

RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:
**Bid Receiving - PWGSC / Réception des
soumissions - TPSGC**
11 Laurier St. / 11, rue Laurier
Place du Portage, Phase III
Core 0A1 / Noyau 0A1
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 CCTV UPGRADE- Emerson MB	
Solicitation No. - N° de l'invitation 47733-122675/A	Date 2012-05-30
Client Reference No. - N° de référence du client 47733-122675	
GETS Reference No. - N° de référence de SEAG PW-\$\$HN-334-60591	
File No. - N° de dossier hn334.47733-122675	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2012-06-29	
Time Zone Fuseau horaire Eastern Daylight Saving Time EDT	
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input checked="" type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: McLaughlin, Michael	Buyer Id - Id de l'acheteur hn334
Telephone No. - N° de téléphone (819) 956-3622 ()	FAX No. - N° de FAX () -
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: CANADA BORDER SERVICES AGENCY P.O.EMERSON HWY 75 EMERSON Manitoba R0A0L0 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
Electrical & Electronics Products Division
11 Laurier St./11, rue Laurier
6B1, Place du Portage, Phase III
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

***** THIS DOCUMENT CONTAINS A SECURITY REQUIREMENT *****

TABLE OF CONTENTS

PART 1 - GENERAL INFORMATION

1. Introduction
2. Summary
3. Debriefings

PART 2 - BIDDER INSTRUCTIONS

1. Standard Instructions, Clauses and Conditions
2. Submission of Bids
3. Enquiries - Bid Solicitation
4. Applicable Laws
5. Improvement of Requirement During Solicitation Period
6. Bidders' Conference

PART 3 - BID PREPARATION INSTRUCTIONS

1. Bid Preparation Instructions

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

1. Evaluation Procedures
2. Basis of Selection

PART 5 - CERTIFICATIONS

1. Certifications Precedent to Contract Award and Certifications Required with the Bid

PART 6 - SECURITY REQUIREMENTS

1. Security Requirement

PART 7 - RESULTING CONTRACT CLAUSES

1. Statement of Work
2. Standard Clauses and Conditions
3. Security Requirement
4. Term of Contract
5. Authorities
6. Payment
7. Invoicing Instructions
8. Certifications
9. Applicable Laws
10. Priority of Documents
11. Electrical Equipment
12. Insurance
13. Disclosure of Information

List of Annexes

- Annex "A" Statement of Work
Annex "B" Basis of Payment
Annex "C" Security Requirements Check List

PART 1 - GENERAL INFORMATION

1. Introduction

The bid solicitation and resulting contract document is divided into seven (7) parts plus annexes 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 and states that the Bidder agrees to be bound by the clauses and conditions contained in all parts of 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 Basis of Payment and the Security Requirements Check List.

2. Summary

The Canada Border Services Agency (CBSA) has a requirement to supply and install a complete, high quality Audio Video Monitoring System (AVMS), which includes all necessary components (hardware and software) for a fully operational system at the Emerson, MB Port of Entry located at Highway 75, Emerson, Manitoba, R0A 0L0, ON by August 31st 2012

The scope of work includes the supply, installation, certification and knowledge, cabling, conduit and electrical power provisions, as well as operational and technical training on the fully operational AVMS as described in Annex "A".

There is a security requirement associated with this requirement. For additional information, see Part 6 - Security Requirements, and Part 7 - Resulting Contract Clauses. Bidders should consult the "Security Requirements for PWGSC Bid Solicitations - Instructions for Bidders" document on the Departmental Standard Procurement Documents Web site.

The requirement is subject to the provisions of the Agreement on Internal Trade (AIT).

2.1 Delivery Requirement

Delivery is requested to be completed on or before August 31st 2012.

2.1.1 Delivery Offered

While delivery is requested as indicated above, the best delivery that could be offered is _____

2.2 Contractor Contacts

Name and telephone number of the person responsible for :

General enquiries

Name: _____
 Telephone No. _____
 Facsimile No. _____
 E-mail address: _____

Delivery follow-up

Name: _____
 Telephone No. _____
 Facsimile No. _____
 E-mail address: _____

2.3 Service Response Time

It may be necessary for warranty repairs to be performed on site. You are requested to provide response time and location of nearest office/depot providing staff for this work. Response time will not exceed forty-eight (48) hours. The contact person is as follows:

Response Time: _____
 Name: _____
 Telephone No.: _____
 Facsimile No.: _____
 Email/Internet Address: _____

2.4 Emergency Services/Repairs

If requested by Canada Border Services Agency (CBSA), the Contractor will be required to provide on-site emergency service/repairs not covered under the warranty provision of the General Conditions 2030 during the contract period. The emergency crew will be paid as indicated herein. The response time may not exceed four 4 hours. The contact person is as follows:

Name: _____
 Telephone No.: _____
 Facsimile No.: _____
 Email/Internet Address: _____

3. Debriefings

After contract award, bidders may request a debriefing on the results of the bid solicitation. Bidders should make the request to the Contracting Authority within 15 working days of receipt of notification that their bid was unsuccessful. The debriefing may be provided in writing, by telephone or in person.

You are reminded that this solicitation requires the compliance and completion of requirements attached as an annex and forming part of this document.

PART 2 - BIDDER INSTRUCTIONS

1. Standard Instructions, Clauses and Conditions

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.

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.

The 2003 (2010-01-11) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

Subsection 4.4 of 2003, Standard Instructions - Goods or Services - Competitive Requirements, is amended as follows:

Delete: sixty (60) days

Insert: ninety (90) days

Section 8 of 2003, Standard Instructions - Goods or Services, is amended as follows:

Insert: Upon request by Canada, the bidder must send written confirmation of the bid within five (5) working days.

Section 12 of 2003, Standard Instructions - Goods or Services, is amended as follows:

Delete subsection 1. (a) and (b).

Insert: 1. Canada may reject a bid where any of the following circumstances is present:

- (a) the Bidder is subject to a Vendor Performance Corrective Measure, under the Vendor Performance Corrective Measure Policy, which renders the Bidder ineligible to bid on the requirement;
- (b) an employee, or subcontractor included as part of the bid, is subject to a Vendor Performance Corrective Measure, under the Vendor Performance Corrective Measure Policy, which would render that employee or subcontractor ineligible to bid on the requirement, or the portion of the requirement the employee or subcontractor is to perform;

1.1 SACC Manual Clauses

SACC Reference	Section	Date
B1000T	Condition of Material	11/30/2007

2. Submission of Bids

Bids must be submitted **only to Public Works and Government Services Canada (PWGSC) Bid Receiving Unit** by the date, time and place indicated on page 1 of the bid solicitation.

Due to the nature of the bid solicitation, bids transmitted by electronic mail to PWGSC will not be accepted.

2.1 Technical Documentation

Technical/Description literature must be submitted as part of the bid package prior to the bid closing date. **Failure to comply will render your bid non responsive.**

3. Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than three (3) business days before the bid closing date. Enquiries received after that time may not be answered.

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.

4. Applicable Laws

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

Bidders may, at their discretion, substitute the applicable laws of a Canadian province or territory of their choice without affecting the validity of their bid, by deleting the name of the Canadian province or territory specified and inserting the name of the Canadian province or territory of

their choice. If no change is made, it acknowledges that the applicable laws specified are acceptable to the bidders.

5. 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 reason 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 at least five (5) days before the bid closing date. Canada will have the right to accept or reject any or all suggestions.

6. Mandatory Site Visit

It is mandatory that the Bidder or a representative of the Bidder visit the work site. Arrangements have been made for a mandatory site visit to be held on:

<u>Date</u>	<u>Time</u>	<u>Location</u>
June 21st 2012	11:00am	Emerson, MB Port of Entry Highway 75, Emerson, Manitoba, ROA 0L0,

Bidders are asked to communicate with the Contracting Authority (Michael McLaughlin, by email: michael.mclaughlin@pwgsc.gc.ca or by phone (819) 956-3622 no later than one (1) day before the scheduled visit to confirm attendance and provide the names of the person(s) who will attend. The onus is on the bidders to arrive at the site visit in a timely manner. Bidders arriving late may not be permitted to attend the site visit. Bidders who do not attend or send a representative will not be given an alternative appointment and their bids will be rejected for noncompliance.

