase, all project materials must be electronically backed up and a copy delivered to the ICEMS 2 Technical Authority on a weekly basis as mutually agreed to when accepting the Project Plan.
- 6.2.14. The Client reserves the right to modify and/or translate project documents into Canadian French, without reservation.

6.3. Task 2 System and Application Architecture

- 6.3.1. The Contractor must produce a detailed ICEMS 2 system and application architecture design (the Architecture).
- 6.3.2. The Architecture will be used to create the ICEMS 2 development, User Acceptance Testing, User training and Production computing environments.
- 6.3.3. The Architecture must use current Industry Best Practices for the development of:
 - 6.3.3.1. Application Navigation;
 - 6.3.3.2. Screen Rendering;
 - 6.3.3.3. User Authentication; and
 - 6.3.3.4. Security and Personal Privacy Architecture (the Security Architecture).
- 6.3.4. The Security Architecture design activities must include reviewing the ICEMS 2 Risk Analysis document (to be provided at Contract award, as described in 1.13.2 of this SoW), and updating the Risk Analysis document for each of the technical progress review meetings as described in 6.15 of this SoW, and as per the Risk Assessment section of the ISO/IEC 27002:2005 Standard - Information technology - Security techniques - Code of practice for information security management (the Risk Assessment).
- 6.3.5. The Contractor must use the results of the Risk Assessment to review and propose updates to the ICEMS System and Facilities Security Requirements (as described in Appendix 6 of this SoW), as per then-current Industry Best Practices, including the ISO/IEC 27002:2005 Standard, and CSEC's Information Technology Security Guideline (ITSG-31) – User Authentication Guidance for IT Systems.
- 6.3.6. In order for the ICEMS 2 Technical Authority to approve the Architecture, the Security Architecture must satisfy the updated ICEMS System and Facilities Security Requirements.

6.4. Task 3 Create, manage and support the ICEMS computing environments

- 6.4.1. The Contractor must set up and configure the hosted system and technologies as described in section 10 of this SoW.
- 6.4.2. The architecture for the hosted system and technologies will be finalized in the Architecture designed in Task 2 of this SoW.
- 6.4.3. The hosted system and technologies must be on Dedicated servers in a secure commercial data centre IT facility.

6.4.4. The data centre, IT facilities, and hosted system and technologies must satisfy the ICEMS System and Facilities Security Requirements, which must be updated during the project (as described in 6.3.5 of this SoW).

6.4.5. The Contractor must manage, support and maintain those IT facilities, systems and technologies.

6.5. Task 4 Project Management Controls

6.5.1. The Contractor must create, deliver and implement the following as agreed to by the ICEMS 2 Technical Authority in acceptance of the Project Plan:

6.5.1.1. Quality Assurance Plan and Quality Control Plan

- a. The Quality Assurance Plan must set out in detail the process checklists, project audits and methodology, and standards compliance.
- b. The Quality Control Plan must set out in detail the inspection, deliverable peer reviews and the testing process to ensure deliverables are of acceptable quality, and that they are complete and correct.

6.5.1.2. Risk Management Plan

- a. A Risk Management Plan must be developed.
- b. The Risk Management Plan must be reviewed and updated, at a minimum, every second week.

6.5.1.3. Issues Log

- a. An issues log, available to the ICEMS 2 Technical Authority as well as the Contractor's Project Team, must be kept current.

6.5.1.4. Change Management Plan

- a. The Change Management Plan must set out in detail how change control, configuration management and data management will be managed, and must identify all system change management tools.
- b. The Contractor must provide all change management tools.
- c. The Contractor must manage all software changes for the duration of the Contract.

6.5.1.5. Master Test Plan (MTP)

- a. The MTP must address all of the project's functional requirements (as described in Appendix 4 of this SoW) plus those requirements that are enhancements (as described in 1.3.5 and section 13 of this SoW).
- b. The MTP must set out in detail the Contractor's method and commitment with regard to Unit Testing, Functional Testing, Integration Testing, Performance Testing, Reliability Testing, User Acceptance Testing and Contractor support requirements during User Acceptance Testing, all of which are set out below in 6.5.1.5 c through to h.
- c. Unit Testing: testing of individual units of source code to ensure that they meet the functional requirements.
- d. Functional Testing: testing of individual units or groups of code that make up a discrete function.

- e. Integration Testing: testing of groups of code that make up discrete functions to be tested with other completed functions.
- f. Performance Testing: performance testing that uses the current ICEMS 1 as a baseline for individual functional performance.
- g. Reliability Testing: consists of operating ICEMS 2.0 online under a combination of simulated normal load conditions and ICEMS User-initiated transactions.
- h. User Acceptance Testing: The Project Plan must detail the Work that the Contractor must perform to support the Client-staffed User Acceptance Testing activities as described in Task 10 in 6.11 of this SoW.
- i. With input from the ICEMS 2 Technical Authority and any person designated by the ICEMS WG, the Contractor must develop and maintain the MTP such that it covers all of the project functional requirements, including those requirements that are enhancements (as described in 1.3.5 and section 13 of this SoW).

6.6. Task 5 Deliver the first stage of the ICEMS 2.0 application that supports the development, maintenance, and collection of statistics on questions that are used in Red Seal certification exams (the Item Management)

- 6.6.1. The Contractor must design, develop, deliver, integrate and support the first stage of the ICEMS 2.0 application on Dedicated servers hosted in a secure data centre IT facility.
- 6.6.2. The Contractor must deliver the first stage of the application that meets the core Item Management functions that will be determined as a result of the Work performed in 6.2.10 of this SoW.
- 6.6.3. The Contractor must deliver the ICEMS 2.0 application using current Industry Best Practices for web application development and evolving hardware and software capabilities.
- 6.6.4. The first stage of the ICEMS 2.0 application must be a fully operational, integrated sub-set of the Application, with the user interface, Business Rules and the database, and must meet all testing requirements as described in Task 10 of this SoW.

6.7. Task 6 Deliver the second stage of the ICEMS 2.0 application that supports the generation, maintenance, and the collection of statistics on Red Seal certification examinations (the Exam Management)

- 6.7.1. The Contractor must design, develop, deliver, integrate and support the second stage of the ICEMS 2.0 application on Dedicated servers hosted in a secure data centre IT facility.
- 6.7.2. The Contractor must deliver the second stage of the application that meets the core Exam Management functions that will be determined as a result of the Work performed in 6.2.10 of this SoW.
- 6.7.3. The second phase of the ICEMS 2.0 application must be a fully operational, integrated sub-set of the Application, with the user interface, Business Rules and the database, and must meet all testing requirements as described in Task 10 of this SoW.

6.8. Task 7 Deliver the final ICEMS 2.0 application- Integration of stage 1 (Task 5) and stage 2 (Task 6)

- 6.8.1. The Contractor must design, develop, deliver, integrate and support the final ICEMS 2.0 application on Dedicated servers hosted in a secure data centre IT facility.
- 6.8.2. The Contractor must deliver a functioning ICEMS 2.0 application that meets all of the Detailed Functional Specifications for ICEMS 2.0 (which will be provided after Contract award) and Business Rules, all of which will be determined by the Work performed in 6.2.10 of this SoW. This set of detailed functional specifications include those from Task 5 and Task 6 and the remaining detailed functional specifications that are a result of the Work performed in 6.2.10 of this SoW.
- 6.8.3. The final ICEMS 2.0 application must be a fully operational version of the Application, with the user-interface, Business Rules and the database.

6.9. **Task 8 Application and Services Management Services**

- 6.9.1. The Contractor must deliver, enable, operate and support a 2011 Edition (or newer) Information Technology Infrastructure Library (ITIL) -based application and services management plan
- 6.9.2. The ITIL-based services management plan must be consistent with the ISO/IEC 27002:2005 Standard (or newer version).
- 6.9.3. The application and services management plan must describe how the Contractor will follow Industry Best Practices for application management.
- 6.9.4. The Contractor must provide an application and services management plan that satisfies the defined application and services management requirements (as described in section 12 of this SoW).
- 6.9.5. The Contractor must formally document all of the procedures they are required to provide for the application and services management processes.
- 6.9.6. The Contractor must provide trained application and services management employees so that they can execute, to the required support Service Levels (as described in 12.21 of this SoW), the application and services management plan by following the documented procedures.
- 6.9.7. The application and services management plan must include a disaster recovery plan (DRP).
 - 6.9.7.1. The Contractor must provide the documented DRP and access to the required IT facilities (off-site storage) to the ICEMS 2 Technical Authority before Production operations commence.
 - 6.9.7.2. The DRP must satisfy the requirements of the ICEMS System and Facilities Security Requirements (as described in Appendix 6 of this SoW).
 - 6.9.7.3. The DRP must ensure that the Production version of ICEMS 2 is operational within 5 working days of the occurrence of a disaster.

6.10. **Task 9 Transition-In Activities**

- 6.10.1. The Contractor must deliver, enable and support application transition-In activities including, but not limited to, planning, resource assignment, data migration and transition coordination (as described in 6.10.2 and 6.10.3 of this SoW).
- 6.10.2. The Contractor must provide transition services from the current ICEMS 1 computing environment to the ICEMS 2 computing environment.
- 6.10.3. The Contractor must draft, gain approval from the ICEMS 2 Technical Authority and then execute all transition-related activities (the Transition Plan) including, but not limited to, the following:
 - 6.10.3.1. Transition planning;
 - 6.10.3.2. Assignment of resources during the transition period;
 - 6.10.3.3. Migration of data from the legacy Microsoft SQL Server database to the new ICEMS 2 database;
 - 6.10.3.4. Migration of the existing ICEMS Data Mart application to the Contractor's IT hosting facilities, together with assumption of the responsibility for the hosting and management of that application (Data Mart is a modern IBM Cognos-based reporting and analysis application that accesses a MS SQL Server database, all running in an MS Windows Server environment. No enhancements to this application are required from the Contractor during the Project Phase. The Data Mart database is currently periodically updated with data uploaded from the ICEMS 1 database. That data upload must be modified by the Contractor to upload the same data from the new ICEMS 2 database); and
 - 6.10.3.5. All aspects of transition coordination.

6.11. Task 10 Testing and Client Acceptance

- 6.11.1. The Contractor must successfully perform the MTP testing levels described in (a) through (g) of section 6.5.1.5 before the User Acceptance Testing can commence and the Work is accepted by the Client (the Client Acceptance).
- 6.11.2. Client Acceptance will occur when:
 - 6.11.2.1. User Acceptance Testing (UAT) as set out in the MTP has been successfully completed;
 - 6.11.2.2. It has been confirmed by the Stakeholders' Representative Team that the delivered ICEMS 2.0 conforms with the project-developed Architecture (as described in 6.3 of this SoW);
 - 6.11.2.3. The Contractor has supplied complete technical and support documentation based on the documentation standards described in the Contractor's proposed project management methodology; and
 - 6.11.2.4. It has been confirmed by the Stakeholders' Representative Team that the updated (as described in 6.3.5 and 6.3.6 of this SoW) ICEMS System and Facilities Security Requirements (as described in Appendix 6 of this SoW) have all been met.

- 6.11.3. The UAT will be performed in 2 steps:
- 6.11.3.1. Step 1—An ICEMS User test performed by a select group of ICEMS users as designated by the ICEMS WG that will take place for a minimum of 10 business days. This ICEMS User test will include the following:
 - a. A structured, documented, scripted test of the ICEMS 2.0 application (manually executed by ICEMS Users) that will verify that all of the required business procedures function correctly;
 - b. Further, less formal, unscripted user tests;
 - c. Verification that the ICEMS 1 Production database can migrate correctly to ICEMS 2.0; and
 - d. Verification that the data exchange interfaces with the various jurisdictional apprenticeship systems function correctly.
 - 6.11.3.2. Step 2—An initial version of ICEMS 2.0 that will run while ICEMS 1 is still operating in Production (the Production Pilot). This Production Pilot will take place for a minimum of one month. The Production Pilot will include the following:
 - a. Conversion and migration of all or some segments of the ICEMS 1 production database so that ICEMS 2.0 will have an accurate and complete database with which to start the ICEMS 2 Production Pilot;
 - b. Operation, management and support of the Application, carried out by the Contractor according to the application and services management plan and procedures;
 - c. Use of ICEMS 2.0 by ICEMS Users in a Production Pilot context;
 - d. Before the conclusion of the Production Pilot, successful migration of a consolidated Production database to the ICEMS 2.0 Production computing environment;
 - e. Confirmation that all ICEMS 2.0 computing environments are enabled in a Production context; and
 - f. Confirmation that ICEMS 2.0 is ready to operate in a full Production context without any ongoing operation or use of ICEMS 1.
 - 6.11.4. Step 1 of the UAT will commence when all of the ICEMS 2.0 functionality has successfully gone through all of the testing levels as described in (a) through (g) of 6.5.1.5 of this SoW.
 - 6.11.5. Step 2 of the UAT, Production Pilot(as described in 6.11.3.2 of this SoW), will commence after the first UAT step, User test (as described in 6.11.3.1 of this SoW), has been successfully completed and Task 8 (as described in 6.9 of this SoW), application and services management services, has been delivered and enabled.
 - 6.11.6. The Contractor must support the UAT so that throughout the UAT period—both the 10 business days of the User test (Step 1) and the one-month Production Pilot (Step 2)—all detected errors are remedied within the required Service Levels (as described in 12.20 of this SoW). If such remedies are not achieved, then the UAT period may be restarted or extended at the sole discretion of the ICEMS 2 Technical Authority.
 - 6.11.7. Once an error is detected, the ICEMS 2 Technical Authority will, at his or her sole discretion, determine the severity of the error (as described in 12.22 and do the following:

- 6.11.7.1. Advise the Contractor's representative within 24 hours of each such determination according to a mutually agreed upon method of communication;
- 6.11.7.2. Provide copies to the Contractor of related documentation and all test results that are reasonably available; and
- 6.11.7.3. Provide the Contractor with such assistance as the Contractor may reasonably request in identifying the causative defect, error or malfunction.
- 6.11.8. Each UAT step is considered to be completed when the defined step duration has elapsed, and there are no outstanding Severity 1 or 2 Errors, 2 or fewer Severity 3 Errors, and 5 or fewer Severity 4 Errors (as described in 12.22 of this SoW).
- 6.11.9. The Stakeholders' Representative Team may audit and review the tasks and results of the testing performed by the Contractor.
- 6.11.10. The Stakeholders' Representative Team may perform any of the Contractor's planned Testing tasks, if requested by the ICEMS 2 Technical Authority.
- 6.11.11. Step 1 and Step 2 of the UAT may be repeated for each of the three stages of the ICEMS 2.0 application described in Tasks 5, 6 and 7, if requested by the ICEMS 2 Technical Authority.
- 6.11.12. Partial Client Acceptance may occur at Step 1 and/or Step 2 of the UAT. Full Client Acceptance will not occur until after the Application has successfully completed its Production Pilot.

The following Tasks—11, 12 and 13—are post-ICEMS 2.0 implementation tasks.

6.12. Task 11 Operate, Manage, Support and Maintain ICEMS

- 6.12.1. The Contractor must supply the services to meet the required Service Levels to operate, manage, support and maintain ICEMS 2 once any phase or stage of the ICEMS 2.0 application has been promoted into Production.
- 6.12.2. The Contractor will provide a Warranty for the ICEMS 2.0 application for a 1-year period after Full Client Acceptance as described in 6.11.12 of this SoW.
- 6.12.3. If, during the project, it is determined that the planned transition date to full Production operation of the final ICEMS 2.0 will be delayed, then the Contractor must host, manage, operate, support and maintain the ICEMS 1 system and application to meet defined Service Levels;
- 6.12.4. Through the TA process, the Contractor must perform services such as, but not limited to, replace, implement, support and maintain the Client-owned technologies (hardware, network and software), which includes extending existing support as requested by the ICEMS 2 Technical Authority.

6.13. Task 12 Create the Enhanced Versions (ICEMS 2.1, ICEMS 2.2, ICEMS 2.3, etc. (ICEMS 2.X)) of the ICEMS 2 Application

- 6.13.1. The Contractor must make enhancements to ICEMS 2 after the acceptance of ICEMS 2.0 as directed by the ICEMS 2 Technical Authority.
- 6.13.2. Subject to budget constraints, immediately following the development of ICEMS 2.0, the Contractor must analyze, design and implement the 2.X versions of the ICEMS Application, following the Contractor's proposed SDLC and project management methodologies.

6.14. Task 13 Transition-Out

6.14.1. General

- 6.14.1.1. If the Contract is due to expire and is not being extended, additional services, such as transition-out planning and support services, may be required of the Contractor prior to the expiry of the Contract.
- 6.14.1.2. The Contractor must cooperate with the ICEMS 2 Technical Authority to bring about a smooth and orderly transition.
- 6.14.1.3. The Contractor must continue to provide all of the services required in the Contract to uphold the Service Levels and fulfill all other existing obligations.
- 6.14.1.4. During the transition-out period, the Contractor must keep its core ICEMS Contract staff assigned to the ICEMS 2 Contract, to at least the "prior to transition-out" work effort levels.
- 6.14.1.5. The Contractor will not be responsible for the overall transitioning-out of ICEMS 2 and associated services. However, the Contractor must provide services that support both the planning of the transition (Transition Plan) and the subsequent transition activities.
- 6.14.1.6. All transition-out services provided by the Contractor in support of the transition-out will be authorized via the TA process.

6.14.2. Transition-Out Services and Deliverables

- 6.14.2.1. During the planning, and during the transition-out period itself, the Contractor must promptly supply to the ICEMS 2 Technical Authority all services and deliverables as requested to support the transition. These services and deliverables may include the following.
 - a. Transition Plan support: The ICEMS 2 Technical Authority will prepare and execute the Transition Plan. The Contractor must supply services and deliverables that support the activities set out in the Transition Plan.
 - b. Knowledge transfer: The Contractor must provide its detailed knowledge on ICEMS, and respond within 24 hours or such other time period as requested by the ICEMS 2 Technical Authority to requests for ICEMS-related information.
 - c. Documentation: The Contractor must supply electronic copies of the latest versions of all of the documentation that has been developed

under the Contract including, but not limited to, system specifications; user documentation and aids; operational documentation and procedures; services management policies and procedures; and the DRP.

- d. Data: The Contractor must supply current electronic copies of all of the data created and/or stored during the Contract, including all databases; database backups; audit trails; other test data; error logs; the incident/problem resolution database; and archived data.
- e. Inventory lists: The Contractor must provide current inventory lists of all of the equipment, software and other assets that the Contractor uses to meet its contractual obligations to host, manage, operate, support, maintain and enhance ICEMS 2. Those lists will detail the ownership of each asset and its location. If the Client is the owner, then the listing will provide information on any third-party maintenance agreement that is currently in place for the asset.
- f. Client-owned asset transfer and access: When requested, the Contractor must transfer the Client-owned assets (including software, databases and equipment) to the Client within the time specified and agreed to by the ICEMS 2 Technical Authority. In addition, if requested, prior to the transfer of an asset, the Contractor must provide copies of applicable Client-owned assets (such as the Application software source code) and/or allow reasonable use of such an asset (such as the ICEMS Test computing environment) by the ICEMS 2 Technical Authority.
- g. Contractor-owned assets and sub-contractor assets (both of which may include human resources or goods): When requested, the Contractor must use Contractor-owned assets or sub-contractors assets to assist and support the ICEMS 2 Technical Authority in order for the ICEMS 2 Technical Authority to carry out the necessary Transition activities.
- h. Contractor IT facilities: The Contractor must supply reasonable access to its ICEMS offices and IT hosting facilities such that the ICEMS 2 Technical Authority can execute the Transition Plan and activities. This may include, but is not limited to, providing work desks and other office related IT facilities and equipment (not computing technologies) for up to 3 members of the ICEMS 2 Stakeholders' Representative Team.
- i. Deletion of ICEMS data, information and software: When requested by the ICEMS 2 Technical Authority, the Contractor must delete and confirm in writing that all copies of ICEMS data, information and software that are in the Contractor's possession have been deleted.

6.15. Technical Progress Review Meetings

- 6.15.1. The Contractor must conduct technical progress review meetings every second week throughout the Project Phase, then monthly meetings for the remainder of the Contract.
- 6.15.2. The meeting schedule and frequency may be adjusted by mutual consent of the Contractor and the ICEMS 2 Technical Authority.
- 6.15.3. The Contractor must propose an agenda for each technical progress review meeting and distribute it to the ICEMS 2 Technical Authority at least 2 business days prior to the meeting. Any changes to the agenda requested by the ICEMS 2 Technical Authority must be incorporated into the revised agenda.
- 6.15.4. Participants of the technical progress review meetings include the ICEMS 2 Technical Authority and the Contractor's Project Manager. Either participant may

invite guests to support the agenda. In addition, if requested 24 hours in advance of the review meeting by the ICEMS 2 Technical Authority, the Contractor must make specific personnel available to attend the review meeting.

- 6.15.5. The Contractor must take minutes of these meetings and distribute copies to all participants, including the ICEMS 2 Technical Authority, within 2 business days of the meeting.
- 6.15.6. At each meeting, the Contractor must present a report on work progress and performance, and the plans for the balance of the Project Phase of the Contract, and must identify any current or anticipated technical problem areas, along with related work-around plans.
- 6.15.7. At each meeting, the Contractor must present the current risk management report for the project.
- 6.15.8. The ICEMS 2 Technical Authority, or that person's authorized representative, will be the chair of the technical progress review meetings.
- 6.15.9. The Contractor must provide the required information, personnel (if requested in advance by the ICEMS 2 Technical Authority), IT facilities and amenities so that the review meetings can be conducted in an effective and efficient manner.
- 6.15.10. The Contractor must provide all of its documentation in Canadian English unless otherwise instructed by the ICEMS 2 Technical Authority.

7. Required Contractor Staffing Resources

- 7.1. The Contractor's Project Team must be resourced from the following resource categories: IT Project Manager; Senior IT Architect; Senior Application Developer; Application Developer; Senior Infrastructure Support Analyst; Infrastructure Support Analyst; Senior Database Analyst; IT Services Management Analyst; Security Systems Consultant; Tester; Services Manager; Senior Business Analyst; Business Analyst; IBM Cognos Programmer/Analyst; Technical Writer; and French Translation Analyst.
- 7.2. When resources are requested through the TA process, the identified resources must meet the defined requirements for their relevant resource categories for the entire period of time that they are performing the Work.
- 7.3. The Contractor's resourcing and supporting practices used to fulfill a TA must follow a formal documented process (as described in 6.2.9 of this SoW.).
- 7.4. All Contractor project resources must be able to communicate effectively in English, both orally and in writing.
- 7.5. An IT Project Manager must have the following qualifications:
 - 7.5.1. A computer science or an information technology degree, or an equivalent combination of education and work experience;
 - 7.5.2. Project Management Professional (PMP®) certification or a master's degree in project management or equivalent;

- 7.5.3. A minimum of 7 years Recent experience managing IT application systems implementation projects;
 - 7.5.4. A minimum of 5 years Recent experience managing custom developed application implementation projects;
 - 7.5.5. A minimum of 3 years Recent experience managing IT projects for a Canadian federal or provincial/territorial government organization; and
 - 7.5.6. A minimum of 2 years Recent experience managing IT custom developed application systems implementation projects using the Contractor's project management and SDLC methodologies.
- 7.6. A Senior IT Architect must have the following qualifications:
- 7.6.1. A degree in a directly related field or equivalent combination of education and work experience;
 - 7.6.2. A minimum of 7 years' experience designing and implementing IT systems;
 - 7.6.3. A minimum of 5 years Recent experience as an IT Architect;
 - 7.6.4. A minimum of 5 years Recent experience with Microsoft technologies, including Windows Server and SQL Server;
 - 7.6.5. A minimum of 3 years Recent experience with the Contractor's proposed application development toolset(s);
 - 7.6.6. A Microsoft Certified IT Professional (MCITP) certification or equivalent;
 - 7.6.7. A minimum of 2 years of VMWare experience;
 - 7.6.8. Knowledge of current IT technologies, including Microsoft's, and their likely future directions through any of the following, but not limited to, courses, seminars, conferences and/or self-study activities;
 - 7.6.9. A minimum of 2 years' experience as the lead IT architect on a project; and
 - 7.6.10. A minimum of 2 years Recent experience as an IT architect on IT custom developed application systems implementation projects using the Contractor's accepted SDLC methodology.
- 7.7. A Senior Application Developer must have the following qualifications:
- 7.7.1. A computer science or an information technology degree or diploma, or an equivalent combination of education and work experience;
 - 7.7.2. A minimum of 5 years Recent experience designing and programming business application systems;
 - 7.7.3. A minimum of 2 years Recent experience as a lead application developer;
 - 7.7.4. A minimum of 5 years' experience in application programming and using SQL Server;

- 7.7.5. A minimum of 2 years Recent programming experience using the Contractor's approved application development toolset(s);
 - 7.7.6. A proven ability to ensure that any functional specifications received from the business analysts are adequate and complete so that a quality solution can be programmed;
 - 7.7.7. A proven ability to design and implement quality solutions, with minimal supervision, that satisfy client requirements; and
 - 7.7.8. A minimum of 1 year Recent experience as a lead application developer on an IT custom developed database application systems implementation project using the Contractor's approved SDLC methodology.
- 7.8. An Application Developer must have the following qualifications:
- 7.8.1. A computer science or an information technology degree or diploma, or an equivalent combination of education and work experience;
 - 7.8.2. A minimum of 3 years Recent experience designing and programming business application systems;
 - 7.8.3. A minimum of 2 years Recent experience doing application programming and using SQL Server;
 - 7.8.4. A minimum of 2 years Recent programming experience using the Contractor's approved application development toolset(s);
 - 7.8.5. A proven ability to design and implement quality solutions that satisfy client requirements; and
 - 7.8.6. A proven ability to ensure that functional specifications received from the business analysts are adequate and complete so that a quality solution can be programmed.
- 7.9. A Senior Infrastructure Support Analyst must have the following qualifications:
- 7.9.1. An information technology degree or diploma, or an equivalent combination of education and work experience;
 - 7.9.2. A minimum of 5 years Recent experience planning, configuring, installing and supporting IT systems, system software and networks;
 - 7.9.3. A minimum of 2 years Recent experience as a lead infrastructure support analyst;
 - 7.9.4. A minimum of 3 years' experience planning, configuring, installing and supporting Internet networks, components and IT facilities;
 - 7.9.5. A minimum of 3 years' experience with Microsoft technologies;
 - 7.9.6. A Microsoft Certified IT Professional (MCITP) certification or equivalent;
 - 7.9.7. VMWare certification;
 - 7.9.8. Check Point certification or equivalent; and

- 7.9.9. A proven ability and all of the necessary skills and expertise, to resolve difficult systems integration issues.

7.10. An Infrastructure Support Analyst must have the following qualifications:

- 7.10.1. An information technology degree or diploma, or an equivalent combination of education and work experience;
- 7.10.2. A minimum of 2 years Recent experience configuring, installing and supporting IT systems, system software and networks;
- 7.10.3. A minimum of 2 years' experience configuring, installing and supporting Internet networks, components and IT facilities;
- 7.10.4. A minimum of 2 years' experience with Microsoft technologies;
- 7.10.5. A Microsoft Certified IT Professional (MCITP) certification or equivalent;
- 7.10.6. VMWare certification;
- 7.10.7. Check Point certification or equivalent; and
- 7.10.8. A proven ability to resolve difficult systems integration issues with minimal assistance from more senior resources.

7.11. A Senior Database Analyst must have the following qualifications:

- 7.11.1. A computer science or an information technology degree or diploma, or an equivalent combination of education and work experience;
- 7.11.2. A minimum of 5 years Recent experience designing and programming databases;
- 7.11.3. A minimum of 1 year Recent experience as a senior database analyst; and
- 7.11.4. A minimum of 5 years' experience designing and administering SQL Server databases.

7.12. An IT Services Management Analyst must have the following qualifications:

- 7.12.1. An information technology diploma, or an equivalent combination of education and work experience;
- 7.12.2. A minimum of 5 years Recent experience in the ongoing management of computer applications;
- 7.12.3. A minimum of 2 years Recent experience developing a system management plan;
- 7.12.4. A minimum of 2 years Recent experience implementing a services management plan; and
- 7.12.5. ITIL Version 2 (or later) certification.

7.13. A Security Systems Consultant must have the following qualifications:

- 7.13.1. An information technology degree or diploma, or an equivalent combination of education and work experience;
- 7.13.2. IT security specialist certification;
- 7.13.3. A minimum of 15 years' experience in IT;
- 7.13.4. A minimum of 5 years' experience designing and implementing IT security solutions;
- 7.13.5. Experience preparing security risk assessment reports;
- 7.13.6. Experience preparing disaster recovery plans;
- 7.13.7. A minimum of 3 years Recent experience with Internet security solutions; and
- 7.13.8. A proven ability to recognize potential security breaches in sensitive systems.

7.14. A Tester must have the following qualifications:

- 7.14.1. An information technology diploma, or an equivalent combination of education and work experience;
- 7.14.2. A minimum of 3 years Recent experience testing business application systems;
- 7.14.3. A minimum of 2 years Recent experience designing and implementing formal application system test plans during the development of a custom application system, following a formal project management/SDLC methodology; and
- 7.14.4. A minimum of 1 year Recent experience with automated testing tools.

7.15. A Services Manager must have the following qualifications:

- 7.15.1. An information technology diploma or a degree in a directly related field, or an equivalent combination of education and work experience;
- 7.15.2. A minimum of 5 years IT experience;
- 7.15.3. A minimum of 3 years Recent experience managing the support services provided by an application management services (AMS) provider to a client;
- 7.15.4. A minimum of 2 years' experience in managing an ITIL-based services management plan; and
- 7.15.5. A minimum of 2 years managing a service level agreement from the perspective of an AMS provider.

7.16. A Senior Business Analyst must have the following qualifications:

- 7.16.1. Any degree from a recognized University;
- 7.16.2. A minimum of 5 years Recent experience determining the detailed requirements for, and designing, business application systems;

- 7.16.3. A minimum of 2 years Recent experience as a lead business analyst;
 - 7.16.4. A minimum of 3 years' experience verifying that an implemented application functionality satisfies client requirements;
 - 7.16.5. A minimum of 2 years' experience designing Internet-based applications;
 - 7.16.6. A proven ability to translate functional requirements into detailed functional specifications that both the project's Stakeholders' Representative Team and the application developers can fully understand;
 - 7.16.7. A proven ability to work independently, without analysis and design supervision; and
 - 7.16.8. A minimum of 3 years' experience programming business application systems.
- 7.17. A Business Analyst must have the following qualifications:
- 7.17.1. Any degree from a recognized University;
 - 7.17.2. A minimum of 3 years Recent experience determining the detailed requirements for, and designing, business application systems;
 - 7.17.3. A minimum of 1 years' experience performing business analysis in a complex, multi-stakeholder user environment;
 - 7.17.4. A minimum of 1 years' experience verifying that an implemented application functionality satisfies client requirements;
 - 7.17.5. A minimum of 1 years' experience designing Internet-based applications;
 - 7.17.6. A proven ability to translate functional requirements into detailed functional specifications that both the project's Stakeholders' Representative Team and the application developers can fully understand;
 - 7.17.7. A proven ability to work with minimal supervision; and
 - 7.17.8. A minimum of 3 years' experience programming business application systems.
- 7.18. An IBM Cognos Programmer/Analyst must have the following qualifications:
- 7.18.1. A computer science or an information technology degree or diploma, or an equivalent combination of education and work experience;
 - 7.18.2. A minimum of 3 years Recent experience programming and supporting business intelligence systems using the IBM Cognos suite of tools;
 - 7.18.3. A minimum of 2 years' experience application programming and using SQL Server;
 - 7.18.4. A proven ability to design and implement quality solutions that satisfy client requirements; and
 - 7.18.5. A proven ability to ensure that functional specifications received from the Business Analysts are adequate and complete so that a quality solution can be programmed.

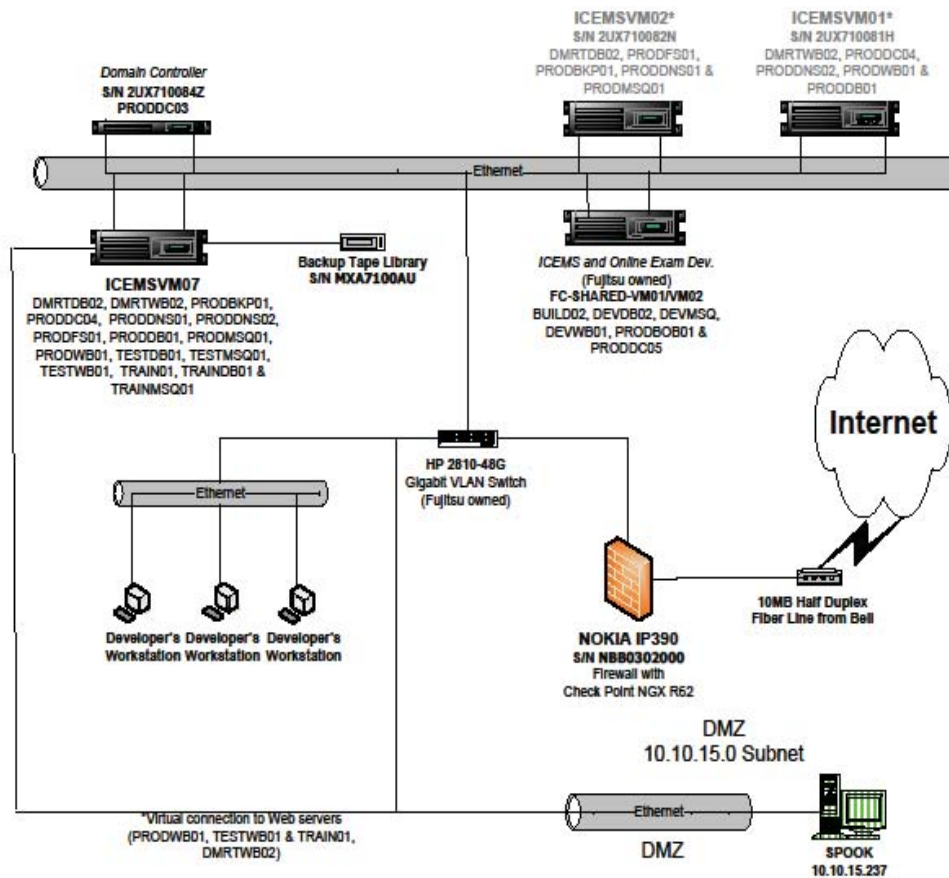
7.19. A Technical Writer must have the following:

- 7.19.1. A degree or an equivalent combination of education and work experience;
- 7.19.2. A minimum of 3 years' experience designing and writing user manuals and other user aids for computer applications; and
- 7.19.3. A minimum of 3 years' experience using specialized tools for developing online-user aids.

7.20. A French Translation Analyst must have the following:

- 7.20.1. A degree or an equivalent combination of education and work experience;
- 7.20.2. A minimum of 3 years' experience in Canadian French translation (from Canadian English); and
- 7.20.3. A minimum of 1 years' experience translating modern Canadian English computerized applications into Canadian French, including Canadian English user manuals.

8. Current ICEMS 1 Network Diagram

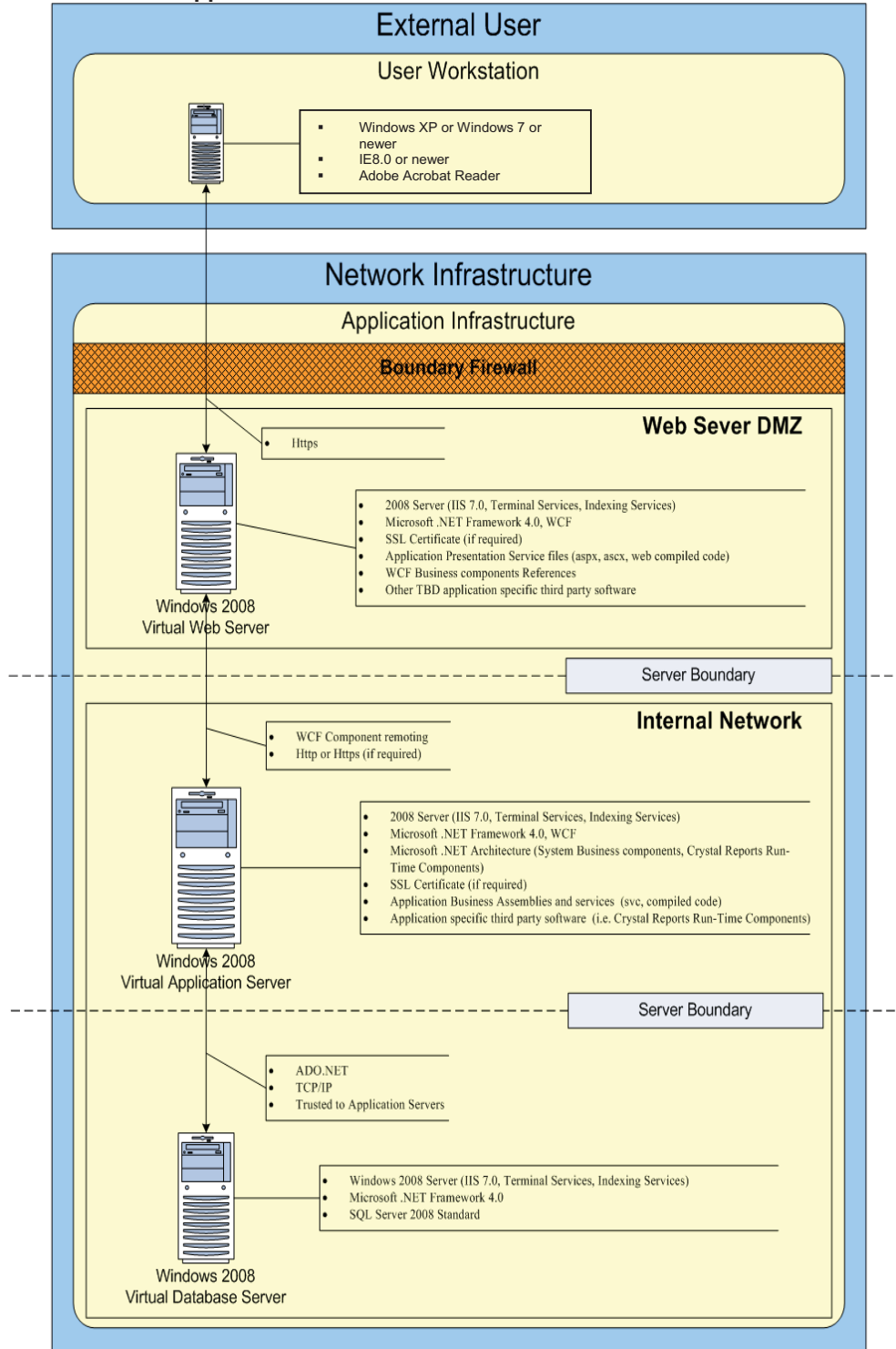


| ICEMS Network - Full VMWare Setup ver. 2.0 | |
|--|-----------|
| All Environments | |
| Fujitsu | Year 2014 |

* ICEMSVM01 & ICEMSVM02
All VMs hosted are inactive, refreshed bi-weekly from ICEMSVM07. Available for Recovery purposes.

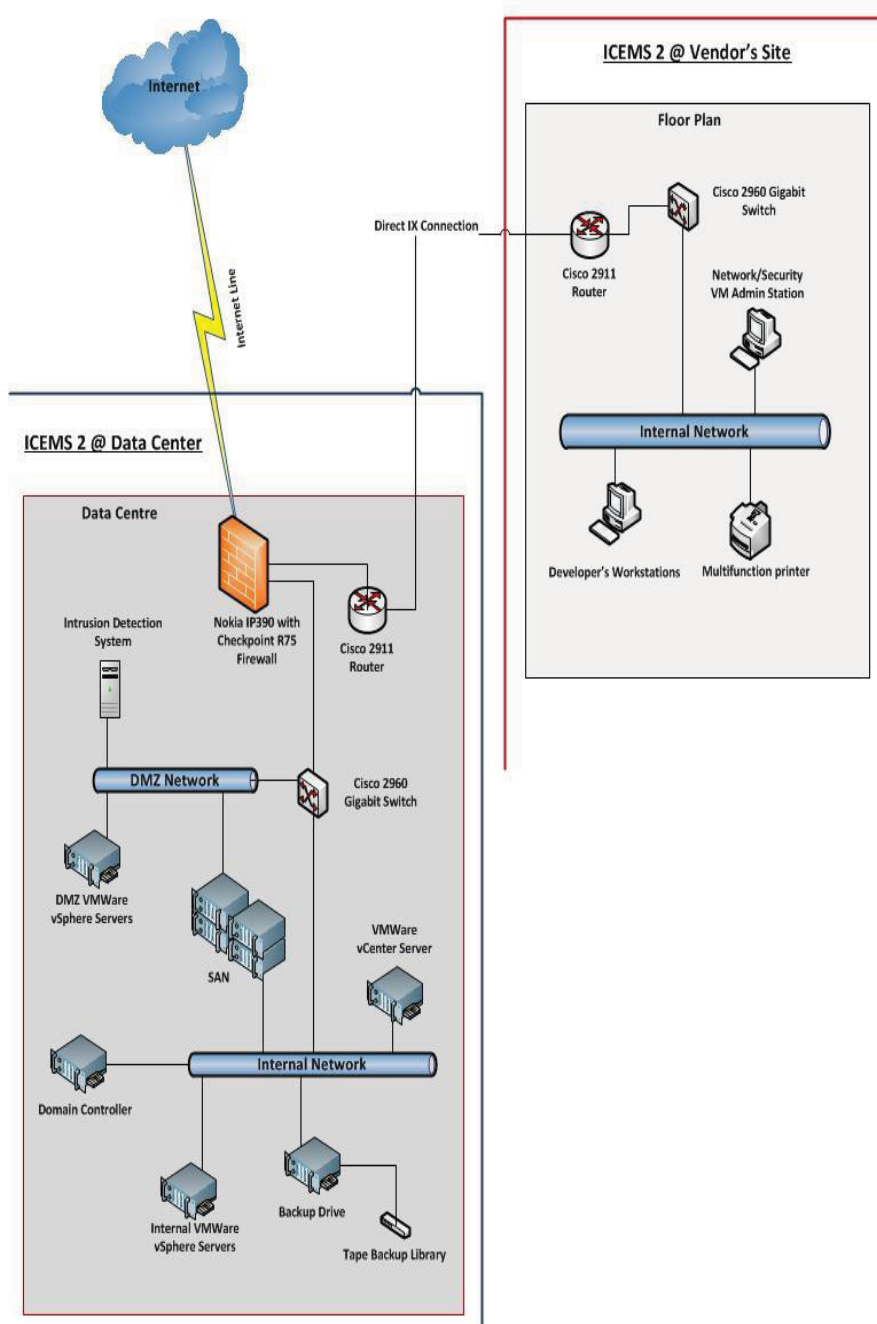
9. Potential ICEMS 2 Architecture Diagrams

9.1. ICEMS 2 Application



9.2. ICEMS 2 Network

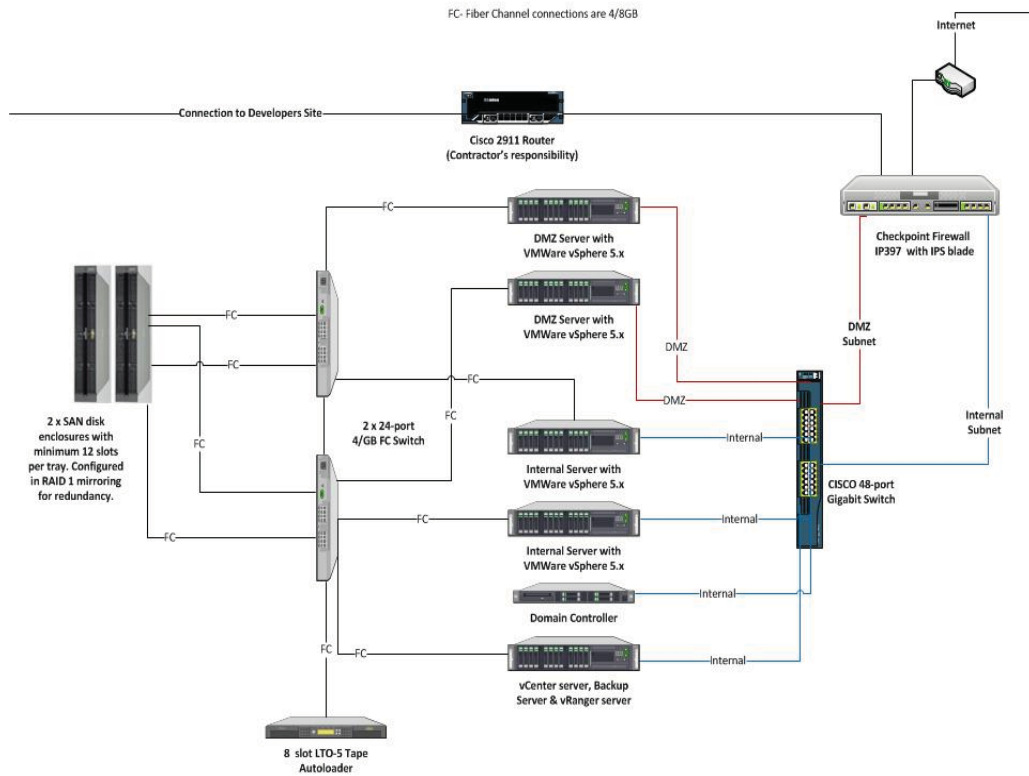
ICEMS 2 @ Data Center & Vendor's Site - Proposed Network Diagram



If the Contractor's ICEMS 2 Project Team is not in a location separate from the Data Centre location ("ICEMS 2 @ Vendor's (Contractor) Site" in the above diagram), then the direct connection and routers linking the two sites will not be required.

9.3. ICEMS 2 Servers and Storage Area Network (SAN)

ICEMS 2 @ Data Center -Proposed Servers Layout with Fiber Channel SAN and VMWare



10. Hosting Requirements

This section details the required IT hosting facilities, systems, technologies, services and supplies. This section does not contain any professional services tasks that will be requested through the TA process.

10.1. Overview of IT hosting Requirements

- 10.1.1. The ICEMS must operate on Dedicated servers hosted in a secure commercial data centre IT facility.
- 10.1.2. The Contractor's ICEMS 2 Project Team (Developers and systems Administrators) must not access the ICEMS computing environments over the Internet. If the Project Team is in a location separate from the data centre, there must be a Dedicated network connection between the two locations.
- 10.2. The Contractor must supply the following IT hosting facilities, infrastructure technologies, supplies and related services upon completion of Task 2, and from that point forward for the duration of the Contract.
 - 10.2.1. The Contractor must supply, directly or through a subcontractor, the data centre IT facilities required to host the ICEMS system, equipment and networks.
 - 10.2.2. The Contractor must supply directly, or through a subcontractor, an off-site disaster recovery backup tape storage IT facility (as described in 4.5 and 4.6 of Appendix 6 of this SoW) that is more than 20 kilometres from the location of the data centre.
 - 10.2.3. The data centre and off-site storage IT facilities must be commercial, built-for-purpose IT facilities.
 - 10.2.4. The data centre must have physical security policies and practices. These policies and practices must follow Industry Best Practices and the physical security requirements as listed in the ICEMS System and Facilities Security Requirements (as described in Appendix 6 of this SoW).
 - 10.2.5. The Contractor must supply the underlying data centre infrastructure technologies, including the following:
 - 10.2.5.1. Cabling and wiring (except the fibre cables and switches referred to in 10.3.5 of this SoW);
 - 10.2.5.2. Racks, rack-switches and panels;
 - 10.2.5.3. Primary and backup power;
 - 10.2.5.4. Physical security systems;
 - 10.2.5.5. Air conditioning;
 - 10.2.5.6. location separate from the host location, then the necessary dedicated network connection and routers required at both locations; and

- 10.2.5.7. A 10MB half-duplex fibre line for Dedicated access by ICEMS to the Internet.
- 10.2.6. The data centre IT facility's underlying infrastructure technologies, including power and air-conditioning elements, must be designed to reflect Industry Best Practices and must support the ICEMS system and network Service Level requirement of a minimum of 99.98% availability during the ICEMS User Supported Access Period as described in section 12.19 of this SoW.
- 10.2.7. The Contractor must support and maintain the underlying data centre infrastructure technologies and IT facilities environment infrastructure.
- 10.2.8. If any of the data centre's underlying infrastructure technologies and IT facilities environment infrastructure elements become obsolete or unsupportable, then the Contractor must replace them with then-current comparable or superior technology.
- 10.2.9. The Contractor must supply and manage the consumables (such as paper, printer cartridges and DVDs, but excluding removable tapes) required to operate the various components of ICEMS 2 at the IT host facilities.
- 10.2.10. The Contractor must supply the following IT hosting Services:
 - 10.2.10.1. Handling of consumables, mounting and dismounting of tapes and disk packs, secure shipment of tapes and disk packs to and from the remote data storage IT facility (as described in 12.8 and 12.9 of this SoW); and powering on and off of devices (if the Contractor sub-contracts these data centre hosting services, the data centre staff may, under the direction of the Contractor, be permitted to perform these services without receiving any Government of Canada security clearances);
 - 10.2.10.2. Help Desk services (as described in 12.19.7 and 12.19.8 of this SoW) with the capacity to process up to 20 calls per month; and
 - 10.2.10.3. A "requests for service" database service (as described in 12.19.12 and 12.19.13 of this SoW).
- 10.3. The Client will supply the Contractor with the following hardware, network technologies and software products (as listed in Appendix 7 of this SoW) as required. All of these products will continue to be owned by the Client:
 - 10.3.1. Firewall and Intrusion Detection System with software;
 - 10.3.2. 2 DMZ vSphere Servers, 2 Internal Network vSphere Servers, the vCentre Server and the Domain Controller Server (6 in total);
 - 10.3.3. A Backup Tape Library with a single drive, and removable tapes;
 - 10.3.4. 2 SAN disk enclosures (the SAN must be partitioned into zones separating the demilitarized zone (DMZ) and private data stores, as described in 10.3.16.3 of this SoW);
 - 10.3.5. 16 fibre cables and two switches, which are required for redundancy (the cables are for connections between the SAN, the servers and the fibre switches);

- 10.3.6. Microsoft Windows Server Software (to minimize costs, ICEMS 2 must use the same system software as does the ICEMS Data Mart—namely, MS Windows Server and MS SQL Server);
- 10.3.7. Virus protection and other related security software;
- 10.3.8. A LAN switch;
- 10.3.9. Various VMWare software products;
- 10.3.10. System backup software;
- 10.3.11. Backup-to-tape software;
- 10.3.12. Microsoft SQL Server software;
- 10.3.13. Microsoft Office, Crystal Reports, ITEMAN and Adobe Acrobat software;
- 10.3.14. IBM Cognos 8 Administrator, Professional and Business Analyst software; and
- 10.3.15. All of these products must be configured to meet the security requirements listed in the ICEMS System and Facilities Security Requirements (as described in Appendix 6 of this SoW), including the following:
 - 10.3.15.1. The server and disks must be used solely by the ICEMS and must not be shared.
 - 10.3.15.2. The ICEMS host site network must have a Dedicated network access connection to the Internet. Only ICEMS traffic must be permitted on that connection.
 - 10.3.15.3. The ICEMS internal host network must be separated into two zones: the DMZ and the private zone. The DMZ must contain only the ICEMS systems that need access that is initiated **from** the Internet. The private zone must allow ICEMS systems to initiate access **to** the Internet in a secure manner.
 - 10.3.15.4. Firewalls must control the traffic across these networks and to the Internet.
 - 10.3.15.5. All data communications with ICEMS over the Internet must be 256-bit encrypted.
 - 10.3.15.6. All data stored in ICEMS on disks and tapes must be encrypted to comply with FIPS 140-2 (the U.S. federal government data encryption standard).
 - 10.3.15.7. The firewall must be used solely by ICEMS and must not be shared.
 - 10.3.15.8. There must be separate Web servers.
 - 10.3.15.9. Only the Web servers may be directly accessible from the Internet.
 - 10.3.15.10. The application and database servers must be accessible only from the network via the ICEMS application running on the Web servers.

10.3.15.11. All systems must be hardened (as described in Appendix 6 of this SOW).

10.4. The Contractor must provide:

- 10.4.1. All of the standard tools (including application software development, source code control, testing, problem tracking, documentation, calls for service database, system and network management, capacity planning, change management and Service Level management tools) that its Developers, Testers and other Project Team members will need to execute the Contract;
 - 10.4.2. A modern application development toolset to develop the Application. Specifically, either the Microsoft Visual Studio 2013 or newer toolset using Visual Basic 2013 (or newer) and ASP.NET, or an application development toolset(s) with similar application development capabilities to the Visual Basic 2013 (or newer) and ASP.NET toolset, or an equivalent Java (compatible with the Java SE 7 or newer specifications) toolset;
 - 10.4.3. Any tools the Contractor uses to satisfy the requirements of this Contract that are not listed in 10.3. If the tools have been accepted as an equivalent by the Client, the Contractor must offer them to the Client at the termination of the Contract with perpetual, fully transferable escrowed licenses and a maintenance and support agreement with terms commensurate with that which is offered to the Contractor's best customers; and,
 - 10.4.4. The work IT facilities (the Project Delivery Office), development computing environments, personal computers and job-related administrative software for its Developers, Testers, other Project Team members and Stakeholders' Representative Team members (as requested by the ICEMS 2 Technical Authority).
- 10.5. When requested by the ICEMS 2 Technical Authority, the Contractor must acquire and install ICEMS 2-specific, application development and management tools. All of these products will be acquired through the TA process and will be owned by the Client.
- 10.6. When requested by the ICEMS 2 Technical Authority, the Contractor must acquire and install ICEMS 2-specific, innovative application development and/or management tools. These innovative tools must demonstrate material improvement in order to be approved by the Client. A material improvement is one in which there is a quantifiable improvement in either, or all, of the following areas: project schedule was decreased, overall cost decreased and/or improved functionality. All of these products will be acquired through the TA process and will be owned by the Client.
- 10.7. The Contractor must install any additional Client-provided technology (hardware, equipment and software) when requested to do so by the ICEMS 2 Technical Authority through the TA process.

11. Technology Maintenance and Replacement

- 11.1. The Contractor must establish policies and procedures with the ICEMS 2 Technical Authority that ensure the optimal availability of ICEMS, and to achieve the ICEMS Service Levels as described in 12.20 of this SoW.

- 11.2. Only the Contractor's authorized staff will be permitted to access and configure the Dedicated ICEMS servers' operating systems and software, either directly or via VMWare.
- 11.3. Only the Contractor's authorized staff will be permitted to access and configure the Dedicated ICEMS firewall.
- 11.4. If the Contractor sub-contracts the hardware maintenance, the hardware vendor maintenance staff may, under the direction of the Contractor, be permitted to install and maintain hardware.
- 11.5. The maintenance requirements in this section 11 include complete coverage of all elements of ICEMS and Data Mart, including the application software, Client-owned hardware, software and network, but do not include maintenance of the underlying data centre infrastructure technologies and IT facilities environment infrastructure described in 10.2.7 and 10.2.8 of this SoW.
- 11.6. The Contractor must extend the length of the manufacturer's and/or software publisher's maintenance and support services for the Client-owned hardware, equipment and software when requested by the ICEMS 2 Technical Authority through the TA process.
- 11.7. The Contractor must ensure that the Client-owned hardware, equipment and software can continue to meet the Client's on-going requirements, including service levels; and recommend replacement of the Client-owned hardware, equipment and software as appropriate
- 11.8. The Contractor must acquire and replace the Client-owned hardware, equipment and software when requested to do so by the ICEMS 2 Technical Authority through the TA process.
- 11.9. The Contractor must ensure that change management policies and procedures are established with the ICEMS 2 Technical Authority and followed.
- 11.10. The Contractor must ensure that changes to all hardware and system software are well managed to ensure the complete availability of the systems during the User Supported Access Period as described in 12.19.1 of this SoW.
- 11.11. The Contractor must maintain the system software.
 - 11.11.1. The Contractor must immediately apply all software publisher-supplied critical fixes and security updates (as described in 12.20.17 and 12.20.18 of this SoW).
 - 11.11.2. The Contractor must implement the most recent release and/or service pack within 6 months of its availability. .
- 11.12. The Contractor must install and keep current, at the ICEMS IT hosting facilities, anti-virus and other security mechanisms.
- 11.13. The Contractor must ensure that the hardware is maintained to the standards set out by the hardware vendor.
- 11.14. Server and SAN hardware support and maintenance services must be provided, 365 days a year, 24 hours a day, with a 4-hour response time.
- 11.15. The Contractor must ensure that appropriate testing is executed to ensure the stability and performance of any hardware and system software changes.

- 11.16. The Contractor must ensure that all of the hardware changes identified by the hardware vendor are implemented.
- 11.17. The Contractor must document all changes.
- 11.18. The Contractor must research, create, test and implement corrections (with documentation) to defects that have been found as a result of using or running any version of the Application. These corrections may be distributed immediately, in the next release, or at any time between, depending on the impact and the elapsed time to the next release as agreed to by the ICEMS 2 Technical Authority.

12. Application and Services Management

- 12.1. The Contractor must oversee each and all of the services provided for application and services management, as described in Task 11 through Task 13.
- 12.2. The Contractor must provide regular service level monitoring to achieve the required Service Levels (as described in 12.20 of this SoW).
- 12.3. The Contractor must provide a comprehensive Service Levels report and a contract financial status report each month. Refer to Appendix 8 of this SoW for a list of existing reports; ICEMS 2 must provide, at a minimum, comparable reporting functionality.
- 12.4. The Contractor must provide all technical capacity planning and forecasting to ensure adequate information technology resource availability to meet Service Levels (as described in 12.20 of this SoW).
- 12.5. The Contractor must manage the ICEMS 2 information technology assets and any sub-contracts.
- 12.6. The Contractor must provide a report, at least annually, detailing the ICEMS 2 information technology assets and their associated contracts.
- 12.7. The Contractor must supply the following Optimization Management Services:
 - 12.7.1. The Contractor must ensure, on an ongoing basis, that the performance and the operation of the Application are cost-effectively optimized and the Service Levels (as described in 12.20 of this SoW) are maintained;
 - 12.7.2. The Contractor must, at regular intervals (at least every 6 months), conduct cost-effective performance optimization tuning on the hardware and software configurations, including disk space allocation and load balancing; and
 - 12.7.3. The Contractor must ensure that the procedures and operating methods are in place to optimize performance cost effectively.
- 12.8. The Contractor must electronically back-up the Production database and computing environment on a nightly basis, so that if a system or database recovery is required, the system and database can be recovered at least to the end of that day's state.
- 12.9. A tape copy of that backup must be stored at a location remote from the data centre so that in the event of a data centre disaster, the system and database can be recovered.
- 12.10. A copy of the Production database must be used to refresh the training database nightly.