Bidders will be required to sign an attendance form provided at the site visit as proof of attendance and should confirm in their bids that they have attended the site visit.

Bidders should submit in writing to the Contracting Authority, a list of issues that they wish to table and the language they would like to address questions and answers, no later than one (1) calendar day prior to the scheduled site visit.

Any clarifications or changes to the bid solicitation resulting from the site visit will be included as an amendment to the bid solicitation

PART 3 - BID PREPARATION INSTRUCTIONS

1. Bid Preparation Instructions

Canada requests that bidders provide their bid in separately bound sections as follows:

Section I:	Technical Bid	(3 hard copies)
Section II:	Financial Bid	(1 hard copy)
Section III:	Certifications	(1 hard copy)

Prices must appear in the financial bid only. Prices must **not** be indicated in any other section of the bid.

Canada requests that bidders follow the format instructions described below in the preparation of their bid:

- (a) use 8.5 x 11 inch (216 mm x 279 mm) paper;
- (b) use a numbering system that corresponds to the bid solicitation.
- (c) include the certifications as a separate section of the bid.

Section I: Technical Bid

In their technical bid, bidders must demonstrate their understanding of the requirements contained in the bid solicitation and explain how they will meet these requirements. **The technical proposal must meet all aspects of the technical requirement as outlined in the Statement of Work and it must clearly identify on a point by point basis how the proposal meets each requirement and where specifically in the bid the requirement is addressed. Failure to meet the technical requirements will render their bid non-responsive and no further consideration will be given**

Bidders should demonstrate their capability and describe their approach in a thorough, concise and clear manner for carrying out the work.

The technical bid should address clearly and in sufficient depth the points that are subject to the evaluation criteria against which the bid will be evaluated. Simply repeating the statement contained in the bid solicitation is not sufficient. In order to facilitate the evaluation of the bid, Canada requests that bidders address and present topics in the order of the evaluation criteria under the same headings. To avoid duplication, bidders may refer to different sections of their bids by identifying the specific paragraph and page number where the subject topic has already been addressed.

Section II: Financial Bid

1.1 Bidders must submit their financial bid using Annex B - Pricing Sheet - in accordance with the following Basis of Pricing:

1.2 Basis of Pricing

All prices must be firm lot prices, in Canadian dollars, Delivery Duty Paid (Emerson, MB). Goods and Services Tax (GST) or Harmonized Sales Tax (HST) is extra, if applicable. Freight charges to destination and all applicable custom duties and excise taxes are included.

1.2.1 Design and All Related Equipment

The bidder must submit a firm lot price for the Advanced Video Management System's (AVMS) design and related equipment at the Emerson, MB Port of Entry (as per Annex "A").

1.2.2 Installation and Testing Costs

1. The bidder must submit a firm lot price. The prices must include all costs, excluding travel and living, related to the installation and testing of the equipment.
2. Installation and Testing of Equipment for Emergency including the Installation, Repairs, Delays and Design Changes:

In support of the quoted lot price for emergency installation and testing, repairs, delays and design changes, the bidder must submit a firm hourly rate during normal working hours and a firm hourly rate outside normal working hours for each labour category required. The rates will be in effect for the entire length of any resulting contract. Normal working hours are Monday to Friday, 7:30 to 16:30 with exception of statutory holidays.

1.2.3 Travel and Living Expenses Related to Installation of Equipment

The bidder must indicate if there are travel and living expenses associated with the installation and testing of the equipment (excluding training). Where applicable, the bidder must submit firm lot prices, the estimated number of people and the estimated number of days (excluding training).

1.2.4 Training and Related Travel and Living Expenses

The bidder must submit a firm lot price for all required on-site training sessions including any associated travel and living expenses.

Solicitation No. - N° de l'invitation

47733-122675/A

Amd. No. - N° de la modif.

Buyer ID - Id de l'acheteur

hn334

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

47733-122675

File No. - N° du dossier

hn33447733-122675

CCC No./N° CCC - FMS No/ N° VME

1.2.5 Documentation

The bidder must submit a firm lot price for the following:

Operator and Maintenance Manuals and other requested Technical Documentation as detailed in the SOW.

1.3 Exchange Rate Fluctuation

The requirement does not provide for exchange rate fluctuation protection. Any request for exchange rate fluctuation protection will not be considered and will render the bid non-responsive.

Section III: Certifications

Bidders must submit the certifications required under Part 5.

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

1. Evaluation Procedures

- (a) Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and financial evaluation criteria.
- (b) An evaluation team composed of representatives of Canada will evaluate the bids.

1.1 Mandatory Technical Statement of Requirements

Mandatory criteria: Bids will be evaluated on a "compliant / non-compliant" basis. Proposals must clearly demonstrate compliance with all aspects of the mandatory requirements by providing a clear description of where in their bid they meet the mandatory requirements. Proposals that fail to meet any mandatory requirements will be deemed non-responsive and given no further consideration.

Table 1: General Camera Requirements for ALL Cameras

	Compliant / Non-compliant	Bid location
<p>1. Open Architecture – Camera must provide an application programming interface (API) for system integration: <u>Direct access</u> to video stream using a URL. Software development kit (SDK) to control, and change camera settings remotely. It must be possible to change all of the following settings remotely: Resolution, Video Compression, Network settings, Frame rate.</p>		
<p>2. Video – Camera must support the following video settings: Multiple compression formats, not limited to, but supporting MJPEG and H.264 at minimum required resolution. Resolution and frame rate must be controllable for each stream, and camera must support at least dual stream video and support simultaneous streaming of different formats.</p>		
<p>3. Power – Camera must be Power over Ethernet compatible. Camera may have additional power sources (i.e. High POE) for cooling or heating units.</p>		
<p>4. Exposure Settings – Must be configurable for different lighting conditions such as shutter speed, and exposure.</p>		
<p>5. Environment Enclosure</p> <ul style="list-style-type: none"> - All cameras must be contained in a housing and securely mounted - All outdoor cameras and enclosures must have an operating range of – 40° C to + 50° C, resistance to humidity changes and ice. <p>Outdoor camera assemblies must have an Ingress Protection (IP) rating of IP65 or greater</p>		

Solicitation No. - N° de l'invitation
47733-122675/A
Client Ref. No. - N° de réf. du client
47733-122675

Amd. No. - N° de la modif.
hn334
File No. - N° du dossier
hn33447733-122675

Buyer ID - Id de l'acheteur
hn334
CCC No./N° CCC - FMS No/ N° VME

Table 2: Requirements for Fixed Indoor Camera

Criteria	Compliant / Non-compliant	Bid Location
1. Resolution - Camera must have at least 1 Megapixel image resolution.		
2. Lens/Focus/Zoom - Camera must have auto focus or auto back focus. The lens used must provide at least an 80-degree horizontal field of view.		
3. Frames Per Second (FPS) – Camera must support at least 12 frames per second at the minimum resolution specified above.		

Table 3: Requirements for Fixed Outdoor Cameras

Criteria	Compliant / Non-compliant	Bid Location
1. Resolution - Camera must have at least 1 Megapixel image resolution		
2. Night capability - The camera must be a true Day/Night camera with a mechanical IR cut filter.		
3. Lens/Focus/Zoom – Camera must support digital zoom and the lens must support at least 2.5X optical zoom. Must have auto focus or auto back focus. Must provide at least a 50 degree horizontal field of view.		
4. Frames Per Second (FPS) – Camera must support at least 12 frames per second at the minimum resolution specified above.		
5. Audio – Camera must have at least one audio input port that uses a standard 3.5mm plug, so that a microphone may be connected to the camera to receive audio..		

Table 4: Requirements for Fixed Outdoor Cameras (Wide Angle)

Criteria	Compliant/Non-compliant	Bid Location
1. Resolution - Camera must have at least 3 Megapixel image resolution		
2. Night capability - The camera must be a true Day/Night camera with a mechanical IR cut filter.		
3. Lens/Focus/Zoom - Camera must be compatible with CS mount lenses. Must have auto focus or auto back focus. The lens used must provide at least an 84 degree horizontal field of view.		
4. Frames Per Second (FPS) – Camera must support at least 12 frames per second at the minimum resolution specified above.		
5. Wide Dynamic Range – Camera must support wide dynamic range for bright or backlit scenes.		

Table 5: PTZ Outdoor Camera

Criteria	Compliant/Non-compliant	Bid Location
1. PTZ – Camera must be a Pan-Tilt-Zoom (PTZ) camera. This means that the camera can be made to move left and right, move up and down and zoom in and out.		
2. Resolution - Camera must have at least High-definition television (HDTV) 720p image resolution.		
3. Night capability - The camera must be a true Day/Night camera with a mechanical IR cut filter.		
4. Lens/Focus/Zoom - The camera must support digital zoom and the lens support at least 18X optical zoom. Must have auto focus or auto back focus. Must provide at least a 45 horizontal degree field of view.		
5. Range of Motion – Must have a pan range of at least 350 degrees. Must have a tilt range of 180 degrees.		
6. Frames Per Second (FPS) – Camera must support at least 12 frames per second at the minimum resolution specified above.		

Solicitation No. - N° de l'invitation
47733-122675/A
Client Ref. No. - N° de réf. du client
47733-122675

Amd. No. - N° de la modif.
File No. - N° du dossier
hn33447733-122675

Buyer ID - Id de l'acheteur
hn334
CCC No./N° CCC - FMS No/ N° VME

Table 6. Camera Quantities and Types Required

Camera #	Camera Type	Location	Specification (Refer to Table # above)
1	PTZ Outdoor	Traffic Building Outdoor	1,5
2	Fixed Outdoor Wide Angle	Traffic Building Outdoor	1,4
3	Fixed Indoor	Interview Room	1,2
4	Fixed Indoor	Interview Room	1,2
5	Fixed Indoor	Cell	1,2
6	Fixed Indoor	Cell	1,2
7	Fixed Indoor	Cell	1,2
8	Fixed Indoor	Counter	1,2
9	Fixed Outdoor Wide Angle	Link	1,4
10	Fixed Outdoor Wide Angle	Link	1,4
11	Fixed Outdoor	Link	1,3
12	Fixed Outdoor	Link	1,3
13	Fixed Outdoor	Link	1,3
14	Fixed Indoor	Cell	1,2
15	Fixed Indoor	Public Area	1,2
16	Fixed Outdoor	Commercial Building Outdoor	1,3
17	Fixed Outdoor	Commercial Building Outdoor	1,3

Solicitation No. - N° de l'invitation
47733-122675/A
Client Ref. No. - N° de réf. du client
47733-122675

Amd. No. - N° de la modif.
File No. - N° du dossier
hn33447733-122675

Buyer ID - Id de l'acheteur
hn334
CCC No./N° CCC - FMS No/ N° VME

Section 2.2: Storage Server Requirements

Table 7: Storage Server Requirements

Criteria	Compliant / Non compliant	Bid Location
<p>Storage server Requirements:</p> <p>1. The storage server must have "Microsoft Windows Server 2003 / 2008" and the Video Management Software installed.</p> <p>1.1. The Video Management Software meeting the requirements outlined in Appendix 1 Section 3, must be installed on this server machine.</p> <p>2. The server solution must have capacity to have thirty days retention for all cameras at the specified resolutions and frame rates.</p> <p>2.1. The server solution must have a minimum capacity of 16 Terabytes (TB) of writeable space</p> <p>3. The server provides redundancy features to ensure access to all live and archived data at all times.</p> <p>4. Scalability</p> <p>4.1. The server is scalable without migration to another platform. It must be possible to connect more cameras to the server</p> <p>5. The server must have expansion slots for additional hard drives.</p> <p>6. The server must have hot-swappable disks</p> <p>7. The server must have a power backup (e.g. UPS)</p>		

Solicitation No. - N° de l'invitation
47733-122675/A

Amd. No. - N° de la modif.
File No. - N° du dossier
hn33447733-122675

Buyer ID - Id de l'acheteur
hn334
CCC No./N° CCC - FMS No/ N° VME

Client Ref. No. - N° de réf. du client
47733-122675

Section 2.3 Video Management System (VMS)

Table 9: Requirements for Video Management Software (for viewing and archiving video data)

Criteria	Compliant / Non Compliant	Bid Location
<p>Software Requirements</p> <p>The software used to control and manage the cameras must offer a client-server model. The server application is in a remote location and provides camera control (live viewing, PTZ controls) and video archiving functions. The client application connects to the server to access: live video from cameras, and archived videos. The individual requirements for the server and client applications are outlined below.</p> <p>All of the following requirements are mandatory.</p> <p>Architecture</p> <ol style="list-style-type: none">1. The product supports "Open Standards" architecture to interoperate with a variety of cameras, encoder, and IT infrastructure.<ol style="list-style-type: none">1.1. Software Development Kits (SDK) with sample code and documentation are provided.1.2. The product supports commercial off the shelf (COTS) client workstations, servers and customer selected archiving system.1.3. The product is compatible with open architecture industry leading camera manufacturers including but not limited to: Sony, Axis and Panasonic.1.4. The product provides an application programming interface (API) for integration of third party software such as video analytics.2. The product uses a widely recognized database management system (DBMS).<ol style="list-style-type: none">2.1. The product supports customer programmer access to the database.2.2. The database must have a configurable metadata engine.3. The product provides multicast and unicast transmission.4. It must be possible to use a traditional CCTV keyboard and connect it to the control centre PC to allow full virtual matrix control without the need for PC keyboard and mouse control.5. The server and client application is Microsoft Windows compatible.		

Solicitation No. - N° de l'invitation
47733-122675/A

Amd. No. - N° de la modif.

Buyer ID - Id de l'acheteur

hn334

Client Ref. No. - N° de réf. du client
47733-122675

File No. - N° du dossier
hn33447733-122675

CCC No./N° CCC - FMS No/ N° VME

<p>PTZ Controls</p> <ol style="list-style-type: none">1. Pan-tilt-zoom function must be supported by traditional CCTV keyboard such that the PC keyboard and mouse are not required / mandatory for normal pan-tilt-zoom.2. Variable speed and direction pan-tilt-zoom control must be available using the PC mouse by dragging a directional pointer around the video pane. This includes zoom in, zoom out, focus near, focus far and multiple speed pan and tilt operations.3. The control of pan-tilt-zoom must be able to grant rights to the user with the higher user priority and enable immediate control of any pan-tilt-zoom operations where a user with lower priority attempts to take control.		
<p>Video Archiving and Retrieval</p> <ol style="list-style-type: none">1. The product supports management, distribution and storage of video surveillance data in a centralized and distributed network environment.2. The product supports multiple recording modes and formats:<ol style="list-style-type: none">2.1. Recording modes such as: Always Recording, Pre and post motion recording, and scheduled recording.2.2. The product supports video recording in multiple standard compression formats including but not limited to H.264, configured at the camera level.2.3. The product should record audio (if available) that is synchronized with the video3. The product provides automatic load balance over the network.4. The product supports internal and external storage devices, including but not limited to servers, NAS / SAN solutions.5. The product provides advanced search functions, including but not limited to time-line search, event search, and object search.6. The product provides different levels of access control at individual and user group levels7. The product provides redundancy features to ensure access to all live and archived data at all times.		

Solicitation No. - N° de l'invitation
47733-122675/A
Client Ref. No. - N° de réf. du client
47733-122675

Amd. No. - N° de la modif.
hn334
File No. - N° du dossier
hn33447733-122675

Buyer ID - Id de l'acheteur
hn334
CCC No./N° CCC - FMS No/ N° VME

<p>Alarm/Event Logging and Management</p> <ol style="list-style-type: none">1. The product provides automatic logging of Alarms and Events.2. It must be possible to program a motion zone in a audio / video camera's field of view for motion detection.3. There should be an interface to define "Events" E.g. motion or time of day etc.3.1. It should be possible to associate "actions" with "events".3.2. The product provides motion detection with adjustable sensitivity in user defined motion zones.4. Events should trigger associated alarms. The alarm should alert operator via popup display, or send e-mail or SMS messages, based on user preferences.4.1. The product provides user options to log text descriptions of Event Triggers, Actions, and Alarms.5. Alarms should be associated with user-defined actions. The product supports "multiple conditions trigger one action" or "single condition triggers multiple actions".		
<p>Scalability</p> <ol style="list-style-type: none">1. The product is upgradeable without migration to another platform.2. The sever application should be scalable, i.e. the same application should be able to support 2 or 200 cameras, without additional upgrades or purchases.3. The product supports unlimited number of motion zones, events, and alarms.		