- 12.11. When a copy of the Production database is used to refresh the User Acceptance Test database between each User Test, the User Acceptance Test authorized users profiles must remain unchanged.
- 12.12. The Contractor must review and deliver the revised DRP at least once a year.
- 12.13. The Contractor must ensure that the DRP is updated as related changes occur.
- 12.14. The Contractor must co-operate with any independent third-party audit initiated by the Client during the life of the Contract. Such an audit may follow the CICA 5970 standard.
- 12.15. The Contractor must co-operate with any independent third-party ICEMS security assessment initiated by the Client during the life of the Contract.
- 12.16. The Contractor must then implement all approved recommendations that result from such audits (as described in 12.14 of this SoW) and/or assessments (as described in 12.15 of this SoW).
- 12.17. The Contractor must periodically (at least once a year) formally review the ICEMS security requirements and solutions ensuring that applicable policies and procedures are applied to the security documents and approved by the ICEMS 2 Technical Authority.
- 12.18. The Contractor must co-operate with any privacy impact assessment and/or threat risk assessment initiated by the Client during the life of the Contract.

12.19. System Availability

- 12.19.1. ICEMS must have a User Supported Access Period every Federal Government Working Days (FGWD) from 7:00 a.m. to 8 p.m. Eastern Standard Time (EST). This provides, at minimum, coverage from 8:30 a.m. to 5 p.m. in every jurisdiction.
- 12.19.2. ICEMS must normally remain available without user support during the remaining hours in each business day, and on holidays and weekends. Scheduled system outages that the Contractor requires to manage the system will receive priority outside of the supported hours. Similarly, reduced Service Levels are acceptable outside of those supported hours. However, ICEMS Users must be informed, a minimum of 24 hours in advance, on the home page when outages are planned or reduced services are expected outside of the User Supported Access Period.
- 12.19.3. The ICEMS 2 Technical Authority must be informed, a minimum of 24 hours in advance, in writing (via e-mail) when outages are planned or reduced services are expected outside of the User Supported Access Period.
- 12.19.4. The ICEMS availability will be measured for the Production version of the ICEMS application through to the ICEMS communications connection to the Internet (in the network diagram shown in 9.2, this would include all of the technology in the data center box plus the Internet Line), and then only during the User Supported Access Period.

Support Service Requirements

- 12.19.5. The Contractor must provide an ICEMS 2 home page that displays ICEMS - specific messages, such as advisories to ICEMS Users about the actual and planned status of the system and network access to the system.

- 12.19.6. The Contractor must make the ICEMS 2 home page available 24 hours per day, 7 days per week, to any authorized individual with an Internet-enabled browser.
- 12.19.7. Upon completion of Task 2 and then for the duration of the Contract, the Contractor must supply help desk services (as described in 12.20 below) during the User Supported Access Period. The help desk services must be accessible through a Contractor-supplied toll-free telephone number. The help desk must be staffed by bilingual representatives during the hours of 8:00 a.m. to 6:00 p.m. Atlantic Time on FGWD. During the remaining User Supported Access Period, English-language support must be provided.
- 12.19.8. The Help Desk must advise the caller of the status of the Application, prepare an incident report on behalf of the ICEMS User, electronically submit that ticket to the Contractor's technical support team and directly contact the Contractor's technical support team if immediate technical support is warranted.
- 12.19.9. The Contractor must respond to all e-mailed incident reports that are categorized as a Severity 1 or Severity 2 within 10 minutes of receipt. Severity 3 and 4 incident reports must be responded to within 1 business day.
- 12.19.10. The Contractor must also simultaneously distribute copies of all incident reports to the ICEMS 2 Technical Authority and any person designated by the ICEMS WG.
- 12.19.11. Upon completion of Task 2 and then for the duration of the Contract, the Contractor must provide a "requests for service" database service for the tracking, escalation and resolution of all requests for service and incident reports.
- 12.19.12. The "request for service" database must be available to ICEMS Users. ICEMS Users must be able to access the database over the Web using IE 8.0 or a later version.
- 12.19.13. The classifications of the "request for service" records in the database must follow the Severity 1, Severity 2, Severity 3 or Severity 4 error categories, as described in 12.21 of this SoW.
- 12.19.14. The Contractor must establish problem-escalation policies and procedures with the ICEMS 2 Technical Authority as part of the services management plan (as described in Task 8 in 6.9.1 of this SoW).
- 12.19.15. The Contractor must receive approval from the ICEMS 2 Technical Authority before commencing planned and actual system status changes.
- 12.20. Support Service Level Specifications
- 12.20.1. The Contractor must undertake its work such that the Service Levels (as described below) are attained.
- 12.20.2. Service Levels are only applicable during the User Supported Access Period.

| | Service Level Measure | Service Level |
|--|------------------------------|----------------------|
|--|------------------------------|----------------------|

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| 12.20.3. | Human response time to answer phone calls to the Help Desk | 20 seconds |
| 12.20.4. | Human response time to return a call logged on the voice mail (if the original call was not responded to by a human within 20 seconds) | 10 minutes |
| 12.20.5. | Time to update the Home Page after there is a change in actual system and application availability status | 15 minutes |
| 12.20.6. | Problem resolution – Severity 1 | 4 hours |
| 12.20.7. | Problem resolution – Severity 2 | 2 business days |
| 12.20.8. | Problem resolution – Severity 3 | 20 business days |
| 12.20.9. | Problem resolution – Severity 4 | As time permits |
| 12.20.10. | Respond to all e-mailed incident reports | Severity 1 or 2 within 10 minutes of receipt. Severity 3 or 4 within 1 business day. |
| 12.20.11. | Server-side response time (time taken between the start of receipt of transaction on the server and the start of transmission of result of transaction to the Red Seal client) for non-search query and update transactions | Less than 2 seconds |
| 12.20.12. | Availability of the ICEMS 2 system, including all centralized components | 99.98% |
| 12.20.13. | Availability of the network access between the ISP and the central servers | 99.98% |
| 12.20.14. | Database restore | 4 business hours |
| 12.20.15. | Disaster recovery | 5 business days |
| 12.20.16. | Refreshment of the Training Database with a copy of the Production database | Overnight for each business day |
| 12.20.17. | Application support – Quality of the maintenance process, number of bad fixes and number of maintenance requests processed | Less than or equal to 1% |
| 12.20.18. | Virus protection upgrade – Installation of signature updates | Within 1 business day of release date |
| 12.20.19. | Installation of critical security update | Within 1 business day of release date |
| 12.20.20. | Commencement of problem analysis and resolution activities when a Severity 1 or Severity 2 incident is reported within the User Supported Access Period | 10 minutes |
| 12.20.21. | Problem resolution where there is a known solution to a known problem that has not been permanently fixed for severity levels 1 through 3 | 1 hour |

| | | |
|-----------|---|--------------------------|
| 12.20.22. | Application Enhancement– Quality of the Enhancement process (percentage of problem Enhancements when compared with the total number of Enhancements) | Less than or equal to 1% |
| 12.20.23. | Maintenance releases | Monthly |
| 12.20.24. | Home Page knowledge content update | 1 business day |
| 12.20.25. | Availability of the Requests for Service Database | 99% |

12.21. Definition of Severity Levels

- 12.21.1. Severity 1 indicates a total inability to use the Application or that the database is corrupted, resulting in a critical impact on ICEMS User objectives.
- 12.21.2. Severity 2 indicates some ability to use the Application, but ICEMS User operation is severely restricted.
- 12.21.3. Severity 3 indicates the ability to use the Application with limited functionality, but all critically essential ICEMS User operations can proceed.
- 12.21.4. Severity 4 indicates that the problem can be easily by-passed or worked around, and is not significantly affecting ICEMS User operations.

13. Enhancements

- 13.1. The Contractor must be responsible for and coordinate the implementation of all enhancements (these are the addition of new functionality or technology, or refinement of the existing functionality or technology) to the Application.
- 13.2. The Contractor must ensure the regulatory compliance of ICEMS 2 by modifying the Application so that it is compliant with new requirements from regulatory bodies, such as, but not limited to, federal, provincial and municipal government bodies, relevant industry or association regulatory bodies, and/or unions.
- 13.3. The Contractor must distribute updated versions of ICEMS 2 in formal releases at agreed-to intervals.
- 13.4. The Contractor must maintain and update detailed plans based on incoming enhancement requests.
- 13.5. The Contractor must provide for the management of all ICEMS 2 software changes.
- 13.6. The Contractor must update the technical documentation and provide a description of the changed functionality when a new application release becomes available.
- 13.7. The Contractor must ensure that change management policies and procedures are established and followed, as described in Task 4 in 6.5.1.4 of this SoW.
- 13.8. The Contractor must establish procedures for the transition of ICEMS 2 software from a state of development or modification, through testing and sign-off, into the Production computing environment.

APPENDIX 1 OF ANNEX A: TASK AUTHORIZATION RESOURCE ASSESSMENT PROCEDURE

1. Where a requirement for a specific task is identified, a draft Task Authorization Form (Appendix 3) will be provided to the Contractor. Once a draft TA Form is received the Contractor must submit to the ICEMS 2 Technical Authority a quotation detailing the cost and time to complete the task. The Contractor's quotation must be based on the rates set out in the Contract. The Contractor will be given a minimum of 2 working days to submit a quotation.
2. For each proposed resource the Contractor must supply a résumé and the requested security clearance information. The same individual must not be proposed for more than one Resource Category. The résumés must demonstrate that each proposed individual meets the qualification requirements described (including any educational requirements, work experience requirements, and professional designation or membership requirements). With respect to the proposed resources:
 - (A) Proposed resources may be employees of the Contractor or employees of a subcontractor, or these individuals may be independent contractors to whom the Contractor would subcontract a portion of the Work (Appendix 2).
 - (B) For educational requirements for a particular degree, designation or certificate, Canada will only consider educational programmes that were successfully completed by the resource before the date the draft TA was first issued to the Contractor.
 - (C) For requirements relating to professional designation or membership, the resource must have the required designation or membership by the time of draft TA issuance and must continue, where applicable, to be a member in good standing of the profession or membership throughout the assessment period and Contract Period. Where the designation or membership must be demonstrated through a certification, the certification must be current, valid and issued by the entity specified in this Contract or if the entity is not specified an accredited or otherwise recognized body, institution or entity.
 - (D) For work experience, Canada will not consider experience gained as part of an educational programme, except for experience gained through a formal co-operative programme at a post-secondary institution.
 - (E) For any requirements that specify a particular time period (e.g., 2 years) of work experience, Canada will disregard any information about experience if the résumé does not include the relevant dates (month and year) for the experience claimed (i.e., the start date and end date). Canada will evaluate only the duration that the resource actually worked on a project or projects (from his or her start date to end date), instead of the overall start and end date of a project or a combination of projects in which a resource has participated.
 - (F) A résumé must not simply indicate the title of the individual's position, but must demonstrate that the resource has the required work experience by explaining the responsibilities and work performed by the individual while in that position. Only listing experience without providing any supporting data to describe responsibilities, duties and relevance to the requirement, or reusing the same wording as the TA Form, will not be considered "demonstrated" for the purposes of the assessment. The Contractor should provide complete details as to where, when, month and year, and how, through which activities/responsibilities, the stated qualifications / experience were obtained. In situations in which a proposed resource worked at the same time on more than one project, the duration of any

APPENDIX 1 OF ANNEX A: TASK AUTHORIZATION RESOURCE ASSESSMENT PROCEDURE

overlapping time period will be counted only once toward any requirements that relate to the individual's length of experience.

3. The qualifications and experience of the proposed resources will be assessed against the requirements set out in the Article titled Required Contractor Staffing Resources in Annex A Statement of Work to determine each proposed resource's compliance. Canada may request proof of successful completion of formal training, as well as reference information. Canada may conduct reference checks to verify the accuracy of the information provided. If reference checks are done, they will be conducted in writing by e-mail (unless the contact at the reference is only available by telephone). The reference cannot be the customer of an affiliate of the Contractor. Nor can the customer be its affiliate or other entity that does not deal at arm's length with the Contractor. Crown references will be accepted.
4. Once the quotation has been accepted by the ICEMS 2 Technical Authority, the TA Form will be signed by Canada and provided to the Contractor for signature. The TA Form must be appropriately signed by Canada prior to commencement of any work. The Contractor must not commence work until a validly issued TA Form (the Task Authorization) has been received, and any work performed in its absence is done at the Contractor's own risk.

APPENDIX 2 OF ANNEX A: CERTIFICATIONS FOR TASK AUTHORIZATIONS (TA)

The following Certifications must be used, as applicable. If they apply, they must be signed and attached to the Contractor's quotation when it is submitted to Canada.

1. CERTIFICATION OF EDUCATION AND EXPERIENCE

The Contractor certifies that all the information provided in the résumés and supporting material proposed for completing the subject work, particularly the information pertaining to education, achievements, experience and work history, has been verified by the Contractor to be true and accurate. Furthermore, the Contractor warrants that every individual proposed by the Contractor for the requirement is capable of performing the Work described in the Task Authorization.

Print name of authorized individual & sign above

Date

2. CERTIFICATION OF AVAILABILITY OF PERSONNEL

The Contractor certifies that, should it be authorized to provide services under this Task Authorization, the persons proposed in the quotation will be available to commence performance of the Work within a reasonable time from the date of issuance of the valid Task Authorization, or within the time specified in the TA Form, and will remain available to perform the Work in relation to the fulfillment of the requirement.

Print name of authorized individual & sign above

Date

3. CERTIFICATION OF STATUS OF PERSONNEL

If the Contractor has proposed any individual who is not an employee of the Contractor, the Contractor certifies that it has permission from that individual to propose his/her services in relation to the Work to be performed under this TA and to submit his/her résumé to Canada. At any time during the Contract the Contractor must, upon request from the Contracting Authority, provide the written confirmation, signed by the individual, of the permission that was given to the Contractor of his/her availability. Failure to comply with the request may result in a default under the Contract in accordance with the General Conditions.

Print name of authorized individual & sign above

Date

4. CERTIFICATION OF LANGUAGE - *English*

The Contractor certifies that the proposed resource(s) in response to this draft Task Authorization is/are fluent in English. The individual(s) proposed must be able to communicate orally and in writing in English without any assistance and with minimal errors.

Print name of authorized individual & sign above

Date

APPENDIX 3 OF ANNEX A: TASK AUTHORIZATION (TA) FORM

| | | | |
|-----------------------|-------------------------|----------------------------------|-----------------------------|
| Contractor | Contract No. | TA No. | TA Amendment No. |
| | | | |
| Commitment No. | Financial Coding | TA (Amendment) Issue Date | Response Required By |
| | | | |

| | | | | |
|---|--------------------------------|---|------------------------------|-------------------|
| SECTION A – PROFESSIONAL SERVICES | | | | |
| 1. Statement of Work (Work Activities, Certification and Deliverables) | | | | |
| <i>See attached Statement of Work</i> | | | | |
| 2. Period of Services From: To: | | 3. Work Location | | |
| | | | | |
| 4. Travel Requirements | | 5. Language Requirements | | |
| | | | | |
| 6. Other Conditions/Constraints | | 7. Level of Security Clearance Required for the Contractor Personnel | | |
| | | | | |
| 8. Contractor's Response | | | | |
| Category and Name of Proposed Resource | PWGSC Security File No. | Per Diem Rate | Estimated No. of Days | Total Cost |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| Estimated Sub-Total for Section A: | | | | |
| Estimated Applicable Taxes for Section A: | | | | |
| Estimated Total Labour Cost for Section A: | | | | |
| Estimated Total Travel and Living Cost for Section A: | | | | |
| Firm Price or Maximum TA Price for Section A: | | | | |

APPENDIX 3 OF ANNEX A: TASK AUTHORIZATION (TA) FORM

| SECTION B – GOODS | | | | | |
|--|--------------------|----------------------|-----------------------------|-----------------|-----------------------|
| 1. Delivery Date | | | 2. Delivery Location | | |
| | | | | | |
| 3. Goods Description | | | | | |
| Item | Description | Unit of Issue | Unit Price | Quantity | Extended Price |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| Estimated Sub-Total for Section B: | | | | | |
| Estimated Applicable Taxes for Section B: | | | | | |
| Firm Price or Maximum TA Price for Section B: | | | | | |

| SECTION C – FIRM PRICE OR MAXIMUM TA PRICE | |
|---|--|
| Firm Price or Maximum TA Price: <i>(Firm Price or Maximum TA Price for Section A + Section B)</i> | |

| SECTION D – CONTRACTOR'S SIGNATURE AND AUTHORIZATION | |
|---|------------------|
| Name, Title and Signature of Individual Authorized to Sign on behalf of the Contractor: | |
| Name: _____ | Signature: _____ |
| Title: _____ | Date: _____ |

| SECTION E – APPROVAL – SIGNING AUTHORITY | |
|--|--|
| <u>Signatures (Client)</u> | <u>Signatures (PWGSC)¹</u> |
| Technical Authority or Individual Authorized to Sign on Behalf of the Technical Authority: | Contracting Authority or Individual Authorized to Sign on Behalf of the Contracting Authority: |
| Name: _____ | Name: _____ |
| Title: _____ | Title: _____ |
| Signature: _____ | Signature: _____ |
| Date: _____ | Date: _____ |

| SECTION F - NOTES |
|---|
| ¹ Signature required for projects valued at \$50,000.00 or more, Applicable Taxes included. |
| You are requested to sell to Her Majesty the Queen in Right of Canada, in accordance with the terms and conditions set out in the Contract, referred to herein, or attached hereto, the services and goods listed herein and in any attached sheets at the price set out thereof. |

APPENDIX 4 OF ANNEX A: ICEMS 2.0 FUNCTIONAL SCOPE

The table below summarizes the functional requirements, which combined, define the scope of the ICEMS 2.0 application. Detailed specifications on each of these functions will be supplied to the Contractor at the commencement of the Work after Contract award.

| Requirement # | Functional Requirements |
|---------------|---|
| 1. | <p>1.1 All of the functions must support interactions with ICEMS Users in both Canadian English and Canadian French, with the following requirements.</p> <p>1.1.1 After log-on, ICEMS Users must be defaulted to use the Application in their preferred language.</p> <p>1.1.2 ICEMS Users must be able to switch the language displayed on the screen.</p> <p>1.1.3 The Application must then continue to work for Users in their selected language until the Users change their selections.</p> <p>1.1.4 Displayed label abbreviations and icons should be equally comprehensible in both languages.</p> <p>1.1.5 Wherever ICEMS Users are entering a string of text that must be entered in both languages, the Application must enable users to view both versions of the text on one screen to support the Users' translation efforts.</p> <p>1.1.6 Textual strings that are expansions of coded data fields must be displayed in the User's selected language.</p> <p>1.1.7 ICEMS Users must be able to generate and print bilingual exams that must adhere to the Red Seal specifications for exams.</p> <p>1.1.8 ICEMS Users must be able to select in which language reports are printed without changing the Users' selected language.</p> |
| 2. | <p>User Interface, Log On/Off, Home Page</p> <p>2.1 The user interface must enable ICEMS Users to login and logout of the Application.</p> <p>2.2 The user interface must include a Home Page.</p> <p>2.3 ICEMS Users must be able to log in to a Home Page, and jump to the Home Page from any screen.</p> <p>2.4 ICEMS Users must be able to logout of the Application from all screens.</p> <p>2.5 When ICEMS Users log out they must be able to control whether their next log in returns them to that screen with their logged out data in context, or they are logged in to the Home Page with no saved data context.</p> <p>2.6 ICEMS Users must be forced to change their passwords periodically.</p> <p>2.7 The user interface must include a navigational menu for an easy access to the ICEMS business functions.</p> |

APPENDIX 4 OF ANNEX A: ICEMS 2.0 FUNCTIONAL SCOPE

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| 3. | <p>Search, Browse and Select</p> <p>3.1 ICEMS Users must be able to search for any logical record(s) in the database including National Occupational Analysis (NOA), Item, Attachment, Exam, etc. that match user-entered search criteria for all of the data fields that make up that logical record.</p> <p>3.2 ICEMS Users must be able to enter search criteria for the data fields by selecting from predefined field value lists, when a data field can only contain predefined values.</p> <p>3.3 ICEMS Users must be able to search for text strings in specified text fields and selectively replace matching text with another text string.</p> <p>3.4 ICEMS Users must be able to browse through the records in the database in predefined hierarchies (such as Occupation ⇒ NOA⇒Block ⇒ Task ⇒ Sub-task ⇒ Item ⇒ Attachment).</p> <p>3.5 Both the search and browse must provide result set lists of records. The User must be able to select a record, or a set of records, and then initiate the new function for the User to perform. That function must be pre-populated with the data from the selected record(s).</p> |
| 4. | <p>Occupation and NOA Maintenance</p> <p>4.1 When requested by ICEMS Users, with the ICEMS Users supplying the data, the database administrator must be able to directly create, modify and delete the Occupation and NOA-TOS, (NOA segment only) database records.</p> <p>4.2 ICEMS Users must be able to view Occupation and NOA-TOS records.</p> <p>4.3 ICEMS Users must be able to copy an NOA, and maintain a few NOA data fields.</p> |
| 5. | <p>NOA Printing</p> <p>5.1 ICEMS Users must be able to print a formatted copy of a version of an NOA.</p> |
| 6. | <p>NOA Exams Preamble Maintenance</p> <p>6.1 ICEMS Users must be able to view, create or modify any of the data that comprises the exam preamble (instructions) for an NOA.</p> <p>6.2 A User must be able to manipulate the text sections of the pre-amble within ICEMS by using Word or a Word-like text editor.</p> <p>6.3 The preamble instructions must adhere to a pre-defined format.</p> |
| 7. | <p>NOA-TOS Maintenance</p> <p>7.1 ICEMS Users must be able to view, create, or modify any of the data that comprises the segments of the NOA-TOS that are required for specifying a</p> |

APPENDIX 4 OF ANNEX A: ICEMS 2.0 FUNCTIONAL SCOPE

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| | <p>TOS, and to create and maintain sub-tasks.</p> <p>7.2 The TOS must define which items are required to make a completed item bank for an NOA.</p> <p>7.3 A completed item bank must enable random exams to be generated that test the scope of that item bank's Occupation appropriately and equally.</p> |
| 8. | <p>NOA-TOS File Export to Excel</p> <p>8.1 ICEMS Users must be able to export to their workstation an Excel file that contains data from an NOA-TOS in the database.</p> <p>8.2 The data in an Excel file must be displayed in a manner consistent with the way the NOA-TOS Report (function #10) displays data.</p> <p>8.3 ICEMS Users must be able to edit the data in that file in a defined manner using Excel on their workstations.</p> |
| 9. | <p>NOA-TOS File Import from Excel TOS</p> <p>9.1 ICEMS Users must be able to import from their workstations an Excel file that contains NOA-TOS data, then ICEMS must update the database with that data.</p> <p>9.2 The Excel file must have an identical format to the file created in function #8.</p> |
| 10. | <p>TOS Report</p> <p>10.1 ICEMS Users must be able to create a report that lists the number of items and item taxonomy required to satisfy the TOS of a single exam for an NOA.</p> |
| 11. | <p>NOA-TOS Integrity Reports</p> <p>11.1 ICEMS Users must be able to create the NOA-TOS Integrity Reports.</p> <p>11.2 These reports must detail where an ICEMS Item Bank is incomplete.</p> |
| 12. | <p>NOA Diagram Booklet</p> <p>12.1 ICEMS Users must be able to print a bilingual diagram booklet for an NOA.</p> <p>12.2 The diagram booklet must have a cover page, table of contents, then the diagrams/attachments for that NOA.</p> <p>12.3 The diagram booklets must be able to accommodate diagrams that need to be printed on standard letter or tabloid (11" by 17") sized paper as appropriate for each diagram.</p> |
| 13. | <p>Item Maintenance</p> <p>13.1 ICEMS Users must be able to view, add, or modify item (exam question) data.</p> <p>13.2 ICEMS Users must be able to create a new version of an item, or create a new item by copying an existing item.</p> |

APPENDIX 4 OF ANNEX A: ICEMS 2.0 FUNCTIONAL SCOPE

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| | <p>13.3 ICEMS Users must be able to create a new item by copying an existing item.</p> <p>13.4 ICEMS Users must be able to edit the text sections of the item within ICEMS by using Word or a Word-like text editor.</p> <p>13.5 The text must adhere to a pre-defined format.</p> <p>13.6 An item must be able to be linked to one or more attachments.</p> <p>13.7 ICEMS Users must be able to view the Canadian English and the Canadian French item on one screen.</p> |
| 14. | <p>Select a Set of Items to be Copied to an NOA</p> <p>14.1 ICEMS Users must be able to select and export to their workstations an Excel file containing a selected set of items, with certain item data, from an NOA.</p> <p>14.2 ICEMS Users must be able, using Excel running on their workstations, to directly update the item data in that file, plus enter the data that defines the desired destinations (in an NOA) that those items must be copied to.</p> <p>14.3 Like item group relationships must be retained.</p> <p>14.4 Information linking attachments to items must be retained.</p> |
| 15. | <p>Item Cross Reference Report</p> <p>15.1 ICEMS Users must be able to run a report for an NOA, listing, for each item in the NOA, all related items in other NOAs</p> |
| 16. | <p>Copy a Set of Items to an NOA</p> <p>16.1 ICEMS Users must be able to import from their workstations an Excel file that contains copy item and NOA destination data, then the Application must update the database with that data.</p> <p>16.2 The Excel file must have an identical format to the file created in function #14.</p> |
| 17. | <p>Export Items for Workshop Backup</p> <p>17.1 ICEMS Users must be able to select and export to their workstations an Excel file containing a selected set of items from an NOA, containing the Canadian English and Canadian French texts and other data.</p> <p>17.2 ICEMS Users must be able, in Excel, to directly update each item's data in that file using Word to edit the text.</p> <p>17.3 Like item group relationships must be retained.</p> <p>17.4 Linked attachment information must be retained.</p> |
| 18. | <p>Import Items from Workshop Backup</p> <p>18.1 ICEMS Users must be able to import an Excel file from their workstations that contains item data, then the Application must update an NOA in the</p> |

APPENDIX 4 OF ANNEX A: ICEMS 2.0 FUNCTIONAL SCOPE

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| | <p>database with that data.</p> <p>18.2 The Excel file must have a format identical to that of the file created in function #16.</p> |
| 19. | <p>Item Development Workshop Report</p> <p>19.1 ICEMS Users must be able to create a report that lists the data on all items in the database in the NOA-TOS.</p> <p>19.2 The report must specify the number of required items and item taxonomy for the item bank of the selected NOA-TOS.</p> |
| 20. | <p>Item Inventory Report</p> <p>20.1 The daily backup tape must contain a report detailing, for each NOA, every item and attachment in the database.</p> |
| 21. | <p>Item Translation Workshop</p> <p>21.1 ICEMS Users must be able, on one screen, to concurrently display the item text in Canadian English and Canadian French.</p> <p>21.2 ICEMS Users must be able to directly edit both language texts using Word or a Word-like editor.</p> |
| 22. | <p>Link Attachments to an Item</p> <p>22.1 While maintaining an Item, ICEMS Users must be able to search for and select an already created attachment and link the attachment to the item.</p> <p>22.2 Attachments that may be linked to an item are diagrams and statements; not load charts and formulas/acronyms.</p> |
| 23. | <p>Like Item Group Maintenance</p> <p>23.1 ICEMS Users must be able to view, create, and change a group of “like” items from the items that belong in a sub-task.</p> <p>23.2 Items from the same like item group must not be questions on the same exam.</p> |
| 24. | <p>Item Print</p> <p>24.1 ICEMS Users must be able to print the formatted stem and response of an item, or a set of items.</p> <p>24.2 ICEMS Users must be able to print a “dump” of all of the data pertaining to an item, or a set of items.</p> |
| 25. | <p>Attachment Maintenance</p> <p>25.1 ICEMS Users must be able to, on their workstations, create and edit attachments in the following software applications – CorelDRAW for diagrams; Word for formulas/acronyms, statements and load charts.</p> <p>25.2 ICEMS Users must be able to seamlessly upload the source and display versions of the attachments from those software applications (as described</p> |

APPENDIX 4 OF ANNEX A: ICEMS 2.0 FUNCTIONAL SCOPE

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| | <p>in 23.1 of this Appendix), and the Application must store the attachments in the database.</p> <p>25.3 ICEMS Users must be able to download the source for an attachment to their workstations with appropriate software application running with that attachment opened.</p> <p>25.4 ICEMS Users must be able to generate a copy or a new version of an attachment.</p> <p>25.5 ICEMS Users must be able to print a selected set of attachments.</p> |
| 26. | <p>Item XML Formatted Export</p> <p>26.1 ICEMS Users must be able to select and export to their workstations a zipped, XML formatted file containing all the data, including attachment data, on a selected set of items from an NOA-TOS.</p> |
| 27. | <p>Generate Exam</p> <p>27.1 ICEMS Users must be able to automatically generate an exam(s) from an item bank according to a pre-determined set of specifications.</p> <p>27.2 ICEMS Users must be able to control the characteristics of the generated exam(s).</p> |
| 28. | <p>Exam Maintenance</p> <p>28.1 ICEMS Users must be able to maintain an existing exam.</p> <p>28.2 ICEMS Users must be able to manually create a new exam.</p> <p>28.3 A new exam may be created from a copy of an existing exam.</p> <p>28.4 ICEMS Users must be able to create a copy of an exam with its items automatically randomly sequenced within each block.</p> <p>28.5 ICEMS Users must be able to generate a new version of an existing exam.</p> <p>28.6 ICEMS Users must be able to update a draft exam with any newer versions of the items on the exam.</p> |
| 29. | <p>Find Duplicate Items on Exams</p> <p>29.1 ICEMS Users must be able to determine if a set of exams for the same NOA-TOS contain items that are exam questions on more than one of the exams in the set.</p> <p>29.2 ICEMS Users must be able to directly maintain any of those exams.</p> |
| 30. | <p>Item Used on Which Exams</p> <p>30.1 ICEMS Users must be able to find in which exams items appear as exam questions.</p> <p>30.2 ICEMS Users must then be able to immediately maintain the items.</p> |
| 31. | <p>Red Seal Validate an Exam</p> <p>31.1 ICEMS Users must be able to determine if an exam meets the Red Seal</p> |