Solicitation No. - N° de l'invitation
47733-122675/A
Client Ref. No. - N° de réf. du client
47733-122675

Amd. No. - N° de la modif.
hn334
File No. - N° du dossier
hn33447733-122675

Buyer ID - Id de l'acheteur
hn334
CCC No./N° CCC - FMS No/ N° VME

	<p>Client Workstation (Application) Requirements</p> <p>Live Viewer</p> <ol style="list-style-type: none">1. The live viewer client application should display live video from cameras connected to the server located in a remote location.2. The live viewer should:<ol style="list-style-type: none">2.1. Provide a highly intuitive Graphical User Interface (GUI).2.2. Support two languages: English and French.2.3. Provide help options to locate a function or feature.2.4. Must have the capability of displaying live video at 30 FPS and have an adjustable frame rate.2.5. Display live video at different resolutions.2.6. Provide Snap Shot function, to allow the operator to take a snap shot at any instant in time3. Provides configurable live audio functions, including but not limited to audio ON/OFF, audio synchronized with video and adjustable audio volume.<ol style="list-style-type: none">4. Live viewer software must have synchronous play back mode5. A record icon / button must be available on the live controls to allow instant recording of the audio / video from any camera6. The operator must have the ability to choose playback layouts including 2x2, 4x4 and various custom layouts;	
	<p>Archive Player</p> <ol style="list-style-type: none">1. The product provides multiple playback functions, including but not limited to play, pause, fast forward, rewind, and variable play speed functions.2. The product provides synchronized playback from multiple cameras.<ol style="list-style-type: none">2.1. The archive player should have multiple layouts to playback videos from multiple cameras e.g. It should be possible to play 2, 4, or 16 videos synchronously2.2. It should be possible to disable audio during playback.3. The product supports efficient video export functions.<ol style="list-style-type: none">3.1. The exported video should be in standard formats such as H.264, MPEG-4, AVI, or ASF.	

Solicitation No. - N° de l'invitation
47733-122675/A

Amd. No. - N° de la modif.

Buyer ID - Id de l'acheteur

hn334

Client Ref. No. - N° de réf. du client
47733-122675

File No. - N° du dossier
hn33447733-122675

CCC No./N° CCC - FMS No/ N° VME

User (Client) Management

1. The product should provide the following user authentication features:
 - 1.1. User ID and Password protection for each client connection to the server application.
 - 1.2. Automatic password expiry function.
 - 1.3. Encryption of stored Passwords.
 - 1.4. Multiple administrator and user levels.
2. There must be a capability to control who has access to the software and camera features and to audit any changes. These requirements relate to this.
 - 2.1. The proposed solution must provide at a minimum, username and password authentication consistent with the CBSA's standards for Active Directory for Windows®.
 - 2.2. The proposed solution must support role-based access control (RBAC) or group-based access control (GBAC) where privileged users can define roles or groups and can assign users to roles or groups.
 - 2.3. The proposed solution must allow the assigning of granular permissions to users, groups or roles.
 - 2.4. The proposed solution must provide the administrator the ability to define the functions and tasks that can be performed by different users, groups or roles.
 - 2.5. The proposed solution must have an audit capability that can provide a log of user actions including privileged administrator functions.
 - 2.6. Product must be able to record (audit) camera changes; modifications or product changes to an audit file that associates the changes with a user.
 - 2.7. The proposed solution must provide the capability to determine who has access to the camera images.
3. External vendors must have no access to any of the technology or technology components implemented unless explicitly authorized by the CBSA technology authority.

Technical Criteria

1. address on a paragraph by paragraph basis the Statement of Work - Annex "A", by indicating where in your bid you meet the requirement. If required, the bidder should provide additional information.
2. comply with all of the requirements of the statement of work requirement as well as all amendments to the bid solicitation issued prior to bid closing date.

1.2 Financial Evaluation

1.2.1 Mandatory Financial Criteria

All prices must be firm in Canadian dollars, Delivery Duty Paid (Emerson, MB), Goods and Services Tax or the Harmonized Sales Tax extra, transportation costs to destination and all applicable Custom Duties and Excise Taxes included.

Prices must be submitted for all items listed in the **Annex "B" - Pricing Sheet**.

2. Basis of Selection

To be declared responsive, a bid must:

- (a) comply with all the requirements of the bid solicitation; and
- (b) meet all mandatory technical evaluation criteria

Bids not meeting (a) and (b) will be declared non-responsive. The responsive bid with the lowest evaluated price will be recommended for award of a contract.

PART 5 - CERTIFICATIONS

Bidders must provide the required certifications to be awarded a contract. Canada will declare a bid non-responsive if the required certifications are not completed and submitted as requested.

Compliance with the certifications bidders provide to Canada is subject to verification by Canada during the bid evaluation period (before award of a contract) and after award of a contract. The Contracting Authority will have the right to ask for additional information to verify bidders' compliance with the certifications before award of a contract. The bid will be declared non-responsive if any certification made by the Bidder is untrue, whether made knowingly or unknowingly. Failure to comply with the certifications or to comply with the request of the Contracting Authority for additional information will also render the bid non-responsive.

1. 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 so inform the Bidder and provide the Bidder with a time frame within which to meet the requirement. Failure to comply with the request of the Contracting Authority and meet the requirement within that time period will render the bid non-responsive.

1.1 Federal Contractors Program - Certification

Federal Contractors Program - over \$25,000 and below \$200,000

Suppliers who are subject to the Federal Contractors Program (FCP) and have been declared ineligible contractors by Human Resources and Skills Development Canada (HRSDC) are no longer eligible to receive federal government contracts over the threshold for solicitation of bids as set out in the Government Contracts Regulations. Suppliers may be declared ineligible contractors either as a result of a finding of non-compliance by HRSDC, or following their voluntary withdrawal from the FCP for a reason other than the reduction of their workforce to less than 100 employees. Any bids from ineligible contractors, including a bid from a joint venture that has a member who is an ineligible contractor, will be declared non-responsive.

The Bidder, or, if the Bidder is a joint venture the member of the joint venture, certifies its status with the FCP, as follows:

The Bidder or the member of the joint venture

-
- (a) is not subject to the FCP, having a workforce of less than 100 full-time or part-time permanent employees, and/or temporary employees having worked 12 weeks or more in Canada;
- (b) is not subject to the FCP, being a regulated employer under the Employment Equity Act, S.C. 1995, c. 44;
- (c) is subject to the requirements of the FCP, having a workforce of 100 or more full-time or part-time permanent employees, and/or temporary employees having worked 12 weeks or more in Canada, but has not previously obtained a certificate number from HRSDC, having not bid on requirements of \$200,000 or more;
- (d) has not been declared an ineligible contractor by HRSDC, and has a valid certificate number as follows: _____.

Further information on the FCP is available on the HRSDC Web site.

Signature

Date

Solicitation No. - N° de l'invitation

47733-122675/A

Amd. No. - N° de la modif.

File No. - N° du dossier

hn33447733-122675

Buyer ID - Id de l'acheteur

hn334

CCC No./N° CCC - FMS No/ N° VME

47733-122675

2. Certifications Required with the Bid

Bidders must submit the following duly completed certifications as part of their bid.

2.1 Service Response Time

The bidder certifies that it has the ability to respond to service requests from the Crown within a maximum of six (6) hours. Bidders must verify that multiple service response technicians will be available to meet such requests, and that all service technicians have completed certification on the proposed Manufacturer's equipment.

Signature

Date

PART 6 - SECURITY AND FINANCIAL REQUIREMENTS

1. Security Requirement

a. Before award of a contract, the following conditions must be met:

- (a) the Bidder must hold a valid organization security clearance as indicated in Part 7 - Resulting Contract Clauses;
- (b) the Bidder's proposed individuals requiring access to classified or protected information, assets or sensitive work site(s) must meet the security requirement as indicated in Part 7 - Resulting Contract Clauses;
- (c) the Bidder must provide the name of all individuals who will require access to classified or protected information, assets or sensitive work sites.

b. Canada will not delay the award of any contract to allow bidders to obtain the required clearance.

c. For additional information on security requirements, bidders should consult the "Security Requirements for PWGSC Bid Solicitations - Instructions for Bidders" document on the Departmental Standard Procurement Documents Web site.

2. Financial Capability

SACC Manual clause A9033T (30/11/2007) Financial Capability

PART 7 - RESULTING CONTRACT CLAUSES

The following clauses and conditions apply to and form part of any contract resulting from the bid solicitation.

1. Statement of Work

The scope of work includes supplying and installing a complete and fully operational, high quality Audio Video Monitoring System (AVMS), which includes Cameras, Video Control Software and a Storage Server at the Emerson, MB Port of Entry.

1.1 Additional Work

The Design Authority may, at any time before issuing the final acceptance notice, order work or material in addition to that provided for in the Statement of Work. The contractor will perform the work in accordance with such orders, deletions and changes and on the same terms and conditions contained and referenced herein.

SACC Manual Clauses

SACC Reference	Section	Date
B5007C	Procedures for Design Change or Additional Work	11/01/10

2. 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 issued by Public Works and Government Services Canada.

2.1 General Conditions

2030 (2010/01/11), General Conditions - Higher Complexity - Goods, apply to and form part of the Contract.

2.2 Supplemental General Conditions

4001 (12/05/08) Hardware Purchase or Lease, apply to and form part of the Contract.

4003 (12/05/08) Licensed Software, apply to and form part of the Contract.

2.3 SACC Manual Clauses

SACC Reference	Section	Date
B1501C	Electrical Equipment	16/06/06
A9068C	Site Regulations	25/05/07

3. Security Requirement for Canadian Supplier

Contractor personnel **may not enter nor perform work on** sites where **protected** or **classified** information or assets are kept, without an escort provided by the department or agency for which the work is being performed.

1. The Contractor must, at all times during the performance of the Contract, hold a valid Designated Organization Screening (DOS), issued by the Canadian Industrial Security Directorate (CISD), Public Works and Government Services Canada (PWGSC).
2. The Contractor personnel requiring access to PROTECTED information, assets or sensitive work site(s) must EACH hold a valid RELIABILITY STATUS, granted or approved by CISD/PWGSC. Until the security screening of the Contractor personnel required by this Contract has been completed satisfactorily by the CISD, PWGSC, the Contractor personnel **MAY NOT HAVE ACCESS** to PROTECTED information or assets, and **MAY NOT ENTER** sites where such information or assets are kept, without an escort.
3. The Contractor **MUST NOT** remove any PROTECTED information or assets from the identified work site(s), and the Contractor must ensure that its personnel are made aware of and comply with this restriction.
4. Subcontracts which contain security requirements are NOT to be awarded without the prior written permission of CISD/PWGSC.
5. The Contractor must comply with the provisions of the:
 - (a) Security Requirements Check List, attached at Annex "C";
 - (b) Industrial Security Manual (Latest Edition).

4. Term of Contract

4.1 Period of Contract

The system design, the delivery of all related equipment, the completion of all installation, testing and contract related work is to be completed on or before August 31st 2012.

Date of delivery will be of the essence of any resulting contract. Your attention is drawn to article 10 of General Conditions, 2030.

4.2 Shipping Instructions - Delivery at Destination

1. Shipment shall be consigned to the destination specified herein and DDP Delivered Duty Paid (Emerson, MB) Incoterms 2000 for shipments from a commercial supplier.

4.3 Inspection and Acceptance

All reports, deliverable items, documents, goods and all services rendered under the Contract are subject to inspection. Inspection and acceptance will be accomplished by the project authority or the authorized representative at destination.

- (a) The Contractor will be required to present the work, for final acceptance, when such work has been designed, manufactured, delivered to site and installed and has successfully passed all tests in strict accordance with the specification and terms and conditions, and the Contractor has performed all other work and complied with all the terms and conditions of the contract.

Should any report, document, good or service not be in accordance with the requirements of the Statement of Work and to the satisfaction of the Inspection Authority, as submitted, the Inspection Authority will have the right to reject it or require its correction at the sole expense of the Contractor.

Final Inspection and acceptance will take place at destination when all goods are delivered/services rendered, and after all deficiencies identified by the Project Authority or the authorized representative are rectified and accepted.

- (b) Upon verification of the above, the Project Authority will by written notice to the Contractor so acknowledge, and such notice will constitute final acceptance.

5. Authorities

5.1 Contracting Authority

The Contracting Authority for the Contract is:

Michael McLaughlin
 Public Works and Government Services Canada
 Acquisitions Branch
 Logistics, Electrical, Fuel & Transportation Directorate - HN Division
 Place du Portage Phase III - 7B3,
 11 Laurier St., Gatineau (Qc), K1A 0S5

Telephone: 819.956.3622
 Facsimile: 819-953-4494
 E-mail address: michael.mclaughlin@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.

5.2 Project Authority

The Project Authority for the Contract is:

Name: will be inserted at contract award
 Title: will be inserted at contract award
 Organization: will be inserted at contract award
 Address: will be inserted at contract award

Telephone: ____-____-_____
 Facsimile: ____-____-_____
 E-mail address: _____

The Project 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 Project Authority; however, the Project Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

Solicitation No. - N° de l'invitation
47733-122675/A

Amd. No. - N° de la modif.

Buyer ID - Id de l'acheteur

Client Ref. No. - N° de réf. du client
47733-122675

File No. - N° du dossier
hn33447733-122675

hn334

CCC No./N° CCC - FMS No/ N° VME

5.3 Contractor Contacts

Name and telephone number of the person responsible for :

General enquiries

Name: will be inserted at contract award
Telephone No. will be inserted at contract award
Facsimile No. will be inserted at contract award
E-mail address: will be inserted at contract award

Delivery follow-up

Name: will be inserted at contract award
Telephone No will be inserted at contract award
Facsimile No. will be inserted at contract award
E-mail address: will be inserted at contract award

6. Payment

6.1 Basis of Payment

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a firm lot price in Canadian dollars, as specified in Annex "B". Freight charges to destination, all customs duties and excise taxes are included, while Goods and Services Tax (GST) or Harmonized Sales Tax (HST) is extra, if applicable.

6.2 Limitation of Price

SACC Manual clause C6000C (2007/05/25) Limitation of Price

6.3 SACC Manual Clauses

SACC Reference	Section	Date
A9117C	T1204 - Direct Request by Customer Department	11/30/07
C4001C	Travel and Living Expenses	01/11/10

The Contractor will be reimbursed for the authorized travel and living expenses reasonably and properly incurred in the performance of the Work, at cost, in accordance with the National Joint Council's Travel Directive (Appendices B, C and D; other provisions referencing 'travellers' rather than 'employees'). No allowance will be given for profit and/or administrative overhead. All payments are subject to government audit.

<http://www.njc-cnm.gc.ca/directive/travel-voyage/index-eng.php>

6.4 Method of Payment - Milestone Payments

Canada will make milestone payments in accordance with the Schedule of Milestones detailed in the Contract and the payment provisions of the Contract if:

- (a) an accurate and complete claim for payment using PWGSC-TPSGC 1111, Claim for Progress Payment, and any other document required by the Contract have been submitted in accordance with the invoicing instructions provided in the Contract;
- (b) all the certificates appearing on form PWGSC-TPSGC 1111 have been signed by the respective authorized representatives;
- (c) all work associated with the milestone and as applicable any deliverable required has been completed and accepted by Canada.

The schedule of milestones for which payments will be made in accordance with the Contract is as follows:

Milestone No.	Description/Deliverable	Payment
1	System Design, Equipment Delivery, Relative Documentations, Installation and Testing costs (including related travel and living expenses)	80% (less 10% holdback)
2	On-site training (including related travel and living expenses) and manuals	20% (less 10% holdback)
3	Demonstrated as operable and uninterrupted for a minimum of (14) fourteen calendar days prior to final delivery, acceptance and release of the 10% holdback payment.	Final 10% holdback

7. Invoicing Instructions

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

Each invoice must be supported by:

- (a) a copy of time sheets to support the time claimed;
- (b) a copy of the invoices, receipts, vouchers for all direct expenses, and all travel and living expenses.

2. Invoices must be distributed as follows:

- (a) The original and one (1) copy must be forwarded to the address shown on page 1 of the Contract for certification and payment.
- (b) One (1) copy must be forwarded to the Contracting Authority identified under the section entitled "Authorities" of the Contract.

8. 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 term of the Contract. 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, pursuant to the default provision of the Contract, to terminate the Contract for default.