APPENDIX 4 OF ANNEX A: ICEMS 2.0 FUNCTIONAL SCOPE

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| | <p>exam compliance rules.</p> <p>31.2 This function is a shared internal function that determines whether or not an exam is Red Seal compliant.</p> <p>31.3 This function must be used by any function that creates or maintains an exam.</p> |
| 32. | <p>Create an Exam PDF</p> <p>32.1 ICEMS Users must be able to view and print an exam stored in PDF format.</p> <p>32.2 This function is a shared internal function that assembles all of the exam's components into a PDF formatted file.</p> <p>32.3 This function must be used by any function that prints an exam.</p> |
| 33. | <p>Print Exam</p> <p>33.1 ICEMS Users must be able to print a hard copy of an exam in the Red Seal standard exam format.</p> <p>33.2 A printed exam must not only include the exam questions, but the exam pre-amble, table of contents and, at the user's option, its exam specific attachments must be appended to the exam.</p> <p>33.3 PDF copies of each printed exam must be stored on each daily system backup tape.</p> |
| 34. | <p>Exam Answer Key Export</p> <p>34.1 ICEMS Users must be able to download to their workstations a file containing an exam's answer key.</p> |
| 35. | <p>Exam Answer Key Print</p> <p>35.1 ICEMS Users must be able to print an exam's answer key.</p> <p>35.2 PDF copies of each printed exam's answer key must be stored on each daily system backup tape.</p> |
| 36. | <p>Scan, Load and Score Paper Answered Exams</p> <p>36.1 From ICEMS, users must be able to initiate the execution of the ScanTools NCS application COTS software running on the User's workstation.</p> <p>36.2 ScanTools must be configured to scan ICEMS standard exam answer sheets.</p> <p>36.3 ICEMS Users must be able to manually or automatically upload an anonymous (without any client personal identifying information) version of the scanned response data file (in either ScanTools or LXR*Test Export format, (LXR*Test is a COTS product of Applied Management Professionals).</p> <p>36.4 If the scanned response file is a ScanTools formatted file, then ICEMS must score the exam, then update the database.</p> |

APPENDIX 4 OF ANNEX A: ICEMS 2.0 FUNCTIONAL SCOPE

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| 37. | <p>Score Exam</p> <p>37.1 ICEMS Users must be able to score an exam sat by an anonymous candidate.</p> <p>37.2 This function is a shared internal function that must be used by any function that includes scoring an exam.</p> |
| 38. | <p>Imported Scansheet File Report</p> <p>38.1 After a Scansheet file has been processed (function #36.4) a report must be produced that details the results of that processing.</p> |
| 39. | <p>Exam Item Analysis Using ITEMAN</p> <p>39.1 ICEMS Users must be able to run an ITEMAN (Assessment Systems Corporation COTS product) Exam Item Analysis on a set of Red Seal clients' anonymous responses to an Exam</p> <p>39.2 ICEMS Users must be able to export the resultant ITEMAN Exam Item Analysis reports to the users' workstations.</p> <p>39.3 ICEMS Users must be able to view those reports on their workstations.</p> |
| 40. | <p>Manage Reports</p> <p>40.1 ICEMS Users must be able to view and print previously generated reports, and delete a report.</p> <p>40.2 ICEMS Users must be able to export any reports, in various formats (including .doc and .pdf), to their workstations.</p> |
| 41. | <p>Report Generator</p> <p>41.1 ICEMS Users must be able to generate reports from one point in the application.</p> <p>41.2 ICEMS Users must be able to control how the reports are generated.</p> <p>41.3 This function is a shared internal function.</p> <p>41.4 This function must be used to pass report parameters to each specific report.</p> |
| 42. | <p>File Import and Export</p> <p>42.1 ICEMS Users must be able to import and export files from and to their workstations.</p> <p>42.2 There must be one shared internal function that imports and exports files.</p> <p>42.3 This function must be used by any function that includes importing or exporting files.</p> |
| 43. | <p>Maintain User Access</p> <p>43.1 When requested by jurisdiction administrators, with the administrators supplying the data, the database administrator must be able to directly create, modify and delete user access profiles.</p> |

APPENDIX 4 OF ANNEX A: ICEMS 2.0 FUNCTIONAL SCOPE

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| | <p>43.2 ICEMS Users must only have access to the functions that are required in order to perform their duties.</p> <p>43.3 For each such function, a user must be defined to have either read only or update access rights.</p> <p>43.4 For certain functions, a user must be defined to have read only or update access rights for only certain records within a file. For example, one user might be permitted to only view Plumber occupation items, but be permitted to update Carpenter items.</p> |
| 44. | <p>Maintain Code Tables and System Parameters</p> <p>44.1 The database administrator must be able to directly create, modify and delete the database code table records and the system parameters.</p> |
| 45. | <p>Audit Trail</p> <p>45.1 The data pertaining to all transactions must be logged.</p> <p>45.2 There must be one shared internal function that logs the transaction.</p> <p>45.3 This function must be used by all types of transactions.</p> |
| 46. | <p>“Background” Processing</p> <p>46.1 Certain long-running functions, or the long-running elements of certain functions, must be processed in a way that ICEMS Users can continue to execute other interactive functions (“background” mode).</p> <p>46.2 ICEMS Users must be able to manage those processes through the same shared function.</p> |
| 47. | <p>Automated System Availability Monitoring and Alert</p> <p>47.1 If the Application, or key functions within it, become inaccessible to ICEMS Users, then that must be automatically detected and alerts immediately sent to the Contractor’s technical support staff.</p> |
| 48. | <p>Nightly Population of the Data Mart Database</p> <p>48.1 On a nightly basis, the latest examination results data must automatically be extracted from the ICEMS database and used to update the Data Mart database.</p> |

**APPENDIX 5 OF ANNEX A: SAMPLE FROM THE BUSINESS PROCEDURES GUIDE,
INCLUDES SCREEN SHOTS**



INTERPROVINCIAL COMPUTERIZED EXAMINATION MANAGEMENT SYSTEM (ICEMS)

Maintain Item : Business Procedure and Screen Shots

MAINTAIN ITEM 6.2.1

Version 1.0

Created: 13 May 2011

**APPENDIX 5 OF ANNEX A: SAMPLE FROM THE BUSINESS PROCEDURES GUIDE,
INCLUDES SCREEN SHOTS**

Business Procedure 6.2: Enter Items, Activate Items

Purpose of this procedure is to:

- enter new items in both official languages into the item bank of an Occupation;
- identify the correct response;
- add an attachment;
- enter comments and keywords;
- activate single and several items at once;
- change the status of an item (In review or Inactivate); and,
- copy several items to a new NOA.

**APPENDIX 5 OF ANNEX A: SAMPLE FROM THE BUSINESS PROCEDURES GUIDE,
INCLUDES SCREEN SHOTS**

Business Procedure 6.2.1: Entering a new item

1. From the **Navigation Menu**, go to **Item Development > Maintain Item**.
Navigate to the Basic Item Search screen.

Client/Application Search 27 - operational hours: 5:00 a.m. to 6:00 p.m. MST
 Client/Application Processing Maintain NOA-TOS
 Exam Session Set-up Browse Item
 Exam Invigilation and Scoring Maintain Item
 Exam Preparation Maintain Like Item Groups
 Exam Management Item Text Search
 Item Management Generate Exam
 Item Development Maintain Exam
 Item Translation Select Items to Bulk Copy to NOA
 Attachment Development Bulk Copy Selected Items to NOA
 Occupation Management Export Items
 Reports Workshop Backup
 System Administration Import Items
 Data Mart Administration Item Inventory Report
 Browse Item and Attachment Keyword Report
 Search Item Statistics Report
 Logout-Retain Context Item Development Workshop Control Report

• Build 9.0.1 of the ICEMS application was released on the evening of December 22, 2010. It just incorporated fixes to a number of reported problems. Please refer to the "Readme Release Notes for the Current Build" and the User Reference Addenda #3, 4 & 5 for further details.

Word 2007: Microsoft Office Word 2007 now works with ICEMS as long as the release of Office 2007 is service pack 2 (SP2) or later. If you experience issues or require assistance contact the Fujitsu ICEMS Help Desk.

2. From the **NOA-TOS/Name Ver#** drop-down menu select the NOA-TOS for which the item(s) are to be added.

Basic Item Search

Navigation Menu
Basic Item Search


Back
Help
Submit
Clear
Advanced

Item Ref # Ver #
 NOA-TOS Name/Pub Year/Ver# Tilesetter/2010/2
 Block Label
 Sub-task #
 Keyword
 Status
 Development Sub-Status
 Available Language

Submit Clear Advanced

**APPENDIX 5 OF ANNEX A: SAMPLE FROM THE BUSINESS PROCEDURES GUIDE,
INCLUDES SCREEN SHOTS**

3. Click on the **Submit** button. *Navigate to the Browse Items Path screen.*


Browse Items Path

Basic Item Search > Item

[Back](#)
[Help?](#)
New
[Maintain](#)
[Exam](#)
[Bulk](#)
[Export](#)
[Wrkshp Bckup](#)
[Quick Analysis](#)
[ITEMAN Item](#)
[ITEMAN Update](#)
[Prt Item](#)
[Prt Unf Item](#)
[Cpy: Create WS](#)
[Item Inv Rpt](#)
[Item Workshop](#)
[Translate](#)
[Trans Export](#)
[Trans Wrkshp](#)
[XML Export](#)
[Expand](#)
[Select All](#)
[Deselect All](#)
[Inverse All](#)

Search->
458 Found

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| Item | | | | | | | | | | | |
|--------------------------|--------|---------------|---------------|-----|----------|---------------|----------------|------------------------|-----|--------|--|
| | Attach | Red Seal Code | NOA Version # | Blk | Sub-task | Item Ref/Ver# | Status | Development Sub-Status | Tax | ITEMAN | |
| <input type="checkbox"/> | | 45 | 2 | A | 1.01-I | 81299/1 | In Development | 2. New | 1 | | |
| <input type="checkbox"/> | | 45 | 2 | A | 1.01-I | 81300/1 | In Development | 2. New | 1 | | |
| <input type="checkbox"/> | | 45 | 2 | A | 1.01-I | 81301/1 | In Development | 2. New | 1 | | |
| <input type="checkbox"/> | | 45 | 2 | A | 1.01-II | 81298/1 | In Development | 2. New | 2 | | |
| <input type="checkbox"/> | | 45 | 2 | A | 1.01-II | 81302/1 | In Development | 2. New | 2 | | |
| <input type="checkbox"/> | | 45 | 2 | A | 1.01-II | 81303/1 | In Development | 2. New | 2 | | |
| <input type="checkbox"/> | | 45 | 2 | A | 1.02 | 79901/1 | In Development | 3. Edit | 1 | | |
| <input type="checkbox"/> | | 45 | 2 | A | 1.02 | 81313/1 | In Development | 2. New | 1 | | |
| <input type="checkbox"/> | | 45 | 2 | A | 1.02 | 81314/1 | In Development | 2. New | 1 | | |
| <input type="checkbox"/> | | 45 | 2 | A | 1.02 | 81315/1 | In Development | 2. New | 1 | | |
| <input type="checkbox"/> | | 45 | 2 | A | 1.02 | 81316/1 | In Development | 2. New | 1 | | |
| <input type="checkbox"/> | | 45 | 2 | A | 1.02 | 81317/1 | In Development | 2. New | 1 | | |
| <input type="checkbox"/> | | 45 | 2 | A | 2.01 | 79893/1 | In Development | 2. New | 2 | | |
| <input type="checkbox"/> | | 45 | 2 | A | 2.01 | 79894/1 | Inactive | 4. Surplus | 2 | | |
| <input type="checkbox"/> | | 45 | 2 | A | 2.01 | 80148/1 | Inactive | 4. Surplus | 2 | | |
| <input type="checkbox"/> | | 45 | 2 | A | 2.01 | 80149/1 | Inactive | 4. Surplus | 2 | | |
| <input type="checkbox"/> | | 45 | 2 | A | 2.01 | 80150/1 | Inactive | 4. Surplus | 2 | | |
| <input type="checkbox"/> | | 45 | 2 | A | 2.01 | 80151/1 | Inactive | 4. Surplus | 2 | | |
| <input type="checkbox"/> | | 45 | 2 | A | 2.01 | 80152/1 | Inactive | 4. Surplus | 2 | | |
| <input type="checkbox"/> | | 45 | 2 | A | 2.01 | 80153/1 | Inactive | 4. Surplus | 2 | | |

**APPENDIX 5 OF ANNEX A: SAMPLE FROM THE BUSINESS PROCEDURES GUIDE,
INCLUDES SCREEN SHOTS**

4. Select the **New** button. *Navigate to the Item Maintenance screen.*
5. From the **Item Maintenance** screen, fill in the required fields by selecting from the drop-down menus - the mandatory red fields with an asterisk (for example, Occupation, NOA-TOS Version Name, Block, Task, Sub-task, etc.), and leave the “Exclude from marking” at “No.”. For a new item, set the Item Status at “**In Development**” and the Development Sub-Status at “**New**”.

Item Maintenance NOA-TOS Name/Pub Year/Ver#
Sub-task
Item Ref/Ver# V-1

Navigation Menu
Basic Item Search > Item > Item Maintenance

Item Text View Dates Response Attachment Comment Keyword

Back
Help?
New
Save
Cancel
Copy
New Version
Prt Unf Item
Prt Item
Save Defaults
Français

English Edit

Correct Response

Occupation* Tiler

NOA-TOS/Pub Year/Ver#* 2:Tiler/2010/2

Block* C:LAYOUTS

Task* 7:Lays out work area.

Sub-task* 7.03:Lays out grid lines.

Item Status* In Development **Development Sub-Status*** 2. New


Share Status* Red Seal

Primary Language* English Available Language English

Taxonomy Attachments

Source Item's Taxonomy.



**APPENDIX 5 OF ANNEX A: SAMPLE FROM THE BUSINESS PROCEDURES GUIDE,
INCLUDES SCREEN SHOTS**

| | | | |
|---|-----------------------------|---|--|
| Jurisdiction | <input type="text"/> | Jurisdiction Owner | <input type="text"/> |
| Average Response Time | <input type="text"/> (sec.) | Like Item Group |  <input type="text"/> |
| | | Like Item Group Name | <input type="text"/> |
| Exclude from Marking* | | <input type="radio"/> Yes <input checked="" type="radio"/> No | |
| Calculation Indicator | <input type="checkbox"/> | | |
| Translation Comment | <input type="checkbox"/> | Comments | <input type="text"/> |
| Code Book <input type="text"/> | | | |
| Indicator <input type="checkbox"/> <input type="text"/> | | | |
| ITEMAN <input type="text"/> | | | |
| % Correct | <input type="text"/> | Date Processed | <input type="text"/> |
| # of Examinees | <input type="text"/> | | |

| | | | |
|----------------------|----------------------|-------------------------|----------------------|
| Related Items | <input type="text"/> | Source Item's Taxonomy. | <input type="text"/> |
|----------------------|----------------------|-------------------------|----------------------|

| | |
|--|-------------|
| French | Edit |
| <div style="background-color: #ccc; width: 20px; height: 100%; position: relative;"> <div style="position: absolute; top: 0; width: 100%; height: 100%; background: linear-gradient(to bottom, transparent 49%, #ccc 49%, #ccc 51%, transparent 51%); background-size: 4px 4px;"></div> </div> | |

Note

An alternative way to add a new item: from the Basic Item Search Screen , identify the desired NOA-TOS Name/year of publication; identify the sub-task; click on the  button. A list of items in the subtask will be presented. Left mouse click on an item to navigate to the Item Maintenance screen. Click on the  button from the Item Maintenance screen (you will not have to laboriously add data such as Block, Task, Sub-Task; template data is pre-populated for the sub-task).

**APPENDIX 5 OF ANNEX A: SAMPLE FROM THE BUSINESS PROCEDURES GUIDE,
INCLUDES SCREEN SHOTS**

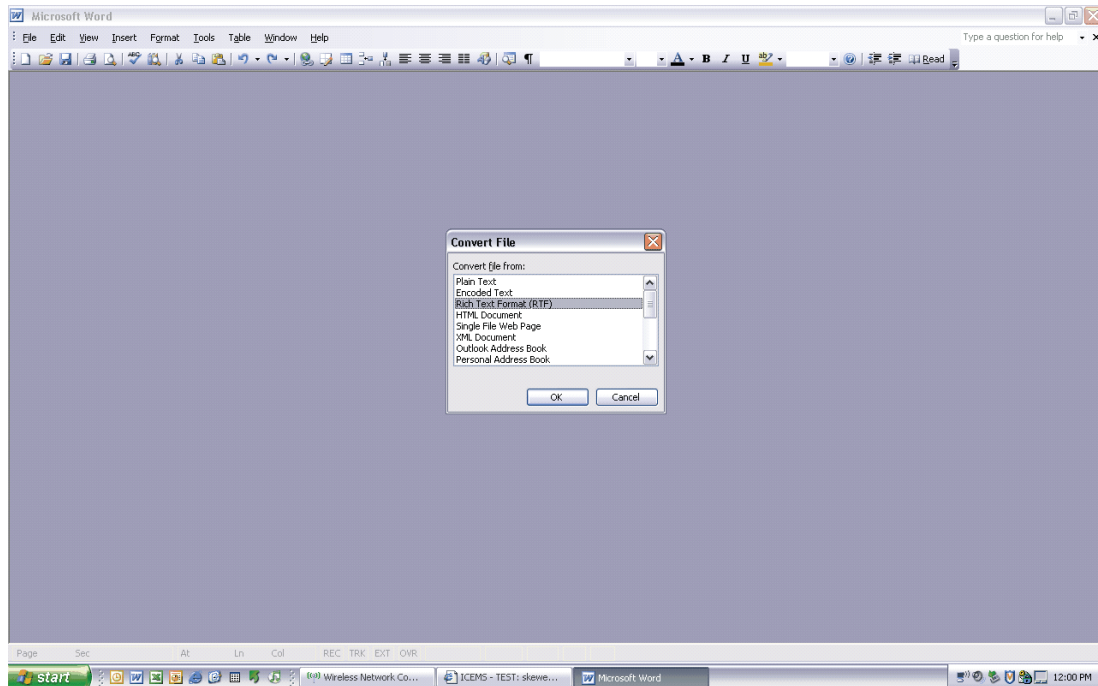
6. Click on the **Save** button and the item will be given a Reference and Version # (displayed in the upper right-hand side of the screen).

The screenshot shows the 'Item Maintenance' web application. At the top, there is a green header bar with the title 'Item Maintenance' and a navigation menu. To the right of the header, the following information is displayed: 'NOA-TOS Name/Pub Year/Ver# Tilesetter/2010/2', 'Sub-task C/7/7.03', and 'Item Ref/Ver# 86298 V-1'. Below the header, there is a yellow tabbed interface with tabs for 'Item', 'Text View', 'Dates', 'Response', 'Attachment', 'Comment', and 'Keyword'. The 'Item' tab is currently selected. On the left side of the 'Item' tab, there is a vertical menu with buttons: 'Back', 'Help?', 'New', 'Save', 'Cancel', 'Copy', 'New Version', 'Prt Unf Item', 'Prt Item', 'Save Defaults', and 'Français'. The 'Save' button is highlighted. The main content area of the 'Item' tab is a large white box with a green border. Inside this box, there is a green bar at the top with the text 'English' and an 'Edit' button. Below this bar is a large empty white area with a vertical scrollbar on the right. At the bottom of the 'Item' tab, there is a label 'Correct Response' followed by a small white input box.

**APPENDIX 5 OF ANNEX A: SAMPLE FROM THE BUSINESS PROCEDURES GUIDE,
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7. To enter the English version of the item, click on the **Edit** button to open MS Word.

For some versions of Word, the following screen may appear.



If this happens, click on the **OK** button to proceed entering the item.

The ICEMS default item template will populate the Word document and must be used. To preserve the integrity of the formatting in the item template, highlight (select) the phrase "Item Text Here" and type in the question. Highlight the phrase "Response A" and type in the first distractor (repeat for distractors B, C, and D).

Item Text Here.

What is the first step in dry layout of tile?

- A. Response A
- B. Response B
- C. Response C
- D. Response D

- A. Measure the tiles.
- B. Select calibrated tiles.
- C. Establish the grid size.
- D. Determine the size of the room.

**APPENDIX 5 OF ANNEX A: SAMPLE FROM THE BUSINESS PROCEDURES GUIDE,
INCLUDES SCREEN SHOTS**



- Do not delete or change the formatting in the item template.
- Bulleted lists should **not** be used in the Word document.
- Track changes should **not** be used in the Word document.
- If you copy and paste from an existing Word file, ensure the formatting in the item template does **not** change.

- Close MS Word by clicking on the at the top right hand corner and click **Yes** to the MS Word question “Do you want to save the changes to ####.# ENG?”.
- In the Correct Response field, enter the letter for the correct response to the item. *If an attempt is made to save the item without identifying the correct answer, a warning will alert the user that a correct response is required.*

If the item is code-related, you must check the Code Book indicator selection ☐ box and enter the code reference in the field.

Code Book ☐

Indicator ☒ NBC 2012 12-1010

**APPENDIX 5 OF ANNEX A: SAMPLE FROM THE BUSINESS PROCEDURES GUIDE,
INCLUDES SCREEN SHOTS**

10. Click on the **Save** button. *The item will only appear in the Item Box once you have clicked on the save function.*

| | |
|---|------|
| English | Edit |
| <p>What is the first step in dry layout of tile?</p> <ul style="list-style-type: none">A. Measure the tiles.B. Select calibrated tiles.C. Establish the grid size.D. Determine the size of the room. | |

Correct Response

A

Note

If a font symbol appears correctly displayed in ICEMS but will not print correctly, change the font of the symbol to Arial type font.

Note

To enter the French version of an item, repeat steps 7, 8, and 10 in field entitled "French" provided on the lower portion of the Item Maintenance Screen.


| | |
|--------|------|
| French | Edit |
| | |

End of procedure.

APPENDIX 5 OF ANNEX A: SAMPLE FROM THE BUSINESS PROCEDURES GUIDE,
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Item Maintenance Screen, Buttons, and Tabs

Item Maintenance Screen for an item with an attachment.



Item Maintenance

Navigation Menu

Advanced Item Search > Item > Item Maintenance

NOA-TOS Name/Pub Year/Ver# Tilesetter/2004/1

Sub-task C/8/8.01

Item Ref/Ver# 38962 V-1

Item Text View Dates Response Attachment Comment Keyword

Back

Help?

New

Save

Cancel

Copy

New Version

Prt Unf Item

Prt Item

Save Defaults

Français

English Edit

Refer to Figure 6. What is the floor area?

A. 30 sq. ft.

B. 38 sq. ft.

C. 45 sq. ft.

D. 54 sq. ft.

Correct Response

Occupation*

NOA-TOS/Pub Year/Ver#*

Block*

Task*

Sub-task*

Item Status* Development Sub-Status*

Share Status*

Primary Language* Available Language

Taxonomy Attachments

Source Item's Taxonomy.

| Figure | Ref No. |
|--------|---------|
| 6 | 1633 |


APPENDIX 5 OF ANNEX A: SAMPLE FROM THE BUSINESS PROCEDURES GUIDE, INCLUDES SCREEN SHOTS


The attachment field is populated to indicate the number of attachments (1). An attachment icon is displayed.

Attachments

| Figure | Ref No. |
|--------|---------|
| 6 | 1633 |

The **Figure Number (6)** and the **Attachment Reference Number (1633)** are read only.

The thumbnail  is active and when selected, will open a .GIF image of the attachment. The image is view only.


Item Maintenance
 Navigation Menu
 Advanced Item Search > Item > Item Maintenance

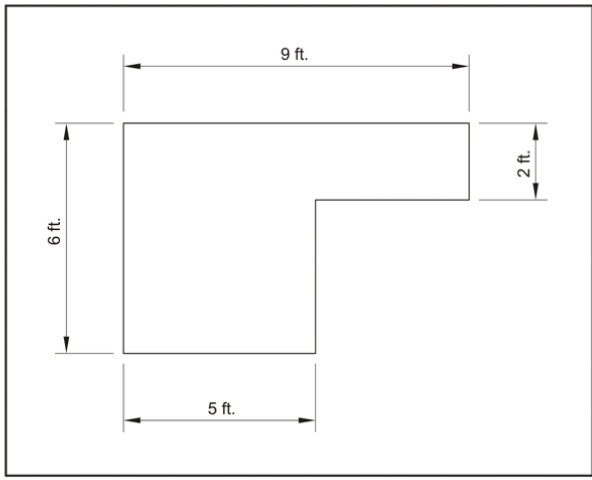
NOA-TOS Name/Pub Year/Ver#
 Sub-task
 Item Ref/Ver#

Tilesetter/2004/1
 C/8/8.01
 38962 V-1

Item Text View Dates Response Attachment Comment Keyword

Back
 Help?
 New
 Save
 Cancel
 Copy
 New Version
 Prt Unf Item
 Prt Item
 Save Defaults
 Français

English
 Refer to Figure 6.
 A. 30 sq. ft.
 B. 38 sq. ft.
 C. 45 sq. ft.
 D. 54 sq. ft.
 Correct Response
 Occupation*
 NOA-TOS/Pub Year/V
 Block*
 Task*
 Sub-task*
 Item Status*
 Share Status*
 Primary Language*

https://training.ccda-icems.ca/?Filename=%2Finclude%2Fstream%5Fgif%2Easp%3Ferrorid%3D0%26intid% - Windows Inte...
 50% 75% 100% 150% 200% Close

 38962

Taxonomy Attachments


| Figure | Ref No. |
|--------|---------|
| 6 | 1633 |


Source Item's Taxonomy.

**APPENDIX 5 OF ANNEX A: SAMPLE FROM THE BUSINESS PROCEDURES GUIDE,
INCLUDES SCREEN SHOTS**

Item Maintenance Screen for an item in a Like Item Group (LIG). The field displays the LIG label (a).

Like Item Group 

Click on the  button. *Navigate to the Like Item Group Maintenance screen.*



Like Item Group Maintenance

Navigation Menu

Item Maintenance > Advanced Like Item Group Search > Like Item Group > Like Item Group Maintenance

Back

Help?

New

Save

Cancel

Display Item

Jurisdiction: Quebec

Occupation: Tilesetter

NOA: 1:Tilesetter

SubTask: C/8/8.01

TRAINING

Label*

Name*

Sub-Task Items Available

| Item Ref/Ver# - Attachment Ref/Ver# |
|-------------------------------------|
| 86354/1 - 1633/1 |

<<

<

>

>>

Sub-Task Items In Group

| Item Ref/Ver# - Attachment Ref/Ver# |
|-------------------------------------|
| 38962/1 - 1624/1, 1633/1 |
| 38963/1 - 1634/1 |
| 38964/1 - 1635/1 |

New
Save
Cancel
Display Item

APPENDIX 5 OF ANNEX A: SAMPLE FROM THE BUSINESS PROCEDURES GUIDE, INCLUDES SCREEN SHOTS

Item Maintenance Screen for an item with a Related Items. The field displays the number of related items (1).

Related Items

Click on the **Related Items** button. *Navigate to the Item Related Item screen.*

Item Related Item

NOA-TOS Name/Pub Year/Ver# Tilesetter/2004/1

Sub-task C/8/8.01

Item Ref/Ver# 38962 V-1


Navigation Menu

Advanced Item Search > Item > Item Maintenance

Item Text View Dates Response Attachment Comment Keyword

| NOA-TOS/Pub/Ver# | Jurisdiction | Item Ref/Ver# | Last Revised Date | Item Status | Source /Copy | Taxonomy |
|-------------------|--------------|---------------|-------------------|----------------|--------------|----------|
| Tilesetter/2010/2 | QC | 79959/1 | 2011/02/17 | In Development | Copy | Tax II |

Back Help?

Click on the  thumbnail to display a view only image of the related item.

Item Related Item

NOA-TOS Name/Pub Year/Ver# Tilesetter/2004/1

Sub-task C/8/8.01

Item Ref/Ver# 38962 V-1

Navigation Menu

Advanced Item Search > Item > Item Maintenance

Item Text View Dates Response Attachment Comment Keyword

| NOA-TOS/Pub/Ver# | Jurisdiction | Item Ref/Ver# | Last Revised Date | Item Status | Source /Copy | Taxonomy |
|-------------------|--------------|---------------|-------------------|----------------|--------------|----------|
| Tilesetter/2010/2 | QC | 79959/1 | 2011/02/17 | In Development | Copy | Tax II |

Back Help?

Refer to Figure 6. What is the floor area?