9. Applicable Laws

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

10. Priority of Documents

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

- (a) the Articles of Agreement;
- (b) the general conditions 2030 (2010/01/11);
- (c) the supplemental General Conditions 4001 (2010/01/11) Hardware Purchase, Lease and Maintenance
- (d) the supplemental General Conditions 4003 (2010/01/11) Licensed Software
- (e) Annex A, Statement of Work (SOW);
- (f) Annex B, Basis of Payment;
- (g) Annex C, Security Requirements Check List
- (h) the Contractor's bid dated _____ (date of bid), as clarified/ as amended on _____.

11. Electrical Equipment

All electrical equipment supplied under the Contract must be certified or approved for use in accordance with the Canadian Electrical Code, Part 1, before delivery, by a certification organization accredited by the Standards Council of Canada.

12. Insurance

The Contractor is responsible for deciding if insurance coverage is necessary to fulfill its obligation under the Contract and to ensure compliance with any applicable law. Any insurance acquired or maintained by the Contractor is at its own expense and for its own benefit and protection. It does not release the Contractor from or reduce its liability under the Contract.

13. Disclosure of Information

The Contractor will keep confidential and will not publish or otherwise reuse, release, disclose or make available to any third party any Background or Foreground Information concerning **site drawings and manuals**, except as may be necessary to carry out the work under the Contract in which case the Contractor will impose the same obligation of confidentiality on any person to whom the information is disclosed.

ANNEX "A"

Statement of Technical Requirements

SECTION 1 - Audio Video Monitoring System

Objective

Supply components and upgrade an Audio-Video Monitoring System at the Emerson, MB, Port of Entry.

Background

The Canada Border Services Agency (CBSA) is currently upgrading the Emerson, MB, Port of Entry AVMS system. Coverage of the facility required is indicated in order to enhance the health and safety of employees. An audio-video monitoring system will be procured and installed in all these operational areas not covered by the current AVMS system.

Scope

The work consists of supplying and installing a complete and fully operational, high quality Audio Video Monitoring System (AVMS), which includes Cameras, Video Management Software and a Storage Server in the new Emerson, MB, Port of Entry by March 31st, 2012

Tasks

1. Provide and install a functional system in compliance with each specific manufacturer's installation guidelines, whether or not all required parts, components, systems, software or accessories are specified in the project's documents.
2. The Contractor shall provide knowledge, labour, materials, scissor lifts, tools, equipment and services to install new equipment, devices and components required for a complete and operational AVMS.
3. Installation, connection, programming and verification of all new devices in accordance with CBSA's technical and operational requirements.
4. The AVMS must meet or exceed all criteria and specifications as stated in the Section 2 - Mandatory Technical Statement of Requirements.
 5. Seventeen (17) cameras must be supplied and installed in the work areas indicated in Section 3 - Component/Hardware Distribution Diagram. Five (5) cameras shall replace existing legacy analog cameras. All cameras must be in accordance to Tables 1-6 of Section 2 - Mandatory Technical Statement of Requirements.
 - 5.1. Cameras located in detention cells must be housed in heavy duty, vandal resistant and tamper proof enclosures that mount flush to the wall and ceiling. Enclosures cannot provide a hanging point.
 6. Each of the following locations must be equipped with a 24" widescreen flat panel computer monitor mounted on the wall with hardware that allows the monitor to tilt and swivel:
 - 1) Counter at Traveller's Building

-
7. Each of the following locations must be equipped with a PC, controller/joystick to operate PTZ cameras, and an uninterruptible power supply (UPS) that provides a minimum of 60 minutes of power and surge protection:

7.1. Chief's Office in the Traveller's Building

Storage Server

8. A storage server(s) must be supplied and installed.
- 8.1. The storage server(s) must be in accordance to Table 7 of Section 2 - Mandatory Technical Statement of Requirements: Storage Server Requirements
- 8.2. The supplied storage server(s) must meet the specifications recommended by the video management software supplier to ensure optimal performance for 17 cameras.
- 8.3. The storage server(s) must be placed in a locked metallic rack that meets CBSA security standards and contains an air conditioning unit to control the temperature.

Network, Wiring, and Cabling

9. All cabling to connect network devices (computers, IP cameras, PoE Switches, etc.) must be CAT-6.
10. All inter-switch (building to building) cabling will be fiber optic cable that provides the best network performance and allows for system expansion as needed.
11. Contractor must supply all equipment related to fiber optic connectivity.
12. The supply and installation of the required cabling, including low voltage power cable where required and electrical source to all designated equipment must be completed by the contractor.
13. All exposed cabling must be contained within conduit and electrical junction boxes to be installed by the contractor. Conduits that are in place may be used.
14. The network must be optimized to provide high quality, smooth, clear video images to the server and monitoring stations.
15. Switches must be supplied in the following locations: one in each of the Traveller building and the Commercial building. All switches must be accompanied by a UPS that provides a minimum of 60 minutes of power backup and surge protection. All switches must be Gigabit speed.

Video Management Software

16. The AVMS must be equipped with a video management software to view and playback archived audio and video in accordance with Technical Statement of Requirements Section 2.4
17. All seventeen (17) cameras installed as outlined in clause 5 of Section 1 must be connected to the supplied video management software.

Training

18. Up to three (3) one-day training sessions must be provided at the Emerson, MB Port of Entry using the installed AVMS within one month after the installation and acceptance of the completed system or as required by site users.
19. The training must be certified by the company in compliance with their training of operation.

-
20. User and training documentation must be specific to each target audience (super users and regular users) and must provide functional descriptions for each component.
 21. Training must be provided at customer site(s). It will take place during week-days, between 8am and 5pm. The contractor must contact CBSA to establish a training schedule prior to the training sessions.
 22. Training sessions must:
 - 22.1. Be computer based training;
 - 22.2. Have classroom instruction and hands-on training provided.
 - 22.3. Be customized to meet customer requirements specific to each target audience.
 23. Training documentation must be available to all trainees in both English and French.
 24. CBSA will provide the training facilities, computers, and projector required for the training sessions.

Deliverables

25. At project closeout, Contractor will provide hard and soft copy Operations and Maintenance (O & M) Manuals for each system provided under this contract. This includes data for each type of product and features and operating sequences, both automatic and manual.
26. The manuals must include the address and telephone number of the Contractor with emergency service contact information.
27. The operational manual will include all manufacturer recommended equipment maintenance requirements, with a complete description of all maintenance procedures required on all installed equipment including time intervals (hour usage), required inspection, periodic maintenance, fault diagnosis and repair/replacement of parts/components.
28. Installation guide, system documentation, system structure and setup information must be made available to the CBSA.
29. System operation must be made available to the CBSA.
30. User documentation clearly defines procedures for all processes.
31. Documentation can be copied and distributed within the CBSA without restriction.
32. All documentation shall be available in English and French.
33. The Contractor will provide a written warranty statement detailing each manufacturer's hardware and software warranties. The written warranty is to cover all system components. The written warranty is to describe, in detail, the warranty policy for each equipment manufacturer.
34. Testing verification report in accordance with paragraph 16, Compliance verification testing.
35. All documentation and training material provided (hard and soft copy) must be created using the Microsoft Suite of Products.

Maintenance

36. The service provider must provide a 24/7 contact in the event of failure or support.
37. The service supplier must have a certified technician available 24/7 for maintenance in the event of system or component failure.
38. The service provider must have a response time of 6 hours or less for a technician or a preauthorized subcontractor to be on-site in the event of system or component failure.

-
39. The service provider must repair and return the replaced defective part within fifteen (15) calendar days.

Constraints

40. The Contractor must adhere to CBSA requirements for the installation of audio/video, network and power cabling infrastructure.
41. The contractor must provide knowledge, labour, materials, tools, equipment and services to install equipment, devices and components required for a complete operational audio/video system.
42. The contracting authority will be responsible to organize a mandatory site visit prior to submitting proposals
43. CBSA security restrictions require that all system updates be installed on site using a Compact Disc and not using the internet.

Compliance Verification Testing

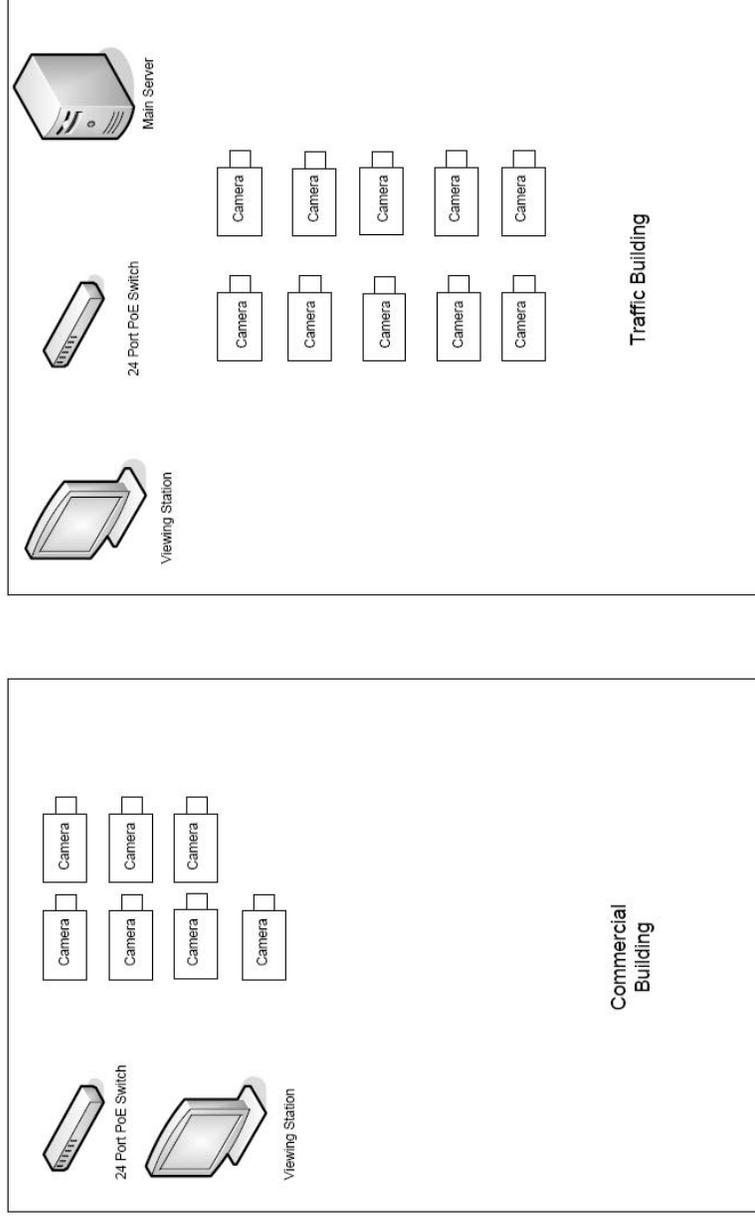
44. The Contractor must perform compliance verification tests with the project authority, prior to final delivery and acceptance of the system. The Contractor must provide personnel, equipment, instruments and other supplies to perform the test. The compliance test shall demonstrate that the installed AVMS components function and comply with the project technical expectation and specifications.
45. All camera location input points must be recorded singly (camera cabling direct to site storage media) both at night and day for a minimum of two (2) minutes each.
46. All physical and functional system requirements must be demonstrated as operable.
47. The contractor will record each component's serial number, manufacturer name with complete model number, and IP address (where applicable), and submit a typed list along with the testing verification report.
48. Camera positioning and performance are to CBSA's satisfaction.

Solicitation No. - N° de l'invitation
47733-122675/A
Client Ref. No. - N° de réf. du client
47733-122675

Amd. No. - N° de la modif.
hn334
File No. - N° du dossier
hn33447733-122675

Buyer ID - Id de l'acheteur
hn334
CCC No./N° CCC - FMS No/ N° VME

Component/Hardware Distribution Diagram



Emerson AVMS System
(Buildings should be linked by fibre)

Solicitation No. - N° de l'invitation
47504-120064/A

Amd. No. - N° de la modif.

Buyer ID - Id de l'acheteur
hn334

Client Ref. No. - N° de réf. du client
1000300064

File No. - N° du dossier
hn33447504-120064

CCC No./N° CCC - FMS No/ N° VME

ANNEX "B"
BASIS OF PRICING

All prices must be firm, in Canadian dollars, Delivery Duty Paid (Emerosn, MB). Goods and Services Tax (GST) or Harmonized Sales Tax (HST) is extra while transportation costs to destination and all applicable custom duties and excise taxes are included, if applicable.

Reference Part 3, Section IV - 1.2 Basis of Pricing of this RFP for details.

Firm Lot Price

1.2.1 Design & All Related Equipment \$ _____
1.2.2 Installation and Testing Cost (travel & living excluded) \$ _____
1.2.3 Travel & Living Expenses (training excluded)* \$ _____

* Travelling required? YES / NO

* Number of people? _____

* Number of days? _____

1.2.4 On-site training including related travel and living expenses \$ _____

1.2.5 Documentation \$ _____
1. Drawings: \$ _____
2. Operation and Maintenance Manuals and other technical documentations: \$ _____

TOTAL FINANCIAL VALUE:

Firm Hourly Rates

Emergency Installation and testing cost

1) *Labor category 1*

2) *Labor category 2 (if applicable)*

3) *Labor category 3 (if applicable)*

4) *If applicable*

	Normal Hours	Outside Normal Hours
1) <i>Labor category 1</i>	_____ / hr	_____ / hr
2) <i>Labor category 2 (if applicable)</i>	_____ / hr	_____ / hr
3) <i>Labor category 3 (if applicable)</i>	_____ / hr	_____ / hr
4) <i>If applicable</i>	_____ / hr	_____ / hr

Solicitation No. - N° de l'invitation

47504-120064/A

Amd. No. - N° de la modif.

File No. - N° du dossier

hn33447504-120064

Buyer ID - Id de l'acheteur

hn334

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

1000300064

CCC No./N° CCC - FMS No/ N° VME

ANNEX "C"
SECURITY REQUIREMENTS CHECK LIST

(see attached pdf.)



Government of Canada

Gouvernement du Canada

Contract Number / Numéro du contrat 1000302675
Security Classification / Classification de sécurité unclassified

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

PART A - CONTRACT INFORMATION / PARTIE A - INFORMATION CONTRACTUELLE

1. Originating Government Department or Organization / Ministère ou organisme gouvernemental d'origine Canada Border Services Agency	2. Branch or Directorate / Direction générale ou Direction Southern Manitoba District
---	---

3. a) Subcontract Number / Numéro du contrat de sous-traitance	3. b) Name and Address of Subcontractor / Nom et adresse du sous-traitant
--	---

4. Brief Description of Work / Brève description du travail
CCTV Upgrade at the port of Emerson, MB: Supply and install CCTV equipment, configuration of equipment, testing of equipment, and provide training to staff at Emerson.

5. a) Will the supplier require access to Controlled Goods?
Le fournisseur aura-t-il accès à des marchandises contrôlées? No / Non 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? No / Non 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.) No / Non 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. No / Non 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 sans entreposage de nuit? No / Non 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: Specify country(ies): / Préciser le(s) pays: <input type="checkbox"/>	Restricted to: / Limité à: Specify country(ies): / Préciser le(s) pays: <input type="checkbox"/>	Restricted to: / Limité à: Specify country(ies): / Préciser le(s) pays: <input type="checkbox"/>

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 / CONFIDENTIEL <input type="checkbox"/>	NATO SECRET / NATO SECRET <input type="checkbox"/>	CONFIDENTIAL / CONFIDENTIEL <input type="checkbox"/>
SECRET / SECRET <input type="checkbox"/>	COSMIC 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"/>



Contract Number / Numéro du contrat 1000302675
Security Classification / Classification de sécurité unclassified

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?
If Yes, indicate the level of sensitivity:
Dans l'affirmative, indiquer le niveau de sensibilité :

No / Non Yes / Oui

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 / Non Yes / 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

<input checked="" type="checkbox"/> RELIABILITY STATUS COTE DE FIABILITÉ	<input type="checkbox"/> CONFIDENTIAL CONFIDENTIEL	<input type="checkbox"/> SECRET SECRET	<input type="checkbox"/> TOP SECRET TRÈS SECRET
<input type="checkbox"/> TOP SECRET- SIGINT TRÈS SECRET - SIGINT	<input type="checkbox"/> NATO CONFIDENTIAL NATO CONFIDENTIEL	<input type="checkbox"/> NATO SECRET NATO SECRET	<input type="checkbox"/> COSMIC TOP SECRET COSMIC TRÈS SECRET
<input type="checkbox"/> SITE ACCESS ACCÈS AUX EMBLEMES			

Special comments:
Commentaires spéciaux : Contractor to be escorted for any required access to CBSA space by Sup't or BSO's.