A. 30 sq. ft.
B. 38 sq. ft.
C. 45 sq. ft.
D. 54 sq. ft.

Close

APPENDIX 5 OF ANNEX A: SAMPLE FROM THE BUSINESS PROCEDURES GUIDE,
INCLUDES SCREEN SHOTS

Text View Tab

Click on the **Text View Tab**. *Navigate to the Item View screen.* The Correct Response field will display via when 'mouse hover over'. **Note: this function /screen will not be reproduced in ICEMS 2.**

The screenshot displays the 'Item View' screen. At the top left is a red circular logo with 'CANADA' and '100th Anniversary' text. The main header area is green and contains the title 'Item View', a 'Navigation Menu' button, and a breadcrumb trail 'Advanced Item Search > Item > Item Maintenance'. On the right side of the header, there is a table with item metadata:

| | |
|----------------------------|-------------------|
| NOA-TOS Name/Pub Year/Ver# | Tilesetter/2004/1 |
| Sub-task | C/8/8.01 |
| Item Ref/Ver# | 38962 V-1 |

Below the header is a horizontal tab bar with six tabs: 'Item', 'Text View' (which is highlighted), 'Dates', 'Response', 'Attachment', 'Comment', and 'Keyword'. On the left side of the main content area, there is a vertical sidebar with buttons: 'Back', 'Help?' (with a question mark icon), 'New', 'Save', 'Cancel', and 'Français'. The main content area has a 'Correct Response' label above a text input field. Below this is a large text box with a green header 'English' containing the question: 'Refer to Figure 6. What is the floor area?'. The question is followed by four multiple-choice options: A. 30 sq. ft., B. 38 sq. ft., C. 45 sq. ft., and D. 54 sq. ft. At the bottom of the screen, there is a horizontal bar with four buttons: 'New', 'Save', 'Cancel', and 'Français'.

APPENDIX 5 OF ANNEX A: SAMPLE FROM THE BUSINESS PROCEDURES GUIDE,
INCLUDES SCREEN SHOTS

Dates Tab

Click on the **Date Tab**. *Navigate to the Item Dates screen.* Dates fields are system populated.

Item Dates NOA-TOS Name/Pub Year/Ver# Tilesetter/2004/1
Sub-task C/8/8.01
Item Ref/Ver# 38962 V-1

Navigation Menu
Advanced Item Search > Item > Item Maintenance

Item Text View **Dates** Response Attachment Comment Keyword

Back
Help?
Save
Cancel
Français

Effective Date
English 2009/01/14
French 2009/01/14

Expiry Date
Expiry

Inactive Date
Inactive

Last Revised Date 2009/01/14

Save Cancel Français

APPENDIX 5 OF ANNEX A: SAMPLE FROM THE BUSINESS PROCEDURES GUIDE,
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Response Tab

Click on the **Response Tab**. *Navigate to the Item Response screen.* Fields are system populated.

Item Response NOA-TOS Name/Pub Year/Ver# Tilesetter/2004/1
Sub-task C/8/8.01
Item Ref/Ver# 38962 V-1

Navigation Menu
Advanced Item Search > Item > Item Maintenance

Item Text View Dates **Response** Attachment Comment Keyword

| Label | Correct Response | Revision Date | Created Date | Delete Status |
|-------|------------------|---------------|--------------|---------------|
| A | | 2005/11/28 | 2005/11/28 | |
| B | ✓ | 2005/11/28 | 2005/11/28 | |
| C | | | 2005/11/28 | |
| D | | | 2005/11/28 | |

Back
Help?
New
Save
Cancel
Français

ITEMAN

| Label | % Endorsing | Date Processed |
|-------|-------------|----------------|
| | | |

New Save Cancel Français

APPENDIX 5 OF ANNEX A: SAMPLE FROM THE BUSINESS PROCEDURES GUIDE,
INCLUDES SCREEN SHOTS

Attachment Tab

Click on the **Attachment Tab**. *Navigate to the Item Attachment screen.* The thumbnail



is active and will display a view only image of the attachment.

Item Attachment NOA-TOS Name/Pub Year/Ver# Tilesetter/2004/1
Sub-task C/8/8.01
Item Ref/Ver# 38962 V-1

Navigation Menu
Basic Item Search > Item > Item Maintenance

Back Help? New Link Save Cancel Français

| Item | Text View | Dates | Response | Attachment | Comment | Keyword | |
|---------------|-----------|---------|----------|------------|---------|----------------------|-------------------------------------|
| Display Order | Ref # | Version | Figure # | Status | Type | Description | Removed From Item |
| 0 | 1633 | V-1 | 6 | Active | Diagram | Floor area (L-shape) | <input type="checkbox"/> |
| 0 | 1624 | V-1 | 1 | Active | Diagram | 37641 | <input checked="" type="checkbox"/> |

New Link Save Cancel Français

Click the **New Link** button. *Navigate to Item Link Attachment screen.* A list of available attachments in the NOA is presented. Select an attachment and click on the



Save button to link the item and attachment. The thumbnail is active and will display a view only image of the attachment.

Item Link Attachment NOA-TOS Name/Pub Year/Ver# Tilesetter/2010/2
Sub-task C/7/7.03
Item Ref/Ver# 79984 V-1

Navigation Menu
Basic Item Search > Item > Item Maintenance

Back Help? Save Cancel

| Item | Text View | Dates | Response | Attachment | Comment | Keyword |
|-------------------------------|-----------|----------|----------------|------------|------------------------|---------|
| Ref # | Version | Figure # | Status | Type | Description | |
| <input type="checkbox"/> 1624 | V-1 | 1 | Active | Diagram | 37641 | |
| <input type="checkbox"/> 1625 | V-1 | 2 | Active | Diagram | Flammable WHMIS symbol | |
| <input type="checkbox"/> 1630 | V-1 | 3 | Active | Diagram | 37777 | |
| <input type="checkbox"/> 1631 | V-1 | 4 | In Development | Diagram | Halls and offices | |
| <input type="checkbox"/> 1632 | V-1 | 5 | Active | Diagram | 38959 | |
| <input type="checkbox"/> 1633 | V-1 | 6 | Active | Diagram | Floor area (L-shape) | |
| <input type="checkbox"/> 1634 | V-1 | 7 | Active | Diagram | 38963 | |
| <input type="checkbox"/> 1635 | V-1 | 8 | Active | Diagram | Floor area (L-shape) | |

**APPENDIX 5 OF ANNEX A: SAMPLE FROM THE BUSINESS PROCEDURES GUIDE,
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Comment Tab

Click on the **Comment Tab**. If the item has 1 or no comments, *navigate to the Item Comment Edit screen*. Dates fields are system populated.

Click on the **Comment Tab**. If the item has 2 or more comments, *navigate to the Item Comment screen*. Click on a comment. *Navigate to the Item Comment Edit screen*.

| Created Date/Time | Comments | Delete Status |
|---------------------|---|---------------|
| 2011/05/13 10:07:38 | Enter comment; click Save. Comment is recorded. Created | |
| 2011/05/13 10:11:02 | 2nd comment | |

APPENDIX 5 OF ANNEX A: SAMPLE FROM THE BUSINESS PROCEDURES GUIDE,
INCLUDES SCREEN SHOTS

Keyword Tab

Click on the **Keyword Tab**. If the item has 1 or no keywords, *navigate to the Item Keyword Edit screen* - Note: this function /screen will not be reproduced in ICEMS 2.

Item Keyword Edit

NOA-TOS Name/Pub Year/Ver# Tilesetter/2010/2
Sub-task C/7/7.03
Item Ref/Ver# 79984 V-1

Navigation Menu
Basic Item Search > Item > Item - Mise à jour

Item Text View Dates Response Attachment Comment **Keyword**

English
French

New Save Cancel

Back
Help?
New
Save
Cancel

Click on the **Keyword Tab**. If the item has 2 or more keywords, *navigate to the Item Keyword screen*. Click on a keyword. *Navigate to Item Keyword Edit screen*.

Item Keyword

NOA-TOS Name/Pub Year/Ver# Tilesetter/2010/2
Sub-task C/7/7.03
Item Ref/Ver# 79984 V-1

Navigation Menu
Basic Item Search > Item > Item - Mise à jour

Item Text View Dates Response Attachment Comment **Keyword**

| English | French |
|----------------|---------------------|
| Calculate area | Calculer la surface |
| Keyword 2 | Mot clé 2 |

New Save Cancel Français

Back
Help?
New
Save
Cancel
Français

APPENDIX 6 OF ANNEX A: ICEMS SYSTEM AND FACILITIES SECURITY REQUIREMENTS

1. These security requirements are documented in the form of a series of policies and standards. These policies must reflect Industry Best Practices, and as such will be revised from time to time. At a minimum, they must be formally reviewed, then revised and approved as appropriate, on an annual basis. For the purposes of this appendix, ICEMS represents both the current system and the replacement system (ICEMS 2).
2. **Policies Overview**
 - 2.1. It is the goal of these policies to:
 - 2.1.1. Clearly identify areas of responsibility for ICEMS Users, Administrators and Managers;
 - 2.1.2. Be enforceable; and
 - 2.1.3. Be clear and concise.
 - 2.2. The policies section of this appendix (section 3) is divided into policy statements on the key areas of security management. These policy statements are as follows:
 - 2.2.1 **Accountability Policy** – Clarifies the audit capabilities of ICEMS, and outlines the responsibilities of ICEMS Users, Administrators, and Managers;
 - 2.2.2 **Privacy Policy** – Outlines the limits to personal privacy that ICEMS Users must expect;
 - 2.2.3 **System Access Policy** – Defines access rights and privileges in order to protect the information assets of ICEMS;
 - 2.2.4 **Authentication Policy** – Establishes the ICEMS trust model, and ICEMS User identification and authentication guidelines;
 - 2.2.5 **System and Network Support and Maintenance Policy** – Describes how support and maintenance staff perform their work, and describes the Contractor's role and the IT hosting facilities provider's role;
 - 2.2.6 **Incident Response Policy** – Describes which types of violations must be reported and to whom;
 - 2.2.7 **Firewall Policy** – Describes what information is permitted to pass across the ICEMS network boundaries;
 - 2.2.8 **Physical Access Policy** – Describes the limitations on physical access to the ICEMS physical IT facilities environment; and
 - 2.2.9 **ICEMS Workstation Setup Policy** – Describes how ICEMS Users' PCs and laptops must be set up so that those Users can access ICEMS.
3. **Policies**
 - 3.1 **Accountability Policy**
 - 3.1.1 **Administrators** are employees¹ of the Contractor assigned to maintain and operate the ICEMS systems and network. The Administrators can include personnel defined in section 7 of this SoW or those personnel designated by the Contractor which require access to the Application to fulfill the obligations of the Contract. Administrators must have attained Government of Canada "Reliability" security clearance as required in the Contract. Administrators must be responsible for reporting any breaches of the System Access Policy and Authentication Policy to the Managers. They must be responsible for carrying

¹ The term "employee" throughout this appendix refers to an employee and/or a Contractor.

APPENDIX 6 OF ANNEX A: ICEMS SYSTEM AND FACILITIES SECURITY REQUIREMENTS

out the System and Network Support and Maintenance Policy, the Firewall Policy, and the Incident Response Policy, including escalating incidents to Managers.

- 3.1.2 **IT Host Facilities Administrators** are employees of the IT host facilities Provider that is the Contractor itself or the provider that has been contracted by the Contractor. They must be responsible for the security of the facilities that are hosting the ICEMS servers and related equipment. The IT host facilities administrators must not have any ICEMS User or system administration access to the ICEMS servers and related equipment other than physical activities, and then only under the direction of the Administrators. The duties IT host facilities administrators may perform include physical installation and moving of the ICEMS servers and related equipment, powering on and off (including rebooting) of such, and loading and removing consumables (including disk packs and magnetic tapes).
- 3.1.3 The **Services Manager** is the individual IT Services Supplier employee responsible for the operation of ICEMS. He or she is responsible to the ICEMS 2 Technical Authority. The Administrators must report to the Services Manager.
- 3.1.4 **ICEMS Managers** comprise the jurisdiction ICEMS Managers, the ICEMS Item Bank Development Managers and the ICEMS 2 Technical Authority. Managers must be responsible for enforcing all of the policies in this document, and determining when it is necessary to escalate policy breaches and security incidents to the Canadian Council of Directors of Apprenticeship (CCDA).
- 3.1.5 **Jurisdictional Administrators** are employees of the jurisdictions who are responsible for managing ICEMS access security for ICEMS Users in their jurisdiction. The Jurisdiction Administrators must report to their jurisdiction ICEMS Manager.
- 3.1.6 **ICEMS Organizations** are the IT Host Services Supplier and the jurisdictions.
- 3.1.7 Members of all groups must be held accountable for their actions on ICEMS through detailed logging at the firewall, web server, application and operating system layers of ICEMS.

3.2 Privacy Policy

This policy statement outlines the limits to personal privacy that ICEMS Users must expect. This policy refers to the privacy of ICEMS Users, **not** to the privacy of the Red Seal program client data, as it will not be stored on the ICEMS 2.0 version of the system.

- 3.2.1 The interactions of ICEMS Users, Administrators, Jurisdictional Administrators and ICEMS Managers with ICEMS system resources are not confidential. They are subject to ongoing review and audit by individuals cleared by the CCDA.
- 3.2.2 All connections to ICEMS by ICEMS Users must be logged, complete with the date, time of day and ICEMS User ID.
- 3.2.3 All activities performed by ICEMS Users must be logged complete with the date, time of day, action performed, and the ICEMS User that performed the action.
- 3.2.4 These logs must be retained indefinitely and undergo periodic audits.
- 3.2.5 Upon written request, these logs must be made available for audit by participating jurisdictions. These logs must be made available within 1 business day of the receipt of the written request.

3.3 System Access Policy

This policy statement defines access rights and privileges in order to protect the information assets of ICEMS.

- 3.3.1 Only the employees of participating ICEMS jurisdictions and Administrators must be able to access ICEMS.
- 3.3.2 Those individuals must only have access to the functions and data within the database that they require to effectively perform their assigned duties and responsibilities.
- 3.3.3 ICEMS must only be used for purposes pertaining to the operation of the Interprovincial Standards Red Seal Program.
- 3.3.4 User access to ICEMS must be only through addresses on the ccda-icems.ca and ccda-sigei.ca domains, or their replacements, through proper authentication channels. Methods of access that circumvent these IT facilities may not be created.
- 3.3.5 Administrators' access to ICEMS, if not emulating User access, must use a Dedicated connection used only for ICEMS traffic.
- 3.3.6 The ICEMS production servers must provide valid SSL certificates issued to ICEMS by a well-known Authority—in the case of ICEMS 1, Thawte.
- 3.3.7 A well-known Certificate Authority—in the case of ICEMS 1, Thawte—must sign all workstation-side executables required to interact with ICEMS.
- 3.3.8 Access to ICEMS must only be from workstations running Windows XP, Windows 7 or newer operating systems with supported browsers (Microsoft IE 8.0 or a later release). ICEMS Users must configure their browsers according to the workstation configuration guidelines for all features of ICEMS to function correctly.
- 3.3.9 ICEMS Users desiring access to ICEMS must contact their Jurisdictional Administrator.
- 3.3.10 Jurisdictional Administrators must be responsible for establishing the identity of all of the ICEMS Users in their jurisdiction, and for ensuring that the intended ICEMS User, and no one else, receives the ICEMS username and password information. Failure to carry out this policy effectively places ICEMS at significant risk.
- 3.3.11 Jurisdictional Administrators must sign the Jurisdictional Administrators Agreement (which the Contractor is not required to sign) before being granted access to the ICEMS system.
- 3.3.12 The appropriate Jurisdictional Administrator must grant ICEMS Users only the minimum level of system privileges they require to perform their job duties.
- 3.3.13 All ICEMS Users, Jurisdictional Administrators, Administrators and Managers must read the ICEMS User policy document (or an approved synopsis) before being granted access to the system.
- 3.3.14 All ICEMS Users, Jurisdictional Administrators and Administrators must immediately log out of ICEMS upon completing their work with the system. Remaining unproductively logged in poses a security risk.

APPENDIX 6 OF ANNEX A: ICEMS SYSTEM AND FACILITIES SECURITY REQUIREMENTS

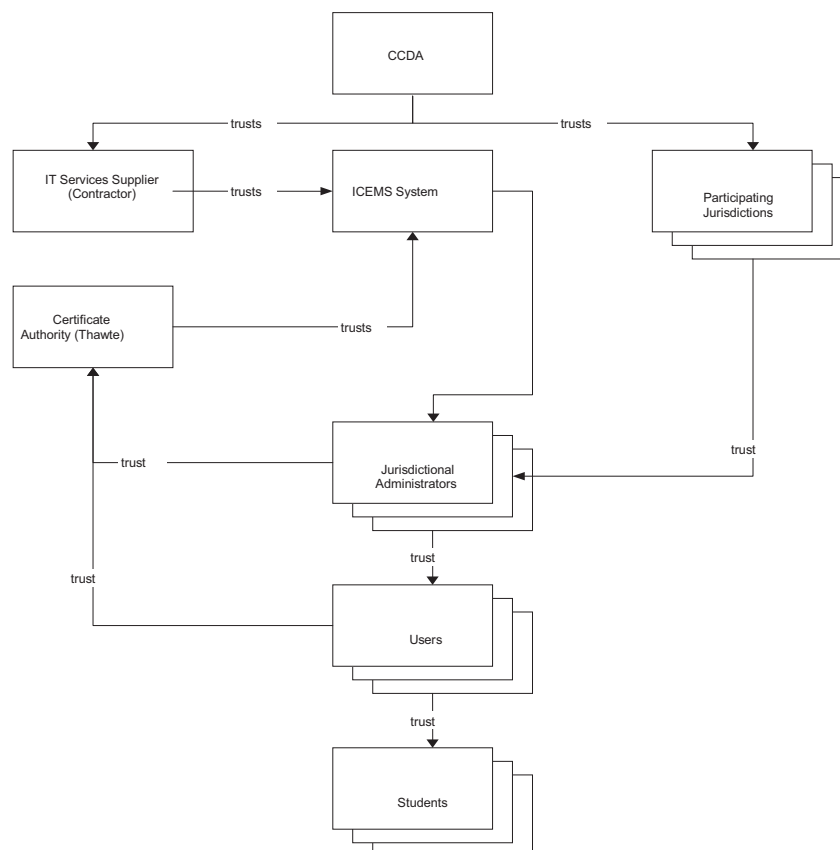
- 3.3.15 All ICEMS Users, Jurisdictional Administrators and Administrators must lock their workstations, log out of their workstations or otherwise secure their workstations when they are unattended.
- 3.3.16 All ICEMS Users, Jurisdictional Administrators and Administrators must secure all information related to ICEMS while it is outside of the system. This requirement applies to all information, whether it is in electronic (i.e. saved on a laptop or workstation hard drive) or physical (i.e. printed documents) form. It applies particularly to Word and CorelDRAW documents related to item development and maintenance.
- 3.3.17 All ICEMS Users, Jurisdictional Administrators and Administrators must only print ICEMS-related documents on physically secured printers or under the direct physical supervision of the authorized individual who issued the print job.
- 3.3.18 ICEMS must be designed so that no sensitive information is left on an ICEMS User's workstation after he or she finishes using the system, unless the ICEMS User explicitly copies or saves information, such as Word or CorelDRAW documents, onto his or her workstation.

3.4 Authentication Policy

This policy statement established the ICEMS trust model, and ICEMS User identification and authentication guidelines.

- 3.4.1 A trust model shows two things. First, it shows the chain of authority through which ICEMS Users are authenticated and given access to information systems. Second, it shows the relationship and degree of trust that the system owners have in all of an information system's stakeholders. In this case, for example, the CCDA has no direct trust in the ICEMS Users. In fact, the CCDA is making several well-informed leaps of faith in trusting the ICEMS Users to use the system properly. The ICEMS trust model is shown in Figure 1.

3.4.2 Figure 1. ICEMS Trust Model



APPENDIX 6 OF ANNEX A: ICEMS SYSTEM AND FACILITIES SECURITY REQUIREMENTS

- 3.4.3 ESDC is a member of the CCDA and will be administering the ICEMS 2 Project on behalf of the CCDA.
- 3.4.4 The Contractor manages ICEMS under Contract with Canada.
- 3.4.5 The CCDA trusts participating jurisdictions by agreement.
- 3.4.6 The CCDA will identify one ICEMS User from each jurisdiction to the Contractor. These are the Jurisdictional Administrators.
- 3.4.7 The Contractor must assign each Jurisdictional Administrator an account.
- 3.4.8 The Contractor must assign all of the privileges of a Jurisdictional Administrator to these accounts.
- 3.4.9 The Jurisdictional Administrators must designate ICEMS Users within their jurisdiction.
- 3.4.10 Jurisdictional Administrators must assign ICEMS privileges to the accounts of the ICEMS Users they designate.
- 3.4.11 The third-party Certificate Authority (in ICEMS 1 case, Thawte) must issue digital security certificates to the ICEMS system.
- 3.4.12 ICEMS Users and Jurisdictional Administrators trust the security certificates and, thus, trust the ICEMS system.
- 3.4.13 Every individual whom ICEMS trusts must have an ICEMS account. Every account is uniquely identified by a username. Individuals are authenticated when they supply the correct combination of username and password. The confidentiality of these username and password combinations is central to the security of ICEMS.
- 3.4.14 **Password owner's responsibility** – The owner of a username and password must be responsible for all activities that take place on ICEMS with his or her account information.
- 3.4.15 **Password length** – All passwords must be at least eight characters in length.
- 3.4.16 **Difficult-to-guess passwords are required** – Passwords must contain at least one non-alphabetic character (i.e., 1, 2, 3, 4, 5, 6, 7, 8, 9, 0 or a punctuation character), and must not be based on a correctly spelled English word or name. Examples of good and bad passwords are given in the next two sections.
- 3.4.17 **Good passwords:** “q233e!!ple”, “catz”) “mize” or “1bloweee”.
- 3.4.18 **Bad passwords:** “kittens!”, “jonathan1” or “starwars”.
- 3.4.19 **Password change** – All passwords must be changed every 90 days. ICEMS Users must be forced to make this change.
- 3.4.20 **Password sharing** – Under no circumstances can ICEMS usernames and passwords be shared between ICEMS Users

APPENDIX 6 OF ANNEX A: ICEMS SYSTEM AND FACILITIES SECURITY REQUIREMENTS

- 3.4.21 **Limit on unsuccessful logins** – If an ICEMS User unsuccessfully attempts to log into the system three consecutive times, the ICEMS User's account must be disabled until reactivated by a Jurisdictional Administrator.
- 3.4.22 **Writing down passwords** – ICEMS Users must recognize that writing down passwords puts ICEMS at risk. If ICEMS Users write down their passwords, they must not store the passwords within physical proximity of their computers.
- 3.4.23 **Display and printing of passwords** – When displayed or printed, passwords must be blanked, masked or otherwise obscured from view.
- 3.4.24 **System storage of passwords** – Passwords must be encrypted when they are stored on the system permanently.
- 3.4.25 **Security notice at login** – The ICEMS User authentication screen must contain a notice stating that (1) the system is to be used only by authorized ICEMS Users; (2) by continuing to use the system, the ICEMS User represents that he or she is an authorized User; (3) all activity on the system is logged; and (4) unauthorized users of this system will be prosecuted to the full extent of the law.
- 3.4.26 **Previous login notification** – Following a successful login, ICEMS Users must be informed of the date and time of the last successful login on their account. This helps ICEMS Users to identify incidents of unauthorized access using their account information.
- 3.4.27 **Password theft** – If an ICEMS User suspects that his or her password has been stolen or misused in any way, he or she must immediately report it to the Contractor Help Desk.
- 3.4.28 **Password disclosure** – ICEMS Managers, Administrators, Jurisdictional Administrators and ICEMS Users will never have a need to ask any ICEMS User for their password. If anyone is asked for their password, they must report it as a security incident through the proper channels.

3.5 System and Network Support Policy

This policy statement describes how Administrators will perform their work, sets limits on remote support and describes the Contractor's role.

- 3.5.1 All database servers in the ICEMS architecture are considered critical systems. As such, they must be properly hardened and maintained over time. In this case, the process of hardening a system includes, but is not limited to, the following:
 - 3.5.1.1 Installing only the minimum amount of software necessary to perform required system functions;
 - 3.5.1.2 Enabling only the minimum number of system services necessary to perform required system functions;
 - 3.5.1.3 Disabling all default accounts to all services;
 - 3.5.1.4 Disabling anonymous access to all services;
 - 3.5.1.5 Establishing a minimum number of ICEMS User accounts, all with the minimum level of access required for ICEMS Users to fulfill their responsibilities;
 - 3.5.1.6 Applying all available patches and updates in a timely fashion;
 - 3.5.1.7 Enacting all security configuration recommendations from hardware and software vendors;
 - 3.5.1.8 Conducting a post-hardening audit to ensure that the hardening is complete;

APPENDIX 6 OF ANNEX A: ICEMS SYSTEM AND FACILITIES SECURITY REQUIREMENTS

- 3.5.1.9 Analyzing and communicating manufacturer- and/or software publisher-issued security warnings for any ICEMS software or hardware to the Managers within 24 hours of publication by the manufacturer and/or software publisher (the Managers and the Service Manager will decide how to respond to these warnings and what priority to give the response through change control, and each patch must be evaluated and tested on a case-by-case basis before being applied to production systems);
- 3.5.1.10 Applying manufacturer- and/or software publisher-issued virus updates to the ICEMS production servers within 1 business day of publication by the manufacturer and/or software publisher;
- 3.5.1.11 Ensuring that remote, jurisdictionally managed equipment and IT facilities used to access the ICEMS database servers adhere to the respective jurisdictional virus management policies;
- 3.5.1.12 Regularly analyzing system logs (firewall-, web server- and application-level logs) for evidence of security incidents;
- 3.5.1.13 Installing only absolutely necessary software and services on ICEMS production, training and test servers (all unnecessary software and services must not be installed at all or must be uninstalled, not merely disabled);
- 3.5.1.14 Forbidding remote support maintenance of the ICEMS network and servers when initiated from outside the ICEMS network; and
- 3.5.1.15 Ensuring that administrative and support passwords adhere to the policies regarding passwords described in section 3.4 of this appendix.

3.6 Incident Response Policy

This policy statement describes which types of violations must be reported and to whom.

- 3.6.1 Security incidents are any events that potentially place ICEMS assets at risk. Some incidents, following investigation, are found to be harmless, while others require an immediate response to eliminate or minimize the impact on ICEMS assets. Some incidents are detected as they occur, while others go undetected for days, weeks or months.
- 3.6.2 Administrators must take all reasonable actions to detect and report to the ICEMS 2 Technical Authority the following security incidents, as identified in the ICEMS Risk Analysis:
 - 3.6.2.1 online password cracking;
 - 3.6.2.2 exploit service vulnerability;
 - 3.6.2.3 denial of service attack;
 - 3.6.2.4 scanning;
 - 3.6.2.5 man in the middle attack;
 - 3.6.2.6 packet replay;
 - 3.6.2.7 session hijacking;
 - 3.6.2.8 virus or worm infection;
 - 3.6.2.9 physical IT facilities environment compromise;
 - 3.6.2.10 user workstation compromise;
 - 3.6.2.11 social engineering attack;
 - 3.6.2.12 electronic eavesdropping;
 - 3.6.2.13 offline password cracking;
 - 3.6.2.14 weak password choice;
 - 3.6.2.15 forgotten/lost (possibly stolen) password; and
 - 3.6.2.16 incident of a User workstation being left logged in.

APPENDIX 6 OF ANNEX A: ICEMS SYSTEM AND FACILITIES SECURITY REQUIREMENTS

- 3.6.3 Administrators and Jurisdictional Administrators must take all reasonable actions to detect and report to the ICEMS 2 Technical Authority the following attempted or successful incidents within their own ICEMS organizations:
 - 3.6.3.1 Social engineering attacks (individuals misrepresenting themselves to gain access to or information about ICEMS);
 - 3.6.3.2 ICEMS workstation thefts or compromises (including, but not limited to, user workstations being left logged into ICEMS and unattended); and
 - 3.6.3.3 Password thefts or losses.
- 3.6.4 Further, ICEMS Users, Jurisdictional Administrators and Administrators must report to the ICEMS 2 Technical Authority any other incident that they believe could affect ICEMS assets.
- 3.6.5 Security incidents must be reported using the following response process:
 - 3.6.5.1 Investigate the event—assess its impact, understand the vulnerability that was exploited, gather forensic evidence and identify the attacker;
 - 3.6.5.2 Recover system integrity and operation; and
 - 3.6.5.3 Reduce the likelihood of the attacker attacking again, through such means as denying the attacker all access to the system, altering security practices, reporting the attack to authorities (police, network security centres) as per 3.6.10 below, taking civil legal action and other means.
- 3.6.6 Some incidents are detected and reported by ICEMS Users. It is the responsibility of Jurisdictional Administrators and ICEMS Users to immediately report security incidents to the Administrators. Only the Administrators can truly gauge the severity of an incident.
- 3.6.7 Some incidents are detected and reported by automated processes. Such automated processes must inform the Administrators by e-mail that an incident has occurred.
- 3.6.8 Some incidents are detected during the course of detailed log analysis conducted by the Administrators. No matter how the incident comes to be known, the Administrators must take immediate action to determine the severity of the incident and react if necessary.
- 3.6.9 Serious incidents, which potentially affect the core business that ICEMS enables, must be escalated by the Administrators to the Services Manager. The Services Manager must determine whether the incident requires immediate escalation to the Managers.
- 3.6.10 Only the Managers can make the decision to involve outside agencies, such as law enforcement, in response to a security incident.
- 3.6.11 The Administrators must log all security incidents. The log will describe the results of the investigation, the recovery activities undertaken (if necessary) and the actions taken to reduce the likelihood of recurrence.
- 3.6.12 All security incidents must be periodically summarized by the Administrators and reported to the Managers.

3.7 Firewall Policy

This policy statement describes what information is permitted to pass across the ICEMS network boundaries. This policy dictates the implementation of the firewall to protect the ICEMS computing environment. It is not to be confused with Check Point

APPENDIX 6 OF ANNEX A: ICEMS SYSTEM AND FACILITIES SECURITY REQUIREMENTS

Firewall policies that are applied to the firewall application. The Firewall Policy will drive the configuration of Check Point Firewall policies.

- 3.7.1 The firewall must separate the ICEMS network from the Internet and control all traffic across this boundary.
- 3.7.2 The firewall must further subdivide the ICEMS network into two zones, the demilitarized zone (DMZ) and the private zone. The DMZ must contain only the ICEMS systems that need access that is initiated **from** the Internet. The private zone must allow ICEMS systems to initiate access **to** the Internet in a secure manner.
- 3.7.3 By default, all traffic across the firewall must be denied (that is, dropped and not responded to with a message of any kind) and logged.
- 3.7.4 Packets with inauthentic source addresses ("spoofed" packets), must be logged and dropped regardless of their origin or destination.
- 3.7.5 Source routed packets must be logged and dropped.
- 3.7.6 Invalid packets—such as, but not limited to, NULL and Xmas tree packets—must be logged and dropped.
- 3.7.7 The firewall must respond to standard pings, but must not allow any internal systems to respond to pings.
- 3.7.8 Attempts to contact internal systems from the Internet, other than by the Administrators, using any protocol must be logged and dropped.
- 3.7.9 Internet Control Message Protocol (ICMP) and Server Message Block (SMB) traffic originating from within the internal ICEMS network must not be allowed through the firewall and will not be logged.
- 3.7.10 The firewall must allow normal communications to occur between the Internet and the following services in the DMZ (contravening packets will be logged and dropped):
 - 3.7.10.1 HTTP to the Web servers; and
 - 3.7.10.2 HTTPS to the Web servers.
- 3.7.11 The firewall must allow only essential communications to occur between the DMZ and the private network zones. Contravening packets must be logged and dropped.
- 3.7.12 SMB traffic originating in the private zone must not be allowed to pass into the DMZ. Contravening traffic must be dropped without logging.
- 3.7.13 Under no circumstances will any packets be allowed to move from the Internet to the private zone.
- 3.7.14 Windows Active Directory must provide authentication. External entities must not be granted access to the internal network, but they may be granted access to the perimeter network where the Web servers are located.
- 3.7.15 Source routing must not be enabled on the firewall. Enabling source routing would allow for malicious attacks by computers configured to look like they are from the target network. This is known as IP spoofing. IP packet forwarding must be enabled, as the firewall application verifies the source of all packets coming into the internal network.
- 3.7.16 The firewall in the ICEMS computing environment must be an application gateway—in other words, it must be an application running on a server-based platform to verify and/or authenticate incoming or outgoing traffic.

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- 3.7.17 The ICEMS firewall must use a multi-homed host architecture. A multi-homed host is one that uses more than one network interface card, each logically and physically connected to a different network.
- 3.7.18 Only a limited number of Administrators—a primary and a backup—must have authority to administer the firewall. The ICEMS Service Manager must determine who those Administrators are.
- 3.7.19 The firewall must be backed up before and after any configuration changes.
- 3.7.20 Simple Message Transfer Protocol (SMTP) and Post Office Protocol (POP) mail must not be permitted through the firewall.
- 3.7.21 All Check Point Firewall policies and configurations must be documented.
- 3.7.22 The firewall server hardware is in the IT host facilities, which must be secured at all times.
- 3.7.23 The server Operating System (OS) must always be kept in a locked state when the Administrator is not present.
- 3.7.24 The two designated Administrators as per 3.7.18 above must have access and manage secret passwords for systems administration. The passwords must also be secured with the Services Manager, in a sealed envelope, in the event of an emergency.
- 3.7.25 On a quarterly basis, an Administrator must review the Check Point Web site for upgrades to the firewall. An evaluation must be performed to validate the necessity of applying the update to the firewall.
- 3.7.26 The firewall logs must be analyzed for attacks or abnormal activity on a weekly basis. Each week, firewall logs must be saved, and the preceding week's logs must be purged.

3.8 Physical Access Policy

This policy statement describes the limitations on physical access to the ICEMS physical IT facilities environment.

- 3.8.1 ICEMS must operate within the policies of the IT host facilities (as set out by the Contractor or subcontractor) and those policies must conform to Industry Best Practices.
- 3.8.2 Only a limited number of Administrators, to be identified by the Services Manager, must have physical access to the ICEMS IT facilities environment.
- 3.8.3 The Services Manager must maintain a current list of all individuals with access to the physical IT facilities environment.
- 3.8.4 The physical facilities environment must be secured. Access to the IT facilities must be denied to staff when they no longer need the access.
- 3.8.5 The ICEMS IT host facilities must have security incident policies and procedures, which must include reporting to the Services Manager any incident involving the compromise of the physical facilities environment.
- 3.8.6 Only the Services Manager may have the authority to authorize Administrator access to the IT host facilities. If an Administrator has access to the IT host facilities, then he or she is subject to the IT host facilities policies and procedures.
- 3.8.7 The Administrators' ICEMS workstations must either be used in a physically secure workstation environment accessible only to authorized personnel or,

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if the Administrator is operating in ICEMS User emulation mode, be under the immediate custody of the authorized workstation user.

- 3.8.8 Access to the ICEMS workstation physically secure IT facilities must be denied to authorized personnel once they become unauthorized.
- 3.8.9 The Administrators' ICEMS workstation secure IT facilities must have security incident policies and procedures.

3.9 ICEMS Workstation Setup Policy

- 3.9.1 All ICEMS workstations accessing ICEMS must be configured according to the ICEMS application workstation configuration guidelines.
- 3.9.2 All data communications between the ICEMS workstations and the ICEMS servers must be 256-bit encrypted.
- 3.9.3 All ICEMS workstations must operate behind a firewall. If the workstation is connected to the Internet via a Dedicated Internet Services Provider (ISP) connection, then a "personal" firewall (that meets the ICEMS organization's IT standards) must be placed between the ICEMS workstation and the ISP connection.
- 3.9.4 Normally, sensitive ICEMS data must only temporarily reside on an ICEMS workstation (for example, while a User is accessing the ICEMS database or printing an exam). If sensitive data are retained on the ICEMS workstation, the disk drives of that ICEMS workstation must be encrypted.
- 3.9.5 Desktop virus protection must be installed, and jurisdictional policies must be followed. The jurisdictions are responsible for installing the latest anti-virus signature files on any of their workstations accessing ICEMS.
- 3.9.6 All critical Windows updates and the latest anti-virus images must be applied to these machines daily (as soon as they become available).

4. Security Standards

- 4.1 Physical security policies must be implemented that restrict access to hosted ICEMS technology resources, which include:
 - 4.1.1 Server resources;
 - 4.1.2 Network devices; and
 - 4.1.3 All production, training, development and testing computing environment resources.
- 4.2 All physical devices must be tagged and inventoried accordingly.
- 4.3 Logical security measures must include:
 - 4.3.1 Configuration and change management controls;
 - 4.3.2 A strong password scheme;
 - 4.3.3 Virus protection;
 - 4.3.4 Secure network design, including the definition of a secure network perimeter;
 - 4.3.5 Restricted access to system administrator functions;
 - 4.3.6 Restricted access to ICEMS system objects and data;

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- 4.3.7 FIPS-2-compliant encryption of the data on the ICEMS disk drives and backup media; and
- 4.3.8 A comprehensive data backup strategy, with secure off-site storage of backup media and documentation sets.
- 4.4 The IT host facilities must provide an environment that is secure against threats of:
 - 4.4.1 Fire;
 - 4.4.2 Water damage; and
 - 4.4.3 Unauthorized access.
- 4.5 The off-site storage IT facilities for data backup media must be commercial, built-for-purpose facilities, supplied by the Contractor or through a sub-contractor.
- 4.6 The off-site storage IT facilities must meet all of the following criteria.
 - 4.6.1 It must be remote from the IT hosting facilities (at least 20 kilometres away).
 - 4.6.2 It must be possible to obtain remotely stored backup materials at any time (24-hour access).
 - 4.6.3 The organization supplying the IT facilities must be bonded and insured against loss or damage.
- 4.7 The Physical Access Policy (as described in 3.8 of this Appendix), addressing access to the IT facilities and to the resources contained therein, must be stringently enforced.
- 4.8 The IT host facilities must be fully equipped with the requisite technology to ensure that the Physical Access Policy can be implemented.
- 4.9 Proactive security monitoring and assessment must be a continuous activity. Regular security reports must be provided, which will describe such items as the following:
 - 4.9.1 Security violations and violation attempts; and
 - 4.9.2 Pre-emptive security initiatives.
- 4.10 Administrators must retain their ICEMS-related printed sensitive documents only for as long as they are needed, and then only within the secure workstation environment.
- 4.11 Administrator-created ICEMS related documents must be destroyed when the documents are no longer needed. The method of destruction must render the documents unreadable and incapable of reconstruction. Shredding or burning under secure Administrator supervision is required.
- 4.12 If an ICEMS workstation is no longer used as an ICEMS workstation, and if that workstation contains retained sensitive ICEMS information, then that information must be securely and permanently removed from that workstation.
- 4.13 If the ICEMS Contract with the ICEMS Host Services Provider is terminated, all sensitive ICEMS data must be returned to the Government of Canada, and any remaining trace of those data securely purged from the ICEMS Host Services Provider environment.

APPENDIX 7 OF ANNEX A: LIST OF HARDWARE, NETWORK TECHNOLOGIES AND SOFTWARE TO BE SUPPLIED BY CLIENT

The Client will supply the Contractor with the following hardware, network technologies and software products as required after Contract award. All of these products will continue to be owned by the Client:

| ITEM # | DESCRIPTION | QUANTITY | QUANTITY COMMENTS |
|--------|--|----------|---|
| 1. | Check Point IP397 appliance with R75 software and IPS software blade, with capability of adding VPN capabilities (blades) in the future. | 1 | |
| 2. | Rack mount servers with the following: - 2 x Intel Xeon 5675 - 128GB of RAM with available slots for future upgrades - 2 x 300GB SAS Hot-Plug hard drives in RAID 1 for VMWare OS - 4 x 300GB SAS Hot-Plug hard drives in RAID 5 - 2 x dual gigabit NIC cards - 2 x dual 4/8GB Fiber Channel cards - DVD-Rom, redundant and Hot-Plug power and fans | 4 | 2 servers each on DMZ & internal subnet to support High Availability & vMotion services |
| 3. | Rack mount servers with the following: - 2 x Intel Xeon 5675 - 16GB of RAM with available slots for future upgrades - 2 x 300GB SAS Hot-Plug hard drives in RAID 1 for OS - 4 x 300GB SAS Hot-Plug hard drives in RAID 5 - 1 x dual gigabit NIC card - 2 x dual 4/8GB Fiber Channel cards - DVD-Rom, redundant and Hot-Plug power and fans | 1 | VMWare vCenter |
| 4. | Rack mount server with the following: - 1 x Intel Xeon - 8GB of RAM with available slots for future upgrades - 2 x 300GB SAS Hot-Plug hard drives in RAID 1 for OS - DVD-Rom, redundant and Hot-Plug power and fans | 1 | Domain controller |
| 5. | Tape Library with 8 to 12 slots and LTO-4 single drive. Fiber Channel connection (4/8GB) to the switches, NIC for management. | 1 | |
| 6. | LTO-4 media with barcode labels and individual tape cases. | 50 | |
| 7. | Storage Area Network (SAS) with 12 x 450GB 15K Hot-Plug SAS hard drives in RAID 5 with Hot Spare. Dual 4/8GB Fiber Channel connection and redundant Hot-Plug power and fans. Dual Fiber Channel connection will be to connect it to two switches. | 2 | This space will be sliced into zones separating DMZ and Internal data store. |
| 8. | 24-Port 4/8GB Fiber Channel switch | 2 | 2 switches required for SAN to servers connections with redundancy |

**APPENDIX 7 OF ANNEX A: LIST OF HARDWARE, NETWORK TECHNOLOGIES AND
SOFTWARE TO BE SUPPLIED BY CLIENT**

| | | | |
|-----|--|----|--|
| 9. | Fibre cables for connections between SAN, servers Fibre switches | 30 | |
| 10. | 48-port all gigabit switch Layer 2 (VLAN capability) | 1 | |
| 11. | 17" Rack console; integrated 8 port, keyboard, video and mouse | 1 | |
| 12. | VMWare vSphere ESXi 5.x Enterprise | 8 | For 4 servers with 2 processors per server |
| 13. | VMWare vCenter Server 5.x Standard | 1 | |
| 14. | Quest vRanger Pro 5.x | 8 | For 4 servers with 2 processors per server |
| 15. | MS Windows Server 2012 single server licenses with up to 2 processors, 2 virtual instances | 17 | 3X for each of Production/Test/ Training (=9), 2X Data Mart, 2X Domain Controller, 1X Tape Backup, 2X DNS, 1X File Server |
| 16. | MS SQL Server 2012 Standard licenses | 4 | 1X for each of Production/Test/ Training, and Data Mart |
| 17. | MS Office Pro 2010 | 3 | 1X for each of Production/Test/ Training |
| 18. | Trend Micro OfficeScan Antivirus | 20 | 17 as per Windows Server 2012 plus 3 spare |
| 19. | Adobe Acrobat Government Pro (latest version) | 3 | Production/Test/ Training |
| 20. | SAP Crystal Reports 2008 | 3 | Production/Test/ Training |
| 21. | Symantec Backup Exec 2010 R3 with the following agents: Library, 10 servers including Domain Controller and SQL databases. | 1 | |
| 22. | ITEMAN | 3 | 1X for each of Production/Test/ Training |
| 23. | Cognos 8.2 BI Administrator | 1 | 1X for Data Mart |
| 24. | Cognos 8.2 BI Professional | 5 | Contractor's and Client's developer licenses |

| ITEM # | ICEMS 1 resources to be provided by the Client: |
|--------|--|
| 1. | The latest copy of the ICEMS and Data Mart application software – source and run-time. |
| 2. | The latest copies of all of the data used throughout the ICEMS and Data Mart systems, including: the Production and Test databases for ICEMS and the Production database for the Data Mart, the audit trail data, incident reporting data and test data. |

APPENDIX 7 OF ANNEX A: LIST OF HARDWARE, NETWORK TECHNOLOGIES AND SOFTWARE TO BE SUPPLIED BY CLIENT

| | |
|----|---|
| 3. | The latest copies of all of the documentation used to develop, support, operate and enhance ICEMS and the Data Mart systems, including: configuration and installation instructions, operational procedures, hardware and software asset management, service level management, build management, knowledge transfer plan for new members to the ICEMS Application Support Team, Entity-Relationship Diagram and the Disaster Recovery Plan. |
|----|---|

APPENDIX 8 OF ANNEX A: LIST OF SAMPLE SERVICE LEVEL MANAGEMENT MONTHLY REPORTS

1. Services Levels Summary Statistics and Performance
2. Incident Summary Statistics
3. Transaction Statistics and Performance
4. Maintenance Statistics & Quality
5. Change Requests Statistics and Quality
6. Open Incidents
7. Closed Incidents
8. Wait for Build Incidents
9. On Hold Incidents
10. Open Change Requests
11. Closed Change Requests
12. Wait for Change Requests
13. On Hold Change Requests
14. Help Desk Statistics & Performance
15. Reboot History
16. Security Incident Log
17. Security Alert Statistics

Financial Monthly Reports

1. Budget vs. Actuals
2. Contract Summary
3. Task Authorizations
4. Change Requests
5. Project Team Hours Billed

APPENDIX 9 OF ANNEX A: LIST OF ACRONYMS AND DEFINITIONS

List of Acronyms

| Term | Definition |
|---------|--|
| AMS | Application Management Services |
| CCDA | Canadian Council of Directors of Apprenticeship |
| COTS | Commercial Off-the-Shelf Software |
| CSEC | Communications Security Establishment Canada |
| DMZ | Demilitarized Zone |
| DRP | Disaster Recovery Plan |
| ERD | Entity Relationship Diagram |
| FGWD | Federal Government Working Days. |
| FLMM | Forum of Labour Market Ministers |
| ESDC | Employment and Social Development Canada |
| ICEMS | Interprovincial Computerized Examination Management System |
| IE | Internet Explorer |
| IP | Intellectual Property |
| ISO-IEC | International Standards Organization–International Electrotechnical Commission |
| ISP | Internet Services Provider |
| ITIL | Information Technology Infrastructure Library |
| MCITP | Microsoft Certified IT Professional |
| MTP | Master Test Plan |
| NOA | National Occupational Analysis |
| P/T | Provincial/Territorial |
| PMBOK | Project Management Body of Knowledge |
| PMI | Project Management Institute |
| PMP® | Project Management Professional Certification |
| PWGSC | Public Works and Government Services Canada |
| SAN | Storage Area Network |
| SC | ICEMS Project Steering Committee |
| SDLC | Software Development Life Cycle |
| SoW | Statement of Work |
| TA | Task Authorization |
| TOS | Table of Specifications |
| UAT | User Acceptance Testing |
| WG | ICEMS Working Group |

List of Definitions

| Term | Definition |
|----------------|---|
| Administrators | Employees of the Contractor assigned to maintain and operate the ICEMS systems and network. The Administrators can include personnel defined in section 7 of this SoW or those personnel designated by the Contractor which require access to the Application to fulfill the obligations of the Contract. |
| Application | The ICEMS 2 application |
| Business Rules | The methods that govern how data is managed to support ICEMS functionalities according to agreements between the jurisdictions. |
| CICA 5970 | A Canadian standard administered by the Canadian Institute of Chartered Accountants. Designation under this program |

APPENDIX 9 OF ANNEX A: LIST OF ACRONYMS AND DEFINITIONS

| Term | Definition |
|--|---|
| | encompasses specific requirements for service providers managing customer data and focuses heavily on the areas of compliance, security and access. In addition, this certification addresses the topics of backup and recovery, computer operations, and IT facility infrastructure. |
| Client | Employment and Social Development Canada |
| Co-located | An adjective referring to systems dedicated to, and owned by, separate business entities that are located in the same data centre |
| Data Mart | A modern IBM Cognos-based reporting and analysis application that accesses a SQL Server database, all running in an MS Windows Server environment |
| Dedicated | Equipment and services used exclusively by and/or for the Client |
| Delivery Office | The office/work site where the Contractor's ICEMS 2 Project Team is located. The Delivery Office may be different for the Project and Application Management Phases. |
| Demilitarized zone | An area that must contain only the systems that need access that is initiated from the Internet |
| Exam Management | One of the two major functions of ICEMS. This functionality supports the generation, maintenance, and the collection of statistics on Red Seal certification exams. |
| Federal Government Working Days (FGWD) | Calendar days, except for Saturday, Sunday and the following holidays: 1) New Year's Day ¹ ; 2) Good Friday and Easter Monday; 3) Victoria Day; 4) Canada Day ¹ ; 5) Labour Day; 6) Thanksgiving Day; 7) Remembrance Day ¹ ; 8) Christmas Day ¹ ; and 9) Boxing Day ² . 1: If this holiday occurs on a Saturday or Sunday, then the following Monday will be a holiday. 2: If this holiday occurs on a Saturday, then the following Monday will be a holiday. If this holiday occurs on a Sunday or Monday, then the following Tuesday will be a holiday. |
| FIPS-2 | U.S. federal government data encryption standard |
| Full Client Acceptance | A final sign-off indicating that the application has been tested and repaired so that the Client is satisfied that it works as specified. This will only occur after the Application has successfully completed its Production Pilot |
| ICEMS 2 System | The technologies required to run the Application |
| ICEMS 2.0 | The first version of the new Application |
| ICEMS Users | The Users of ICEMS are provincial, territorial and federal government employees/contractors. |
| Industry Best Practices | A practice will be considered an Industry Best Practice if at least one of these conditions apply: i. The practice conforms to a standard approved by a recognized standards body; |

APPENDIX 9 OF ANNEX A: LIST OF ACRONYMS AND DEFINITIONS

| Term | Definition |
|------------------------------|---|
| | <ul style="list-style-type: none"> ii. The practice is followed by at least five organizations not affiliated with the Bidder/Contractor; iii. The practice has been benchmarked against other practices, and the benchmark confirmed that the practice was cost beneficial; and/or iv. The practice is endorsed by a relevant recognized authority. |
| Interprovincial | Describes an initiative or project that takes place between or among any of Canada's provinces and territories |
| Item Banks | A collection or inventory of validated examination questions. |
| Item Management: | One of two major functions of ICEMS. This functionality supports the development, maintenance, and collection of statistics on questions that are used in Red Seal certification exams. |
| ITEMAN | Third-party Exam Item Analysis COTS software |
| ITSG-31 | CSEC's Information Technology Security Guideline–User Authentication Guidance for IT Systems |
| Jurisdiction | The territory over which authority is exercised, whether provincial, territorial or federal. A provincial or territorial government, or the Government of Canada |
| Managing Business Unit | <p>The Contractor's business unit that is directly responsible for the overall management of the ICEMS 2 contract. The Contractor's managers, to whom the Contractor's IT Project Manager and Services Manager directly report, work in this business unit.</p> <p>The Managing Business Unit may be different for the Project and Application Management Phases.</p> |
| Partial Client Acceptance | An interim sign-off the application during the testing process. It may be an approval to continue to the next testing step towards Full Client Acceptance. |
| Private zone | A zone that must contain the systems to which initiated access from the Internet is not permitted. If required, private zone systems may initiate access to the Internet. |
| Production | The operational version of ICEMS that ICEMS Users use to process live data |
| Production Pilot | The operational version of ICEMS 2 that some ICEMS Users use to process some live data as part of the User Acceptance Testing (UAT) |
| Project Phase | ICEMS 2.0 development and implementation |
| Recent | Unless specifically stated otherwise, wherever Recent is referred to in the resource requirements, the last year of the required length of experience must have occurred within the last two years. |
| Red Seal client | An apprentice or trade qualifier who applies to obtain a Red Seal endorsement to his or her jurisdiction-specific trade certification. |
| Services Manager | The Contractor's employee responsible for the operation of ICEMS. He or she is responsible to the ICEMS 2 Technical Authority |
| Trade qualifier | A person who has not completed a formal apprenticeship program but is deemed eligible to attempt the certification exam for his or her trade solely because of experience in the trade. |
| User Supported Access Period | Technical help desk services provided by the Contractor every FGWD from 7:00 a.m. to 8 p.m. Eastern Standard Time (EST). This provides, at minimum, coverage from 8:30 a.m. to 5 p.m. in every jurisdiction. |

SECURITY REQUIREMENTS CHECK LIST (SRCL)
LISTE DE VÉRIFICATION DES EXIGENCES RELATIVES À LA SÉCURITÉ

| PART A - CONTRACT INFORMATION / PARTIE A - INFORMATION CONTRACTUELLE | | |
|---|--|--|
| 1. Originating Government Department or Organization / Ministère ou organisme gouvernemental d'origine HRSDC | | 2. Branch or Directorate / Direction générale ou Direction Trades & Apprenticeship- SEB |
| 3. a) Subcontract Number / Numéro du contrat de sous-traitance | | 3. b) Name and Address of Subcontractor / Nom et adresse du sous-traitant TBD |
| 4. Brief Description of Work / Brève description du travail Modernizing, hosting, operations, maintenance and enhancements of ICMS 2 | | |
| 5. a) Will the supplier require access to Controlled Goods? Le fournisseur aura-t-il accès à des marchandises contrôlées? | | <input checked="" type="checkbox"/> No / Non <input type="checkbox"/> Yes / Oui |
| 5. b) Will the supplier require access to unclassified military technical data subject to the provisions of the Technical Data Control Regulations? Le fournisseur aura-t-il accès à des données techniques militaires non classifiées qui sont assujetties aux dispositions du Règlement sur le contrôle des données techniques? | | <input checked="" type="checkbox"/> No / Non <input type="checkbox"/> Yes / Oui |
| 6. Indicate the type of access required / Indiquer le type d'accès requis | | |
| 6. a) Will the supplier and its employees require access to PROTECTED and/or CLASSIFIED information or assets? Le fournisseur ainsi que les employés auront-ils accès à des renseignements ou à des biens PROTÉGÉS et/ou CLASSIFIÉS? (Specify the level of access using the chart in Question 7. c) (Préciser le niveau d'accès en utilisant le tableau qui se trouve à la question 7. c) | | <input type="checkbox"/> No / Non <input checked="" type="checkbox"/> Yes / Oui |
| 6. b) Will the supplier and its employees (e.g. cleaners, maintenance personnel) require access to restricted access areas? No access to PROTECTED and/or CLASSIFIED information or assets is permitted. Le fournisseur et ses employés (p. ex. nettoyeurs, personnel d'entretien) auront-ils accès à des zones d'accès restreintes? L'accès à des renseignements ou à des biens PROTÉGÉS et/ou CLASSIFIÉS n'est pas autorisé. | | <input checked="" type="checkbox"/> No / Non <input type="checkbox"/> Yes / Oui |
| 6. c) Is this a commercial courier or delivery requirement with no overnight storage? S'agit-il d'un contrat de messagerie ou de livraison commerciale entreposage sans de nuit? | | <input checked="" type="checkbox"/> No / Non <input type="checkbox"/> Yes / Oui |
| 7. a) Indicate the type of information that the supplier will be required to access / Indiquer le type d'information auquel le fournisseur devra avoir accès | | |
| Canada <input checked="" type="checkbox"/> | NATO / OTAN <input type="checkbox"/> | Foreign / Étranger <input type="checkbox"/> |
| 7. b) Release restrictions / Restrictions relatives à la diffusion | | |
| No release restrictions Aucune restriction relative à la diffusion <input checked="" type="checkbox"/> | All NATO countries Tous les pays de l'OTAN <input type="checkbox"/> | No release restrictions Aucune restriction relative à la diffusion <input type="checkbox"/> |
| Not releasable À ne pas diffuser <input type="checkbox"/> | | |
| Restricted to: / Limité à: <input type="checkbox"/> | Restricted to: / Limité à: <input type="checkbox"/> | Restricted to: / Limité à: <input type="checkbox"/> |
| Specify country(ies): / Préciser le(s) pays: | Specify country(ies): / Préciser le(s) pays: | Specify country(ies): / Préciser le(s) pays: |
| 7. c) Level of information / Niveau d'information | | |
| PROTECTED A PROTÉGÉ A <input type="checkbox"/> | NATO UNCLASSIFIED NATO NON CLASSIFIÉ <input type="checkbox"/> | PROTECTED A PROTÉGÉ A <input type="checkbox"/> |
| PROTECTED B PROTÉGÉ B <input checked="" type="checkbox"/> | NATO RESTRICTED NATO DIFFUSION RESTREINTE <input type="checkbox"/> | PROTECTED B PROTÉGÉ B <input type="checkbox"/> |
| PROTECTED C PROTÉGÉ C <input type="checkbox"/> | NATO CONFIDENTIAL NATO CONFIDENTIEL <input type="checkbox"/> | PROTECTED C PROTÉGÉ C <input type="checkbox"/> |
| CONFIDENTIAL NATO CONFIDENTIEL <input type="checkbox"/> | SECRET NATO SECRET <input type="checkbox"/> | CONFIDENTIAL CONFIDENTIEL <input type="checkbox"/> |
| SECRET COSMIC SECRET <input type="checkbox"/> | TOP SECRET COSMIC TRÈS SECRET <input type="checkbox"/> | SECRET SECRET <input type="checkbox"/> |
| TOP SECRET TRÈS SECRET <input type="checkbox"/> | | TOP SECRET TRÈS SECRET <input type="checkbox"/> |
| TOP SECRET (SIGINT) TRÈS SECRET (SIGINT) <input type="checkbox"/> | | TOP SECRET (SIGINT) TRÈS SECRET (SIGINT) <input type="checkbox"/> |



Government of Canada
Gouvernement du Canada

Contract Number / Numéro du contrat

7421-04 0186

Security Classification / Classification de sécurité

PART A (continued) / PARTIE A (suite)

8. Will the supplier require access to PROTECTED and/or CLASSIFIED COMSEC information or assets?

Le fournisseur aura-t-il accès à des renseignements ou à des biens COMSEC désignés PROTÉGÉS et/ou CLASSIFIÉS?

☒ No ☐ Yes
Non Oui

If Yes, indicate the level of sensitivity:

Dans l'affirmative, indiquer le niveau de sensibilité :

9. Will the supplier require access to extremely sensitive INFOSEC information or assets?

Le fournisseur aura-t-il accès à des renseignements ou à des biens INFOSEC de nature extrêmement délicate?

☒ No ☐ Yes
Non Oui

Short Title(s) of material / Titre(s) abrégé(s) du matériel :

Document Number / Numéro du document :

PART B - PERSONNEL (SUPPLIER) / PARTIE B - PERSONNEL (FOURNISSEUR)

10. a) Personnel security screening level required / Niveau de contrôle de la sécurité du personnel requis

☒ RELIABILITY STATUS
COTE DE FIABILITÉ

☐ CONFIDENTIAL
CONFIDENTIEL

☐ SECRET
SECRET

☐ TOP SECRET
TRÈS SECRET

☐ TOP SECRET - SIGINT
TRÈS SECRET - SIGINT

☐ NATO CONFIDENTIAL
NATO CONFIDENTIEL

☐ NATO SECRET
NATO SECRET

☐ COSMIC TOP SECRET
COSMIC TRÈS SECRET

☐ SITE ACCESS
ACCÈS AUX EMPLACEMENTS

Special comments:

Commentaires spéciaux : enhanced security clearance

NOTE: If multiple levels of screening are identified, a Security Classification Guide must be provided.

REMARQUE : Si plusieurs niveaux de contrôle de sécurité sont requis, un guide de classification de la sécurité doit être fourni.

10. b) May unscreened personnel be used for portions of the work?

Du personnel sans autorisation sécuritaire peut-il se voir confier des parties du travail?

☒ No ☐ Yes
Non Oui

If Yes, will unscreened personnel be escorted?

Dans l'affirmative, le personnel en question sera-t-il escorté?

☐ No ☐ Yes
Non Oui

PART C - SAFEGUARDS (SUPPLIER) / PARTIE C - MESURES DE PROTECTION (FOURNISSEUR)

INFORMATION / ASSETS / RENSEIGNEMENTS / BIENS

11. a) Will the supplier be required to receive and store PROTECTED and/or CLASSIFIED information or assets on its site or premises?

Le fournisseur sera-t-il tenu de recevoir et d'entreposer sur place des renseignements ou des biens PROTÉGÉS et/ou CLASSIFIÉS?

☐ No ☒ Yes
Non Oui

11. b) Will the supplier be required to safeguard COMSEC information or assets?

Le fournisseur sera-t-il tenu de protéger des renseignements ou des biens COMSEC?

☒ No ☐ Yes
Non Oui

PRODUCTION

11. c) Will the production (manufacture, and/or repair and/or modification) of PROTECTED and/or CLASSIFIED material or equipment occur at the supplier's site or premises?

Les installations du fournisseur serviront-elles à la production (fabrication et/ou réparation et/ou modification) de matériel PROTÉGÉ et/ou CLASSIFIÉ?

☒ No ☐ Yes
Non Oui

INFORMATION TECHNOLOGY (IT) MEDIA / SUPPORT RELATIF À LA TECHNOLOGIE DE L'INFORMATION (TI)

11. d) Will the supplier be required to use its IT systems to electronically process, produce or store PROTECTED and/or CLASSIFIED information or data?

Le fournisseur sera-t-il tenu d'utiliser ses propres systèmes informatiques pour traiter, produire ou stocker électroniquement des renseignements ou des données PROTÉGÉS et/ou CLASSIFIÉS?

☐ No ☒ Yes
Non Oui

11. e) Will there be an electronic link between the supplier's IT systems and the government department or agency?

Disposera-t-on d'un lien électronique entre le système informatique du fournisseur et celui du ministère ou de l'agence gouvernementale?

☒ No ☐ Yes
Non Oui

GC-TBS350103(2005-03-001)B

Security Classification / Classification de sécurité

Canada



Government of Canada
Gouvernement du Canada

Contract Number / Numéro du contrat

7421-000186

Security Classification / Classification de sécurité

PART C - (continued) / PARTIE C - (suite)

For users completing the form manually use the summary chart below to indicate the category(ies) and level(s) of safeguarding required at the supplier's site(s) or premises.
Les utilisateurs qui remplissent le formulaire manuellement doivent utiliser le tableau récapitulatif ci-dessous pour indiquer, pour chaque catégorie, les niveaux de sauvegarde requis aux installations du fournisseur.

For users completing the form online (via the Internet), the summary chart is automatically populated by your responses to previous questions. Dans le cas des utilisateurs qui remplissent le formulaire en ligne (par Internet), les réponses aux questions précédentes sont automatiquement saisies dans le tableau récapitulatif.

SUMMARY CHART / TABLEAU RÉCAPITULATIF

| Category Catégorie | PROTECTED PROTÉGÉ | | | CLASSIFIED CLASSIFIÉ | | | NATO | | | | COMSEC | | | | | |
|--|----------------------|---|---|------------------------------|--------|---------------------------------|---|--|----------------|---|----------------------|---|---|------------------------------|--------|---------------------------------|
| | A | B | C | CONFIDENTIAL CONFIDENTIEL | SECRET | TOP SECRET TRÈS SECRET | NATO RESTRICTED NATO DIFFUSION RESTREINTE | NATO CONFIDENTIAL NATO CONFIDENTIEL | NATO SECRET | COSMIC TOP SECRET COSMIC TRÈS SECRET | PROTECTED PROTÉGÉ | | | CONFIDENTIAL CONFIDENTIEL | SECRET | TOP SECRET TRÈS SECRET |
| | | | | | | | | | | | A | B | C | | | |
| Information / Assets Renseignements / Biens | | ✓ | | | | | | | | | | | | | | |
| Production | | | | | | | | | | | | | | | | |
| IT Media / Support TI | | ✓ | | | | | | | | | | | | | | |
| IT Link / Lien électronique | | | | | | | | | | | | | | | | |

12. a) Is the description of the work contained within this SRCL PROTECTED and/or CLASSIFIED?
La description du travail visé par la présente LVERS est-elle de nature PROTÉGÉE et/ou CLASSIFIÉE?

☒ No
Non ☐ Yes
Oui

If Yes, classify this form by annotating the top and bottom in the area entitled "Security Classification".
Dans l'affirmative, classifiez le présent formulaire en indiquant le niveau de sécurité dans la case intitulée
« Classification de sécurité » au haut et au bas du formulaire.

12. b) Will the documentation attached to this SRCL be PROTECTED and/or CLASSIFIED?
La documentation associée à la présente LVERS sera-t-elle PROTÉGÉE et/ou CLASSIFIÉE?

☒ No
Non ☐ Yes
Oui

If Yes, classify this form by annotating the top and bottom in the area entitled "Security Classification" and indicate with attachments (e.g. SECRET with Attachments).

Dans l'affirmative, classifiez le présent formulaire en indiquant le niveau de sécurité dans la case intitulée
« Classification de sécurité » au haut et au bas du formulaire et indiquer qu'il y a des pièces jointes (p. ex. SECRET avec des pièces jointes).

CONTRACTOR'S CORPORATE IT SECURITY REQUIREMENTS FOR ICEMS 2

This document outlines security requirements for the Contractor's corporate IT utilized for processing information for this Contract. The security requirements for the ICEMS 2 application and system are NOT part of this document.

1. Contractor's Servers

- 1.1 No ICEMS 2 data, programs, or system documentation may ever reside, even temporarily, on any of the Contractor's servers.
- 1.2 Information pertaining to the management of the ICEMS 2 contract, including billing information may reside on the Contractor's servers

2. Contractor's Network

- 2.1 No ICEMS 2 data, programs or system documentation may ever transit, even temporarily, any component of the Contractor's corporate network.
- 2.2 Information pertaining to the management of the ICEMS 2 Contract, including billing information may transit the Contractor's corporate network.

3 Contractor's Workstations

- 3.1 Only the workstations of the Contractor's staff that are assigned to the ICEMS 2 Contract and who have obtained the required Government of Canada "Reliability" security clearance may be used to access the ICEMS 2 application.
- 3.2 Those workstations may only be used by the Contractor's ICEMS 2 project staff.
- 3.3 The Contractor must adhere to all of the relevant ICEMS 2 standards and in particular the following workstation security requirements:
 - 3.3.1 The Contractor workstations that access ICEMS 2 must be running Windows XP or Windows 7 or newer with supported browsers (Microsoft IE 7 or a later release). For the purpose of the rest of this document these workstations are called "ICEMS 2 workstations".
 - 3.3.2 All of the Contractor's workstations accessing ICEMS 2 must be configured according to the ICEMS 2 application workstation configuration guidelines.
 - 3.3.3 All data communications between the ICEMS 2 workstations and the ICEMS 2 servers that are not emulating user interaction with ICEMS 2 must use a dedicated connection, used solely for ICEMS 2 traffic.
- 3.4 All data communications between the ICEMS 2 workstations and the ICEMS 2 servers that are emulating user interaction with ICEMS 2 and is not using the dedicated connection must be 256 bit encrypted.

CONTRACTOR'S CORPORATE IT SECURITY REQUIREMENTS FOR ICEMS 2

- 3.5 All of the ICEMS 2 workstations must operate behind a firewall. If the workstation is being connected to the Internet via a dedicated ISP (Internet Services Provider) connection then a "personal" firewall must be placed between the ICEMS 2 workstation and the ISP connection.
- 3.6 Normally, sensitive ICEMS 2 data must only temporarily reside on an ICEMS 2 workstation (for example while accessing the ICEMS database or printing an exam). In the event that sensitive data is retained on the ICEMS 2 workstation the disk drives of that ICEMS 2 workstation must be FIPS-2 encrypted.
- 3.7 In the event that an ICEMS 2 workstation is no longer used by the Contractor's authorized ICEMS 2 staff, then if that workstation contains retained sensitive ICEMS 2 information that information must be securely and permanently removed from that workstation.
- 3.8 Upon termination of the ICEMS 2 contract, if any ICEMS 2 workstation contains retained sensitive ICEMS 2 information that information must be securely and permanently removed from that workstation.
- 3.9 Virus protections must be installed on the ICEMS 2 workstations.
- 3.10 All critical Windows updates and the latest antivirus images must be applied to all ICEMS 2 workstations daily (as soon as they become available).

4 Contractor's IT Physical Security

- 4.1 As no critical ICEMS 2 data may reside on the Contractor's IT servers, physical security policies for those servers are the responsibility of the Contractor.
- 4.2 The Contractor's ICEMS 2 workstations must either be used in a physically secure workstation environment accessible to only authorized personnel or be under the immediate custody of the workstation owner.
- 4.3 When not in use, ICEMS 2 workstations must be physically and logically secured.
- 4.4 The Contractor is required to secure all information related to ICEMS 2 while it is outside of the system. This requirement applies to information whether it is in electronic (i.e. saved on a laptop or workstation hard drive) or physical form (i.e. printed documents).
- 4.5 The Contractor must only print ICEMS 2 related documents on physically secured printers, or under the direct physical supervision of the authorized individual who issued the print job.
- 4.6 The Contractor must retain ICEMS 2 related documents for as long as they are needed, and then only within the secure workstation environment.
- 4.7 ICEMS 2 related documents must be destroyed when they are no longer needed. The method of destruction must render the documents unreadable and incapable of reconstruction. Shredding or burning under secured ICEMS 2 Contractor staff supervision is required.
- 4.8 Access to the ICEMS 2 workstation in the physically secure facility must be denied to any unauthorized individual.

CONTRACTOR'S CORPORATE IT SECURITY REQUIREMENTS FOR ICEMS 2

- 4.9 The ICEMS 2 workstation in the physically secure facility must have documented security incident policies and procedures.

5 Contractor's IT ICEMS Related Security Reporting

- 5.1 The Contractor must take all reasonable actions to detect and report to the ICEMS 2 Technical Authority (TA) attempted or successful security incidents that pertain to ICEMS 2:
 - 5.1.1 Social engineering attacks (individuals misrepresenting themselves to gain access to or information about ICEMS 2);
 - 5.1.2 ICEMS 2 workstation thefts or compromises, including but not limited to user workstations being left logged into ICEMS 2 and unattended);
 - 5.1.3 Password thefts or losses; and,
 - 5.1.4 Further, the Contractor must report any other incident that they believe could impact ICEMS 2 assets.
- 5.2 All security incidents must be reported to the ICEMS 2 TA. The required response process must be as follows:
 - 5.2.1 Investigate the event – assess impact, understand the vulnerability that was exploited, gather forensic evidence, identify the attacker;
 - 5.2.2 Recover system integrity and operation; and,
 - 5.2.3 Reduce the likelihood of the attacker attacking again – deny the attacker all access to the system, alter the security practices, report the attack or theft to authorities (police, network security centers such as CERT, etc.), take civil legal action and any additional actions requested by the Client and/or the ICEMS 2 TA.

Attachment 3.1

ICEMS 2 Procurement Client Reference Questions

In the event that a reference does not respond or is unable or unwilling to provide information about the services being questioned below the answer will be considered a No and marked accordingly.

| Reference Location | Reference Question |
|--------------------|---|
| M7 | <p>Has the Bidder completed¹ a custom developed application² project(s) within 5 years of the Bid closing date ____ [to be inserted at reference check] for your company?</p> <p>The project must have included the following:</p> <ul style="list-style-type: none"> a) A programming development effort of at least 1,000 person days; b) Used the Project Management methodology, as attached; c) Used the bid SDLC methodology, as attached d) Used comparable technologies, as attached, and used Microsoft's Windows Server operating system & SQL Server database software products e) The development of a custom developed database; f) Have at least 50 daily users; and g) The custom developed application project was managed by the following location: ____ [location of Bidders proposed Managing Business Unit for the Project Phase (development, testing and implementation) of ICEMS 2 to be inserted at reference check]. <p>____ (Yes) The Bidder did complete project(s) for me as described above in the past 5 years.</p> <p>____ (No) The Bidder has not completed a project for me as described above in the past 5 years.</p> <p>____ I am unable or unwilling to provide any information about the services listed above.</p> |
| R1 | <p>If the Bidder completed a custom developed application project(s)² (up to 2) within 5 years of the Bid closing date for your company.</p> <p>Please indicate which of the following were true in the project(s):</p> <ul style="list-style-type: none"> ____ Bilingual (Canadian English and Canadian French); ____ Web-based; ____ Has a Custom Developed database; ____ Has at least 30 screens; ____ Has at least 50 daily users; ____ Had a programming development effort of at least 1,000 person days; ____ Used the Project Management methodology, as attached; ____ Used the bid SDLC methodology, as attached; ____ Was completed prior to ____ [bid closing date to be inserted at reference check]; and ____ The custom developed application project(s) were completed through Task Authorizations (please indicate the number of projects that were completed through Task Authorizations ____). <p>____ (Yes) The custom developed application project was managed by the following location: ____ [location of Bidders proposed Managing Business Unit for the Project Phase (development, testing and implementation) of ICEMS 2 to be inserted at reference check]</p> <p>____ (No) None of the custom developed application project(s) were managed by the</p> |

Attachment 3.1

ICEMS 2 Procurement Client Reference Questions

| | |
|----|--|
| | <p>Managing Business Unit as indicated above.</p> <p>_____ I am unable or unwilling to provide any information about the services listed above.</p> |
| M8 | <p>Is the Bidder currently managing, or have they completed within the last 5 years of the Bid closing date _____ [bid closing date to be inserted at reference check], a similar³ application management project(s)¹?</p> <p>_____ (Yes) The Bidder is currently or has completed a similar application management project for me, as described above, in the past 5 years.</p> <p>_____ (No) The Bidder has not completed a similar application management project for me, as described above, in the past 5 years.</p> <p>_____ I am unable or unwilling to provide any information about the services listed above.</p> |
| R2 | <p>Did the Bidder undertake 1 application management⁴ project that had a duration of more than 3 years?</p> <p>_____ (Yes) The Bidder undertook 1 application management project as described above. Please indicate total number of years _____</p> <p>_____ (No) The Bidder has not undertaken 1 application management project as described above.</p> <p>_____ I am unable or unwilling to provide any information about the services</p> <p>Office location of the application management project:</p> <p>_____ The application management project was managed by the following location: _____ [location of Bidders proposed Managing Business Unit for the application management phase of ICEMS 2 to be inserted at reference check].</p> <p>_____ (No) The application management project(s) were not managed by the Managing Business Unit as indicated above.</p> <p>_____ I am unable or unwilling to provide any information about the services listed above.</p> |
| R3 | <p>As part of the RFP process, Bidders were encouraged to demonstrate innovative tools and/or approaches that were material improvements⁵ on projects they have completed within the past ten (10) years. The innovative material improvements⁵ could be in design, development, operations and/or enhancements.</p> <p>Design (description submitted by Bidder attached):</p> <p>_____ (Yes) The innovative tool/approach, as attached, was a material improvement as described above. Please indicate the number of projects this innovative tool/approach applies to _____.</p> <p>_____ (No) The innovative tool/approach, as attached, was not a material improvement as described above.</p> <p>Development: (description submitted by Bidder attached):</p> <p>_____ (Yes) The innovative tool/approach, as attached, was a material improvement as described above. Please indicate the number of projects this innovative tool/approach applies to _____.</p> <p>_____ (No) The innovative tool/approach, as attached, was not a material improvement as described above.</p> <p>Operations: (description submitted by Bidder attached):</p> |

Attachment 3.1

ICEMS 2 Procurement Client Reference Questions

| | |
|--|---|
| | <p>____ (Yes) The innovative tool/approach, as attached, was a material improvement as described above. Please indicate the number of projects this innovative tool/approach applies to ____.</p> <p>____ (No) The innovative tool/approach, as attached, was not a material improvement as described above.</p> <p>Enhancements: (description submitted by Bidder attached):</p> <p>____ (Yes) The innovative tool/approach, as attached, was a material improvement as described above. Please indicate the number of projects this innovative tool/approach applies to ____.</p> <p>____ (No) The innovative tool/approach, as attached, was not a material improvement as described above.</p> |
| <p>Notes:</p> <div style="margin-left: 40px;"> <p>1 Projects where the Bidder supplied resources to projects which were the responsibility of other organizations qualify only if the Bidder maintained responsibility for those resources and their outcomes to the end client/organization. If the Bidder provided resources to a third party, the project does not qualify, nor do projects managed by the Bidder where the Bidder is requested by its client to use non-Bidder resources. Projects where the Bidder sub-contracted some of the work but retained responsibility for all of the work are acceptable</p> <p>2 A Custom Developed application is an application that consists primarily of software developed specifically for that application, which interfaces with a database that was also specifically designed for that application. Extensive modifications developed for a COTS product are NOT considered to be a Custom Developed application; however a Custom Developed application can include COTS products.</p> <p>3 An application management project will be considered "similar" if ALL of the following apply:</p> <div style="margin-left: 40px;"> <p>i. The project had a duration of at least 3 years;</p> <p>ii. The project cost the client more than \$500K/annum for at least two consecutive years;</p> <p>iii. The application was a custom developed database application;</p> <p>iv. The Bidder utilized the Information Technology Infrastructure Library (ITIL) Service Management discipline;</p> <p>v. The Bidder's responsibilities included hardware and software management; and,</p> <p>vi. The application management project was managed by the following location: ____ [location of Bidders proposed Managing Business Unit for the application management phase of ICEMS 2 to be inserted at reference check].</p> </div> <p>4 The scope of the project should have included maintenance, hosting and operations of a Custom Developed database application</p> <p>5 A material improvement is described as one in which there is quantifiable improvement in either, or all, of the following:</p> <div style="margin-left: 40px;"> <p>i. Project schedule was decreased;</p> <p>ii. Overall cost decreased; AND/OR</p> <p>iii. Improved functionality.</p> </div> </div> | |

FORM 2

BIDDER RESPONSE FORM

1. EVALUATION TABLES

1.1 The evaluation tables included in this attachment list the Mandatory and the point Rated Evaluation requirements of this solicitation.

1.2 The tables included in this Form are as follows:

Table A – Mandatory Requirements

Table B – Rated Requirements

2. MANDATORY REQUIREMENTS

2.1 Bidders are cautioned that Table A – Mandatory Requirements - does not include all the Mandatory requirements of this solicitation. This solicitation contains other Mandatory requirements including the submission, format and content of proposals, the Mandatory submission of certifications, Mandatory requirements for the submission of the cost proposal and Mandatory acceptance of all the clauses in Part 7, Resulting Contract Clauses. It is the Bidder's sole responsibility to read the entire solicitation to ensure that it complies with all Mandatory requirements of this solicitation. All elements of the bid solicitation that are identified specifically with the words "must" or "mandatory" are Mandatory requirements.

2.2 Bidders must complete and submit Table A - Mandatory Requirements with their Technical/Management proposal.

2.3 In the column titled "Bidder Compliance" the Bidder must provide a clear statement of the Bidder's compliance with each Mandatory requirement. This statement must consist of one of the following two responses:

COMPLY where the proposal complies with an article in all respects.

DO NOT COMPLY where the proposal does not comply with the article in all respects.

Use of terms such as "comply with the following changes", "understood", "as per Supplier Agreement", or the like will be considered DO NOT COMPLY and will be considered non-responsive. Some articles in this solicitation may contain more than one Mandatory requirement. Bidders must only use the term 'COMPLY' when they comply with all requirements contained in the article. Partial compliance, for Mandatory requirements will be deemed to be 'DO NOT COMPLY'.

2.4 Substantiation of Compliance to Mandatory Requirements: Bidders must provide substantiation of compliance for each Mandatory requirement in this Bidder Response Form. Bidders must provide a narrative in the column titled "Bidder Substantiation" providing sufficient product description, service description, and/or other information as necessary to substantiate, to the satisfaction of the Government evaluators, that the offer meets the Mandatory requirement. The substantiation may refer to

additional documentation submitted with the bid – this information should be referenced in the “Reference” column of the Bidder Response Form, where bidders are requested to indicate where in the bid the reference material can be found, including the title of the document, and the page and paragraph numbers. Where the reference is not sufficiently precise, Canada may request that the Bidder direct Canada to the appropriate location in the documentation. Bidders are cautioned that a simple restatement that the Bidder complies with the requirement will not be considered substantiation.

3. RATED REQUIREMENTS

3.1 Table B - Rated Requirements lists the point Rated requirements of this solicitation.

3.2 Bidders must complete and submit Table B - Rated Requirements with their Technical/Management proposal.

3.3 Substantiation for Rated Requirements: Bidders should provide substantiation for each Rated requirement in Bidder Response Form. Bidders should provide a narrative in the column titled “Bidder Substantiation” providing sufficient information to substantiate that the offer meets or to what degree it meets the Rated requirement. The substantiation may refer to additional documentation submitted with the bid - this information should be referenced in the “Reference” column of the Bidder Response Form, where bidders are requested to indicate where in the bid the reference material can be found, including the title of the document, and the page and paragraph numbers. Where the reference is not sufficiently precise, Canada may request that the Bidder direct Canada to the appropriate location in the documentation. Bidders are cautioned that a simple restatement of the Rated requirement will not be considered substantiation.

3.4 Scoring of Individual Rated Requirements:

The criteria to determine the number of points awarded for each rated requirement are set out in Table B. A maximum possible score of 100 has been set for the Rated Requirements. Bidders must achieve a minimum of 25 points for their Technical/Management Proposals, or their bid will be considered non-responsive and will be given no further consideration in the evaluation process.

4. EVALUATION RESPONSE DEFINITIONS AND ACRONYMS

4.1. IT: Information Technology

4.2. “Recent experience”

Unless otherwise stated in the Bidders Notes, wherever Recent is referred to in the resource requirements, the last year of the required length of experience must have occurred within the last 2 years.

4.3. “Industry Best Practice”

For this requirement a practice will be considered an Industry Best Practice if at least one of these conditions applies:

- i. The practice conforms to a standard approved by a recognized standards body;
- ii. The practice is followed by at least five organizations not affiliated with the Bidder;
- iii. The practice has been benchmarked against other practices, and the benchmark confirmed that the practice was cost beneficial; or,
- iv. The practice is endorsed by a relevant recognized authority.

- 4.4. The Managing Business Unit is the Bidder's business unit that is directly responsible for the overall management of the proposed solution. The Bidder's managers, to whom the Bidder's IT Project Manager and Services Manager directly report, work in this business unit. The proposed ICEMS 2 Managing Business Unit may differ between the Project and application management phases of the Contract
- 4.5. The Delivery Office is the office/work site where the Bidder's proposed ICEMS 2 Project Team is located.
- 4.6. A Formal methodology is a methodology that is comprehensively and formally documented.
- 4.7. A Custom Developed application is an application that consists primarily of software developed specifically for that application, which interfaces with a database that was also specifically designed for that application. Extensive modifications developed for a COTS product are NOT considered to be a Custom Developed application; however a Custom Developed application can include COTS products.
- 4.8. A Completed project is one that was approved as completed by the Bidder's client or an employer, and the resultant application operated in Production with live data and was used by real users.
- 4.9. Innovative tools/approaches could include, but are not limited to, design techniques, technological tools other than the ones proposed in the SoW, or a combination of aforementioned or COTS products which satisfy specific functionalities in the table of specifications.
- 4.10. The Project Phase includes ICEMS 2.0 development and implementation.

+++++

Table A - Mandatory Requirements

| Item No. | SoW Ref | Requirement | Notes to Bidder | Bidder Compliance Comply/Do Not Comply | Bidder Substantiating Information | Reference |
|------------------|---------|--|--|--|--------------------------------------|-----------|
| CORPORATE | | | | | | |
| M1 | | <p>1. Bidder must specify and substantiate that it is capable of delivering ICEMS 2. The Bidder must describe how it will make use of its resources and knowledge to complete the tasks as described in the SOW to ensure that the overall ICEMS 2 solution will:</p> <p>1.1. Work;</p> <p>1.2. Be complete; and,</p> <p>1.3. Meet the requirements of the User.</p> <p>2. Bidder must provide a statement confirming that, if it is awarded the C contract, it will make the resources and knowledge available during the full contract period.</p> | <p>1. Bidder's response should to take no more than 1 page.</p> <p>2. The response must substantiate the corporate capability, including those resources that are in addition to the Project Team, which will ensure corporate commitment to the success of the overall ICEMS 2 solution. Corporate resources include, but are not limited to, senior management, accounting, account management and human resources.</p> <p>3. Bidder must provide a statement of compliance that the corporate resources and knowledge will be made available during the full contract period if they are the successful bidder.</p> | | | |
| M2 | 6.2.2 | <p>1. The Bidder's proposed solution must use a Formal PMBOK 4 (or newer) compliant project management methodology on the ICEMS 2 project.</p> <p>2. Bidder must summarize its proposed project management methodology demonstrating that it has used this methodology on application development and implementation projects. Bidder must describe how it will meet the project management requirements stated in the SoW and how it will use it to manage the Project Phase of ICEMS 2.0.</p> | <p>1. Bidder must provide a statement of compliance that its proposed methodology is Formal and PMBOK 4 (or newer) compliant.</p> <p>2. Bidder's response should take no more than 4 pages.</p> | | | |

| Item No. | SoW Ref | Requirement | Notes to Bidder | Bidder Compliance Comply/Do Not Comply | Bidder Substantiating Information | Reference |
|----------|---------------|---|---|--|-----------------------------------|-----------|
| M3 | 6.2.9 | <p>1. Bidder must demonstrate that it has a Formal process that will be used for the duration of the contract, and that sets out how the Contractor will:</p> <ul style="list-style-type: none"> a) Identify tools and management processes to enable the Technical Authority to select and approve Bidder's resources; b) Use a documented process to identify, select and deploy the appropriate resource in a timely manner; c) Manage quality assurance practices; d) Manage contingency plans/practices to ensure resource availability and resource replacement; e) Manage the Contract tracking, time sheet collection and invoicing process; and f) Manage the process of issue escalation and dispute resolution to the Bidder's executive level, if required. | <p>1. Bidder's response should take no more than 4 pages.</p> <p>2. All of the necessary resources do not have to be members of the Bidder's ICEMS 2 Project Team, nor even currently working for the Bidder.</p> | | | |
| M4 | 6.2 to 6.121. | <p>1. The Bidder must propose a Formal Software Development Life Cycle (SDLC) Methodology for the ICEMS 2 project.</p> <p>2. Bidder must summarize its proposed SDLC methodology, demonstrating that it has used this methodology on application development projects and describe how it will meet the software development requirements stated in the SoW 6.2 to 6.12.</p> | <p>1. Bidder's response should take no more than 4 pages.</p> <p>2. Both traditional and agile methodologies are acceptable.</p> <p>3. Bidder must provide a statement of compliance that this proposed methodology is a Formal SDLC methodology.</p> | | | |
| M5 | 6.2.3 | <p>1. The Bidder's bid must demonstrate that the Bidder will follow software engineering Industry Best Practices on the ICEMS 2 project.</p> <p>2. Bidder must summarize the software engineering practices that it will follow during</p> | <p>1. Bidder's response should take no more than 4 pages.</p> | | | |

| Item No. | SoW Ref | Requirement | Notes to Bidder | Bidder Compliance Comply/Do Not Comply | Bidder Substantiating Information | Reference |
|----------|---------|--|---|--|--------------------------------------|-----------|
| M6 | 6.9 | <p>the Contract period demonstrating that the practices are Industry Best Practices.</p> <p>1. Bidder's proposed solution must follow application management Industry Best practices.</p> <p>2. Bidder must summarize its application management practices, describing how they will be used to meet the application management requirements stated in the SoW of the ICEMS 2 Project.</p> <p>2.1 The summary must demonstrate that the application management practices are Industry Best Practices.</p> <p>2.2 The summary must demonstrate that the Bidder follows Information Technology Infrastructure Library (ITIL) practices.</p> | <p>1. Bidder should take no more than 4 pages.</p> | | | |
| M7 | | <p>1. The Bidder must demonstrate that it has Completed a similar Custom Developed application project within 5 years of the bid closing date.</p> <p>1.1. The project must meet ALL of the following criteria to be a similar project:</p> <ul style="list-style-type: none"> a) The project had a programming development effort of at least 1000 person days; b) The project used the Bidder's proposed project management and SDLC methodologies; c) The project used technologies comparable to those in the bid; d) A Custom Developed database application was developed as the result of the project; and, | <p>1. The bidder must provide a description and customer reference for the project as required in RFP Part III, 3.2 (a)(vii and viii).</p> <p>1.1. The technologies used do NOT have to be the bid versions as the referenced project may have been completed almost three years ago. For example, if Microsoft Visual Studio 2013 is bid (in response to M14), and the referenced project used MS Visual Studio with Visual Basic.NET and ASP.NET (not necessarily the "2013" version), then the project will satisfy this</p> | | | |

| Item No. | SoW Ref | Requirement | Notes to Bidder | Bidder Compliance Comply/Do Not Comply | Bidder Substantiating Information | Reference |
|----------|---------|---|-------------------|--|-----------------------------------|-----------|
| | | <p>e) The resulting application had more than 50 different daily users.</p> <p>1.2. Comparable technologies are considered acceptable if the application development project:</p> <p>a) Used the Bidder's application development toolset(s) (as bid in response to M14); and</p> <p>b) Used Microsoft's Windows Server operating system & SQL Server database software products.</p> <p>2. The project must have been the responsibility of the Bidder and managed by the Bidder from the same Managing Business Unit that the Bidder is proposing to manage the Project Phase of ICEMS 2.0.</p> <p>2.1. The Bidder must provide a statement that the ICEMS 2 Managing Business Unit is the same as the Managing Business Unit of the application development project being submitted.</p> <p>2.2. Projects where the Bidder supplied resources to projects which were the responsibility of other organizations qualify, only if the Bidder maintained responsibility for those resources and their outcomes to the end client/organization. If the Bidder provided resources to a third party the project does not qualify nor do projects managed by the Bidder where the Bidder was requested by its</p> | <p>criterion.</p> | | | |

| Item No. | SoW Ref | Requirement | Notes to Bidder | Bidder Compliance Comply/Do Not Comply | Bidder Substantiating Information | Reference |
|----------|---------|---|--|--|--------------------------------------|-----------|
| | | client to use non-Bidder resources. Projects where the Bidder sub-contracted some of the work but retained responsibility for all of the work are acceptable. | | | | |
| M8 | | <p>1. The Bidder must demonstrate that it is currently managing, or has Completed within 5 years of the bid closing date, a similar application management project.</p> <p>1.1. An application management project will be considered "similar" to the Work to be performed under the resulting contract if ALL of the following apply:</p> <ul style="list-style-type: none"> a) The project was for a duration of at least 3 years; b) The project had a value of more than \$500K/annum for at least two consecutive years; c) The application was a Custom Developed database application; d) The Bidder utilized the ITIL Service Management discipline; and, e) The Bidder's responsibilities included hardware/software management. <p>2. The project must have been the responsibility of the Bidder and managed by the Bidder itself from the same Managing Business Unit that the Bidder is proposing to manage the ICEMS 2.0 after the Project Phase is completed.</p> <p>2.1. The Bidder must provide a statement that the Managing Business Unit that will be responsible for overseeing the</p> | <p>1. The bidder must provide a description and customer reference for the project as required in RFP Part III, 3.2 (a)(vii and viii).</p> <p>2. The Managing Business Unit may be different for the Project Phase and application management phase.</p> | | | |

| Item No. | SoW Ref | Requirement | Notes to Bidder | Bidder Compliance Comply/Do Not Comply | Bidder Substantiating Information | Reference |
|------------------|---------------------|--|--|--|--------------------------------------|-----------|
| | | <p>management of ICEMS 2 once the Project Phase has been completed is the same as, and under the direct responsibility of the Managing Business Unit of the application management project being submitted.</p> <p>2.2. Projects where the Bidder supplied resources to projects which were the responsibility of other organizations qualify only if the Bidder maintained responsibility for those resources and their outcomes to the end client/organization. If the Bidder provided resources to a third party the project does not qualify, nor do projects managed by the Bidder where the Bidder is requested by its customer to use non-Bidder resources. Projects where the Bidder sub-contracted some of the work but retained responsibility for all of the work are acceptable.</p> | | | | |
| SoW M9 | 6.2.4, and 6.2.5 | <p>1. The Bidder must propose the use of a Formal systematic method for estimating the project Work to be performed.</p> <p>2. The Bidder must provide a detailed overview of their Formal and systematic method for estimating the project work to be performed.</p> <p>2.1. The overview must specify the input parameters that the method uses.</p> <p>2.1.1. The method may involve the use of a software estimating tool, but it is not mandatory.</p> | <p>1. The Bidder must also provide a statement of compliance that their method is a Formal method.</p> | | | |

| Item No. | SoW Ref | Requirement | Notes to Bidder | Bidder Compliance Comply/Do Not Comply | Bidder Substantiating Information | Reference |
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| | | 2.1.2. Providing information on proprietary internal logic of the tool is not mandatory. | | | | |
| M10 | 6.3 | 1. The Bidder must describe how it will produce the required architecture documents as stated in 6.3.3 of the SoW, by referring to the architecture design tasks in their proposed SDLC methodology and demonstrating how they follow Industry Best Practices. | | | | |
| M11 | 6.3.4 | 1. The Bidder must describe how they will perform a security risk assessment that will follow ISO/IEC 27002:2005 Standard – Information Technology - Security techniques - Code of practice for information security management. | | | | |
| M12 | 6.9.1 and 6.9.2 | 1. The Bidder must describe how it will deliver, enable, operate and support a 2011 Edition (or newer) Information Technology Infrastructure Library (ITIL) based Application and Service Management Plan. | | | | |
| M13 | 10.2.2 and Appendix 6, (4.5 and 4.6) | 1. The Bidder's proposed solution must supply directly, or through a subcontractor, an off-site disaster recovery backup tape storage facility (as described in Appendix 6, 4.5 and 4.6 of the SoW) that is more than 20 kilometres from the location of the data centre. | 1. The Bidder must provide a statement of compliance that the location of the tape backup storage facility is a minimum of 20 km distance from the data centre. | | | |
| M14 | 10.4.2 and Appendix 6 (3.3.8) | The Bidder must identify the modern application development toolset(s) they will use to develop the Application. 1.1. The toolset can either be Microsoft Visual Studio 2013 or newer, using Visual Basic 2013 or newer and ASP.NET, | 1. ESDC reserves the right to assess the equivalency of the equivalent product to a Visual Basic 2013 (or newer), ASP.NET and/or Java application development toolset. | | | |

| Item No. | SoW Ref | Requirement | Notes to Bidder | Bidder Compliance Comply/Do Not Comply | Bidder Substantiating Information | Reference |
|----------|----------------|--|-----------------|--|--------------------------------------|-----------|
| | | <p><u>OR</u></p> <p>1.2. An application development toolset(s) with similar application development capabilities to the Visual Basic 2013 (or newer) and ASP.NET toolset,</p> <p><u>OR</u></p> <p>1.3. An equivalent Java application development toolset that is compatible with the JAVA SE7 or newer specifications.</p> <p>1.3.1.If a Java toolset is identified, the Bidder must meet ALL of the following requirements:</p> <p>1.3.1.1. Demonstrate that the toolset builds applications for the target Microsoft environments;</p> <p>1.3.1.2. Also provide a statement of compliance that the toolset is equivalent to MS Visual Studio 2013 using Visual Basic.NET and ASP.NET; and,</p> <p>1.3.1.3. Also provide a statement of compliance confirming that the toolset is compatible with the Java SE 7 or newer specifications.</p> | | | | |
| M15 | 11.1 and 12.20 | 1. The Bidder must describe how it will achieve optimal availability of the ICEMS 2 System and | | | | |

| Item No. | SoW Ref | Requirement | Notes to Bidder | Bidder Compliance Comply/Do Not Comply | Bidder Substantiating Information | Reference |
|---|---------|--|-----------------|--|--------------------------------------|-----------|
| RESOURCES | | | | | | |
| Bidders must submit resumes for each proposed resource listed below. | | | | | | |
| IT Project Manager | | | | | | |
| M16 | 7.4 | <p>1. The Bidder must substantiate in the submitted resume that the proposed resource:</p> <p>1.1 Has worked on projects where he/she was required to communicate in English, both orally and in writing,</p> <p><u>OR</u></p> <p>1.2 Received his/her high school or higher education in English.</p> | | | | |
| M17 | 7.5.1 | <p>1. The Bidder must provide a copy of the proposed resource's Computer Science or an Information Technology degree,</p> <p><u>OR</u></p> <p>2. The Bidder must substantiate that the proposed resource has the equivalent combination of education and work experience.</p> <p>2.1. An equivalent combination of education and work experience is defined as a degree or diploma in a related field (Information Management, Science, Business, or Engineering) plus a minimum of 3 years of experience in the IT industry.</p> <p>2.2. A copy of the degree or diploma in a related field must be submitted. The work experience must be substantiated on the</p> | | | | |

| Item No. | SoW Ref | Requirement | Notes to Bidder | Bidder Compliance Comply/Do Not Comply | Bidder Substantiating Information | Reference |
|----------|---------|---|--|--|-----------------------------------|-----------|
| M18 | 7.5.2 | <p>submitted resume.</p> <p>1. The Bidder must supply for the proposed resource:</p> <p>1.1. A copy of a valid PMP® certificate together with an indication that the resource is a registered PMI professional in "good standing", <u>OR</u>, 1.2. A copy of the Project Manager's Masters degree <u>OR</u>, 1.3. A copy of a certificate in the Bidder's formal proposed project management methodology.</p> | <p>"Good standing" will be confirmed by reference to the following website: http://www.pmi.org/Certification/Credential-Registry.aspx</p> | | | |
| M19 | 7.5.3 | <p>1. The Bidder must substantiate in the submitted resume that the proposed resource has a minimum of 7 years Recent experience managing IT application systems implementation projects.</p> <p>1.1. If an equivalent combination of education and work experience is being used to substantiate M17, the proposed resource must have an additional 7 years Recent experience managing IT application systems implementation projects.</p> | | | | |
| M20 | 7.5.4 | <p>1. The Bidder must substantiate in the submitted resume that the proposed resource has a minimum of 5 years recent experience managing Custom Developed application implementation projects.</p> | | | | |

| Item No. | SoW Ref | Requirement | Notes to Bidder | Bidder Compliance Comply/Do Not Comply | Bidder Substantiating Information | Reference |
|----------------------------|---------|--|-----------------|--|--------------------------------------|-----------|
| | | 1.1. To qualify as Recent experience for this specific requirement, 3 of the 5 years of experience must have occurred within the last 5 years prior to the bid closing date. | | | | |
| M21 | 7.5.5 | 1. The Bidder must substantiate in the submitted resume that the proposed resource has a minimum of 3 years Recent experience managing IT projects for a Canadian federal or provincial/territorial government organization. | | | | |
| M22 | 7.5.6 | 1. The Bidder must substantiate in the submitted resume that the proposed resource has a minimum of 2 years Recent experience in managing IT Custom Developed application systems implementation projects using the Bidder's proposed project management and SDLC methodologies proposed in M2 and M4. | | | | |
| Senior IT Architect | | | | | | |
| M23 | 7.4 | 1. The Bidder must substantiate in the submitted resume that the proposed resource: 1.1 has worked on projects where he/she was required to communicate in English, both orally and in writing, <u>OR</u> 1.2 received his/her high school or higher education in English. | | | | |
| M24 | 7.6.1 | 1. The Bidder must provide a copy of the proposed resource's degree, or diploma in a directly related field. 1.1. Directly related degree fields are: Information Technology, Computer Science, Science, and Engineering. <u>OR</u> | | | | |

| Item No. | SoW Ref | Requirement | Notes to Bidder | Bidder Compliance Comply/Do Not Comply | Bidder Substantiating Information | Reference |
|----------|---------|---|-----------------|--|--------------------------------------|-----------|
| | | <p>2. The Bidder must substantiate in the proposed resource's resume that the proposed resource has the equivalent combination of education and work experience.</p> <p>2.1. An equivalent combination of education and work experience is defined as a degree or diploma in any science or business field plus a minimum of 3 years of experience in the IT Industry.</p> | | | | |
| M25 | 7.6.2 | <p>1. The Bidder must substantiate in the submitted resume that the proposed resource has a minimum of 7 years of experience designing and implementing IT systems.</p> <p>1.1. If an equivalent combination of education and work experience is being used to substantiate M24, the proposed resource must have an additional 7 years of experience designing and implementing IT systems.</p> | | | | |
| M26 | 7.6.3 | <p>1. The Bidder must substantiate in the submitted resume that the proposed resource has a minimum of 5 years recent experience as an IT Architect.</p> <p>1.1. To qualify as Recent experience for this specific requirement, 3 of the 5 years of experience must have occurred within the last 5 years prior to the bid closing date.</p> | | | | |
| M27 | 7.6.4 | <p>1. The Bidder must substantiate in the submitted resume that the proposed resource has a minimum of 5 years recent experience with Microsoft's Windows Server and SQL Server software products.</p> | | | | |

| Item No. | SoW Ref | Requirement | Notes to Bidder | Bidder Compliance Comply/Do Not Comply | Bidder Substantiating Information | Reference |
|----------|---------|---|---|--|--------------------------------------|-----------|
| | | 1.1. To qualify as Recent experience for this specific requirement, 3 of the 5 years of experience must have occurred within the last 5 years prior to the bid closing date. | | | | |
| M28 | 7.6.5 | 1. The Bidder must substantiate in the submitted resume the proposed resource has a minimum of 3 years Recent experience with the application development toolset(s) proposed by the Bidder in M14. | 1. The experience does NOT have to be on the same version of the application development toolset (s) proposed by the Bidder. For example if Microsoft Visual Studio 2013 is bid (in response to M14), and the proposed resource used MS Visual Studio with Visual Basic.NET and ASP.NET (not necessarily the "2013" version), then that experience will satisfy this requirement. | | | |
| M29 | 7.6.6 | 1. The Bidder must provide a copy of the proposed resource's Microsoft Certified Information Technology Professional (MCITP), or an equivalent. 1.1. An MCITP equivalent is defined to be a Microsoft Certified Architect or Microsoft Certified Master, or any Microsoft certification that was a predecessor to any of these certifications. 1.2. If the certification provided is the predecessor equivalent certification, a reference to an official Microsoft publication that substantiates this must be provided in the resume. | | | | |
| M30 | 7.6.7 | 1. The Bidder must substantiate in the submitted resume that the proposed resource has 2 years of Recent VMWare experience. | | | | |
| M31 | 7.6.8 | 1. The Bidder must demonstrate that the | | | | |

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|-------------------------------------|---------|---|-----------------|--|--------------------------------------|-----------|
| | | <p>proposed resource has knowledge of current IT technologies, including Microsoft's, and their likely future directions.</p> <p>1.1. This knowledge must be substantiated on the proposed resource's resume through either: courses OR seminars OR conferences attended OR self-study activities OR projects undertaken.</p> | | | | |
| M32 | 7.6.9 | 1. The Bidder must substantiate in the submitted resume that the proposed resource has a minimum of 2 years of Recent experience as a lead IT Architect. | | | | |
| M33 | 7.6.10 | 1. The Bidder must substantiate in the submitted resume that the proposed resource has a minimum of 2 years Recent experience as an Architect on IT Custom Developed application systems implementation projects using the SDLC methodology proposed in M4. | | | | |
| Senior Application Developer | | | | | | |
| M34 | 7.4 | <p>1. The Bidder must substantiate in the submitted resume that the proposed resource:</p> <p>1.1 has worked on projects where he/she was required to communicate in English, both orally and in writing,</p> <p><u>OR</u></p> <p>1.2 received his/her high school or higher education in English.</p> | | | | |
| M35 | 7.7.1 | <p>1. The Bidder must provide a copy of the proposed resource's Computer Science or Information Technology Degree or Diploma,</p> <p><u>OR</u></p> | | | | |

| Item No. | SoW Ref | Requirement | Notes to Bidder | Bidder Compliance Comply/Do Not Comply | Bidder Substantiating Information | Reference |
|----------|---------|---|--------------------------------|--|--------------------------------------|-----------|
| | | <p>2. The Bidder must substantiate in the submitted resume that the proposed resource has an equivalent combination of education and work experience.</p> <p>2.1 An equivalent combination of education and work experience is defined to be a degree or diploma in any Science or Engineering field, plus a minimum of 3 years of experience in the IT industry.</p> | | | | |
| M36 | 7.7.2 | <p>1. The Bidder must substantiate in the submitted resume that the proposed resource has a minimum of 5 years Recent experience designing and programming business application systems.</p> <p>1.1. If an equivalent combination of education and work experience is being used to substantiate M35, the proposed resource must have an additional 5 years of experience designing and programming business application systems.</p> | | | | |
| M37 | 7.7.3 | <p>1. The Bidder must substantiate in the submitted resume that the proposed resource has a minimum of 2 years of Recent experience as a lead Application Developer.</p> | | | | |
| M38 | 7.7.4 | <p>1. The Bidder must substantiate in the submitted resume that the proposed resource has a minimum of 5 years of experience in application programming and using SQL Server.</p> <p>1.1. Both experience in application programming and using SQL Server can have been gained over the same time period.</p> | | | | |
| M39 | 7.7.5 | <p>1. The Bidder must substantiate in the submitted</p> | 1. The application development | | | |

| Item No. | SoW Ref | Requirement | Notes to Bidder | Bidder Compliance Comply/Do Not Comply | Bidder Substantiating Information | Reference |
|--------------------------------|---------|--|---|--|-----------------------------------|-----------|
| | | resume that the proposed resource has a minimum of 2 years Recent programming experience using the same application development toolset(s) that the Bidder has bid in M14. | toolset(s) used does NOT have to be the bid version. For example if Microsoft Visual Studio 2013 is bid (in response to M14), and the proposed resource used MS Visual Studio with Visual Basic.NET and ASP.NET (not necessarily the "2013" version), then that experience will satisfy this requirement. | | | |
| M40 | 7.7.8 | 1. The Bidder must substantiate in the submitted resume that the proposed resource has a minimum of 1 year Recent experience as a lead Application Developer on IT Custom Developed database application systems implementation projects using the Bidder's SDLC methodology proposed in M4. | | | | |
| Senior Business Analyst | | | | | | |
| M41 | 7.4 | 1. The Bidder must substantiate in the submitted resume that the proposed resource: 1.1 has worked on projects where he/she was required to communicate in English, both orally and in writing, <u>OR</u> 1.2 received his/her high school or higher education in English | | | | |
| M42 | 7.16.1 | 1. The Bidder must provide a copy of the proposed resource's degree in any field. | | | | |
| M43 | 7.16.2 | 1. The Bidder must substantiate in the submitted resume that the proposed resource has a minimum of 5 years Recent experience determining the detailed requirements for, and designing, business application systems. | | | | |
| M44 | 7.16.3 | 1. The Bidder must substantiate in the submitted | | | | |

| Item No. | SoW Ref | Requirement | Notes to Bidder | Bidder Compliance Comply/Do Not Comply | Bidder Substantiating Information | Reference |
|----------|---------|---|-----------------|--|-----------------------------------|-----------|
| | | resume that the proposed resource has a minimum of 2 years of Recent experience as a lead Business Analyst. | | | | |
| M45 | 7.16.5 | 1. The Bidder must substantiate in the submitted resume that the proposed resource has a minimum of 2 years of Recent experience designing Internet-based applications. | | | | |
| M46 | 7.16.7 | 1. The Bidder must substantiate in the submitted resume that the proposed resource has a proven ability to work independently without analysis and design supervision. | | | | |
| M47 | 7.16.8 | 1. The Bidder must substantiate in the submitted resume that the proposed resource has a minimum of 3 years of experience programming business application systems. | | | | |

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Table B- Rated Requirements

| ITEM No. | REQUIREMENT | Criteria | Bidder Substantiating Information | Reference | Maximum Points |
|------------------|---|--|-----------------------------------|-----------|----------------|
| CORPORATE | | | | | |
| R1 | 1. The Bidder should demonstrate it has Completed the development of up to 2 Custom Developed application projects, that when combined, satisfy the following requirements: 1.1. Is bilingual (Canadian English and Canadian French); 1.2. Is Web-based; 1.3. Has a Custom Developed database; 1.4. Has at least 30 screens; 1.5. Has at least 50 daily users; 1.6. Had a programming development effort of at least 1000 person days; | 1. The bidder should provide a project description and customer reference for the project as required in RFP Part III, 3.2 (a)(vii and viii). 2. Up to 20 points will be awarded in the following way for a maximum of 2 projects: 2.1. 1 point will be awarded, to a maximum of 9 points, for each requirement (1.1-1.9) met by either of the submitted application development projects. For any of the requirements 1.1-1.9 that both projects satisfy the same requirement, only 1 point will be awarded. (0 points will be awarded if none of the | Task | | 20 points |

| ITEM No. | REQUIREMENT | Criteria | Bidder Substantiating Information | Reference | Maximum Points |
|----------|---|---|-----------------------------------|-----------|----------------|
| | <p>1.7. Used the bid project management methodology;</p> <p>1.8. Used the bid SDLC methodology; and,</p> <p>1.9. The Custom Developed application project was Completed prior to the issuance of this RFP.</p> <p>2. The Custom Developed application project(s) should have been Completed for a Canadian public sector client.</p> <p>3. The Custom Developed application projects should have been managed by the Bidder's proposed Managing Business Unit for the Project Phase of ICEMS 2.</p> | <p>requirements are met by either of the 2 projects.).</p> <p>2.2. An additional 2 points, to a maximum of 4 points, will be awarded for each of the projects submitted in response to requirement 2 that has been Completed for a Canadian public sector client.(0 points will be awarded if neither projects submitted in response to requirement 2 have been completed for a Canadian public sector client).</p> <p>2.3. An additional 3 points, to a maximum of 6 points, will be awarded for each of the projects submitted in response to requirement 2 that has been completed through Task Authorizations .(0 points will be awarded if neither projects submitted in response to requirement 2 have been completed through Task Authorizations).</p> <p>2.4. An additional 1 point will be awarded if either of the Custom Developed application projects submitted in response to requirement 1 was managed by the Bidder's proposed Managing Business Unit for the Project Phase of ICEMS 2. (0 points will be awarded if neither of the projects submitted in response to requirement 1 were managed by the Bidder's proposed Managing Business Unit for the Project Phase of ICEMS 2).</p> <p>2.5. The Custom Developed application project must have been Completed prior to the issuance of this RFP to satisfy R-1.</p> | | | |
| R2 | <p>1. The Bidder should have undertaken 1 application management project that had a duration of more than 3 years. The scope of the project should have included maintenance, hosting and operations of a Custom Developed</p> | <p>1. The Bidder should provide a description and customer reference for the project as required in RFP Part III, 3.2 (a)(vii and viii).</p> <p>2. Up to 15 points will be awarded in the following way for managing a Custom Developed database application:</p> | | | 15 points. |

| ITEM No. | REQUIREMENT | Criteria | Bidder Substantiating Information | Reference | Maximum Points |
|----------|---|---|-----------------------------------|-----------|----------------|
| | <p>database application.</p> <p>2. The project should have been managed by the Bidder's proposed ICEMS 2 application management Managing Business Unit.</p> | <p>2.1. 0 points will be awarded for either less than 3 years of duration or not including maintenance or not including hosting or not including operations.</p> <p>2.2. 2 points will be awarded, to a maximum of 10 points, for each full year of maintenance, hosting and operations beyond the minimum 3 years, for a Custom Developed application (i.e. each of years 4, 5, 6, 7, 8 of the submitted project will be awarded 2 points).</p> <p>2.3. 5 additional points will be awarded for the application management project awarded points in 2.2, if the application management project was managed by the Bidder's Managing Business Unit responsible for the ICEMS 2 application management phase.</p> | | | |
| R3 | <p>1. The Bidder should substantiate in the submitted resume that the proposed IT Project Manager was the project manager on up to 2 of the Bidder's application development projects submitted in response to either M7, R1 or R4.</p> | <p>1 Up to 10 points will be awarded in the following way, for a maximum of 2 application development projects submitted in response to either M7, R1 or R4:</p> <p>1.1 0 points will be awarded if the proposed IT Project Manager was not the project manager on any of the submitted application development projects.</p> <p>1.2 5 points will be awarded per application development project if the Bidder's proposed IT Project Manager was the project manager.</p> | | | 10 points |
| R4 | <p>1. The Bidder should substantiate in the submitted resume that the proposed IT Project Manager was the project manager on an application development project that was funded by at least 2 different stakeholders.</p> | <p>1. If a new project, other than that submitted in response to either M7 or R1, then the Bidder should provide a project description and customer reference for the project as required in RFP Part III, 3.2 (a)(vii and viii).</p> <p>2. Up to 15 points will be awarded in the following way for the submitted project:</p> | | | 15 points |

| ITEM No. | REQUIREMENT | Criteria | Bidder Substantiating Information | Reference | Maximum Points |
|----------|---|--|-----------------------------------|-----------|----------------|
| | | <p>2.1. 0 Points will be awarded if there were less than 2 stakeholder organizations.</p> <p>2.2. 5 points will be awarded if there were only 2 stakeholder organizations.</p> <p>2.3. 10 points will be awarded if there were at least 3 stakeholder organizations.</p> <p>2.4. 15 points will be awarded if there were at least 3 stakeholder organizations, and at least 3 of those organizations were different Canadian government entities. Those Canadian governmental organizations could have been Ministries or agencies at any of the federal, provincial/territorial, or municipal levels.</p> | | | |
| R5 | 1. The Bidder should substantiate in the submitted resume that the IT Architect was an IT Architect on up to 2 of the Bidder's application development projects submitted in response to either M7 or R1 or R4. | <p>1 Up to 10 points will be awarded in the following way, for a maximum of 2 application development projects submitted in response to either M7 or R1 or R4:</p> <p>1.1 0 points will be awarded if the proposed IT Architect was not the IT Architect for any of the submitted application development projects.</p> <p>1.2 5 points will be awarded for each submitted application development projects if the Bidder's proposed IT Architect was the IT Architect on the project.</p> | | | 10 points |
| R6 | 1. The Bidder should demonstrate that the proposed IT Architect has a Master's degree in Information Technology or Computer Science or Engineering. | <p>1. Up to 5 points will be awarded in the following way:</p> <p>1.1. 0 points will be awarded if a copy of the requested Master's degree is not provided.</p> <p>1.2. 5 points will be awarded if a copy of the proposed IT Architect's Master's degree in Information Technology or Computer Science or Engineering is provided.</p> | | | 5 points |

| ITEM No. | REQUIREMENT | Criteria | Bidder Substantiating Information | Reference | Maximum Points |
|----------|---|--|-----------------------------------|-----------|----------------|
| R7 | 1. The Bidder should substantiate in the submitted resume that the Senior Application Developer was a Senior Application Developer on any of the Bidder's projects submitted in response to either: M7 or R1 or R4. | <p>1. Up to 5 points will be awarded in the following way for a maximum of 1 application development project submitted in response to either M7 or R1 or R4:</p> <p>1.1. 0 points will be awarded if the proposed Senior Application Developer was not the Senior Application Developer for any of the submitted application development projects.</p> <p>1.2. 5 points will be awarded for any 1 project if the Bidder's proposed Senior Application Developer was the Senior Application Developer on the project.</p> | | | 5 points. |
| R8 | 1. The Bidder should substantiate in the submitted resume that the Senior Application Developer has more than 2 years Recent programming experience using the same application development toolset(s) that the Bidder has bid in response to M14. | <p>1. Up to 10 points will be awarded for each full year beyond 2 years of Recent programming experience using the same application development toolset(s) that the Bidder has bid in the following way:</p> <p>1.1 0 points will be awarded for either 2 years or less of experience or not using the same application development toolset(s) that the Bidder has bid.</p> <p>1.2 5 points will be awarded per year for years 3 and 4 of experience. (No extra points will be awarded for years 5 onwards experience.)</p> <p>2. The application development toolset(s) used does NOT have to be the bid version. For example if Microsoft Visual Studio 2013 is bid (in response to M14) and if the proposed resource used MS Visual Studio with Visual Basic.NET and ASP.NET (not necessarily the "2013" version), then that experience will satisfy this requirement.</p> | | | 10 points |
| R9 | 1. The Bidder should substantiate in the submitted resume that the proposed Senior Business Analyst was: | <p>1. Up to 10 points will be awarded in the following way:</p> <p>1.1 0 points will be awarded if the proposed resource was not a Business Analyst (not necessarily in a</p> | | | 10 points |

| ITEM No. | REQUIREMENT | Criteria | Bidder Substantiating Information | Reference | Maximum Points |
|-----------------------------|---|---|-----------------------------------|-----------|----------------|
| | <p>1.1. A Business Analyst (not necessarily in a senior position at the time of gaining experience) on any Exam Item Bank and Exam Management implementation project, AND</p> <p>1.2. Was responsible on that project for <u>any one</u> of the following:</p> <p>1.2.1. Specifying Item Bank functionality; OR</p> <p>1.2.2. Exam Management functionality; OR</p> <p>1.2.3. Writing related User Procedures.</p> <p>2. The Bidder should substantiate in the submitted resume and any of the submitted application development projects in response to either: M7, R1 or R4 that the proposed Senior Business Analyst was responsible for:</p> <p>2.1. Specifying Exam Management functionality; OR</p> <p>2.2. Writing User Procedures specific to exam item bank or exam management procedures.</p> | <p>senior position at the time of gaining experience) on any Exam Item Bank and Exam Management implementation project; <u>AND/OR</u> Was not responsible on that project for specifying at least one of the following:</p> <p>1.1.1 Item Bank functionality; OR</p> <p>1.1.2 Exam Management functionality; OR</p> <p>1.1.3 Writing related User Procedures.</p> <p>1.2 5 points will be awarded if the proposed resource was a Business Analyst on any Exam Item Bank and Exam Management implementation project AND responsible on that project for specifying Item Bank functionality OR Exam Creation/Management functionality OR writing related User Procedures.</p> <p>1.3 An additional 5 points will be awarded if the proposed resource was a Senior Business Analyst responsible for specifying Exam Creation/Management functionality OR writing User Procedures specific to exam item bank or exam management procedures for a project submitted in response to M7 or R1 or R4.</p> | | | |
| Total Maximum Points | | | | | 100 |