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?
If Yes, will unscreened personnel be escorted?
Dans l'affirmative, le personnel en question sera-t-il escorté?

No / Non Yes / 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 / Non Yes / 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 / Non Yes / 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 / Non Yes / 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 / Non Yes / 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 / Non Yes / Oui



Contract Number / Numéro du contrat 1000302675
Security Classification / Classification de sécurité unclassified

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	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
IT Media / Support TI	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
IT Link / Lien électronique	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

12. a) Is the description of the work contained within this SRCL PROTECTED and/or CLASSIFIED? No Yes
 La description du travail visé par la présente LVERS est-elle de nature PROTÉGÉE et/ou CLASSIFIÉE? Non 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? No Yes
 La documentation associée à la présente LVERS sera-t-elle PROTÉGÉE et/ou CLASSIFIÉE? Non 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).



Contract Number / Numéro du contrat 1000.302.675
Security Classification / Classification de sécurité unclassified

PART D - AUTHORIZATION / PARTIE D - AUTORISATION

13. Organization Project Authority / Chargé de projet de l'organisme			
Name (print) - Nom (en lettres moulées) Blair Downey		Title - Titre Chief of Operations	Signature <i>[Signature]</i>
Telephone No. - N° de téléphone 204-373-2633	Facsimile No. - N° de télécopieur 204-373-2774	E-mail address - Adresse courriel blair.downey@cbsa-asfc.gc.ca	Date 11/12/25
14. Organization Security Authority / Responsable de la sécurité de l'organisme			
Name (print) - Nom (en lettres moulées) Kim Spence		Title - Titre A/Manager, Security	Signature <i>[Signature]</i>
Telephone No. - N° de téléphone (204) 984-6522	Facsimile No. - N° de télécopieur (204) 984-3114	E-mail address - Adresse courriel kimberly.spence@cbsa-asfc.gc.ca	Date 09 June 2011
15. Are there additional instructions (e.g. Security Guide, Security Classification Guide) attached? Des instructions supplémentaires (p. ex. Guide de sécurité, Guide de classification de la sécurité) sont-elles jointes?			
			<input type="checkbox"/> No / <input type="checkbox"/> Yes <input type="checkbox"/> Non / <input type="checkbox"/> Oui
16. Procurement Officer / Agent d'approvisionnement			
Name (print) - Nom (en lettres moulées) Lisa Tully		Title - Titre Procurement Officer	Signature
Telephone No. - N° de téléphone (204)983-4431	Facsimile No. - N° de télécopieur (204)984-4229	E-mail address - Adresse courriel lisa.tully@cbsa-asfc.gc.ca	Date 09 June 2011
17. Contracting Security Authority / Autorité contractante en matière de sécurité			
Name (print) - Nom (en lettres moulées)		Title - Titre	Signature
Telephone No. - N° de téléphone	Facsimile No. - N° de télécopieur	E-mail address - Adresse courriel	Date

ANNEX A

Statement of Technical Requirements

SECTION 1 - Audio Video Monitoring System

Objective

Supply components and upgrade an Audio-Video Monitoring System at the Emerson, MB, Port of Entry.

Background

The Canada Border Services Agency (CBSA) is currently upgrading the Emerson, MB, Port of Entry AVMS system. Coverage of the facility required is indicated in order to enhance the health and safety of employees. An audio-video monitoring system will be procured and installed in all these operational areas not covered by the current AVMS system.

Scope

The work consists of supplying and installing a complete and fully operational, high quality Audio Video Monitoring System (AVMS), which includes Cameras, Video Management Software and a Storage Server in the new Emerson, MB, Port of Entry by March 31st, 2012

Tasks

1. Provide and install a functional system in compliance with each specific manufacturer's installation guidelines, whether or not all required parts, components, systems, software or accessories are specified in the project's documents.
2. The Contractor shall provide knowledge, labour, materials, scissor lifts, tools, equipment and services to install new equipment, devices and components required for a complete and operational AVMS.
3. Installation, connection, programming and verification of all new devices in accordance with CBSA's technical and operational requirements.
4. The AVMS must meet or exceed all criteria and specifications as stated in the Section 2 - Mandatory Technical Statement of Requirements.
5. Seventeen (17) cameras must be supplied and installed in the work areas indicated in Section 3 - Component/Hardware Distribution Diagram. Five (5) cameras shall replace existing legacy analog cameras. All cameras must be in accordance to Tables 1-6 of Section 2 - Mandatory Technical Statement of Requirements.
 - 5.1. Cameras located in detention cells must be housed in heavy duty, vandal resistant and tamper proof enclosures that mount flush to the wall and ceiling. Enclosures cannot provide a hanging point.
6. Each of the following locations must be equipped with a 24" widescreen flat panel computer monitor mounted on the wall with hardware that allows the monitor to tilt and swivel:
 - 1) Counter at Traveller's Building

7. [1] Each of the following locations must be equipped with a PC, controller/joystick to operate PTZ cameras, and an uninterruptible power supply (UPS) that provides a minimum of 60 minutes of power and surge protection:

- 7.1. Chief's Office in the Traveller's Building

[2]

Storage Server

8. A storage server(s) must be supplied and installed.
 - 8.1. The storage server(s) must be in accordance to Table 7 of Section 2 - Mandatory Technical Statement of Requirements: Storage Server Requirements
 - 8.2. The supplied storage server(s) must meet the specifications recommended by the video management software supplier to ensure optimal performance for 17 cameras.
 - 8.3. The storage server(s) must be placed in a locked metallic rack that meets CBSA security standards and contains an air conditioning unit to control the temperature.

Network, Wiring, and Cabling

9. All cabling to connect network devices (computers, IP cameras, PoE Switches, etc.) must be CAT-6.
10. All inter-switch (building to building) cabling will be fiber optic cable that provides the best network performance and allows for system expansion as needed.
11. Contractor must supply all equipment related to fiber optic connectivity.
12. The supply and installation of the required cabling, including low voltage power cable where required and electrical source to all designated equipment must be completed by the contractor.
13. All exposed cabling must be contained within conduit and electrical junction boxes to be installed by the contractor. Conduits that are in place may be used.
14. The network must be optimized to provide high quality, smooth, clear video images to the server and monitoring stations.
15. Switches must be supplied in the following locations: one in each of the Traveller building and the Commercial building. All switches must be accompanied by a UPS that provides a minimum of 60 minutes of power backup and surge protection. All switches must be Gigabit speed.

Video Management Software

16. The AVMS must be equipped with a video management software to view and playback archived audio and video in accordance with Technical Statement of Requirements Section 2.4
17. All seventeen (17) cameras installed as outlined in clause 5 of Section 1 must be connected to the supplied video management software.

Training

18. Up to three (3) one-day training sessions must be provided at the Emerson, MB Port of Entry using the installed AVMS within one month after the installation and acceptance of the completed system or as required by site users.
19. The training must be certified by the company in compliance with their training of operation.

20. User and training documentation must be specific to each target audience (super users and regular users) and must provide functional descriptions for each component.
21. Training must be provided at customer site(s). It will take place during week-days, between 8am and 5pm. The contractor must contact CBSA to establish a training schedule prior to the training sessions.
22. Training sessions must:
 - 22.1. Be computer based training;
 - 22.2. Have classroom instruction and hands-on training provided.
 - 22.3. Be customized to meet customer requirements specific to each target audience.
23. Training documentation must be available to all trainees in both English and French.
24. CBSA will provide the training facilities, computers, and projector required for the training sessions.

Deliverables

25. At project closeout, Contractor will provide hard and soft copy Operations and Maintenance (O & M) Manuals for each system provided under this contract. This includes data for each type of product and features and operating sequences, both automatic and manual.
26. The manuals must include the address and telephone number of the Contractor with emergency service contact information.
27. The operational manual will include all manufacturer recommended equipment maintenance requirements, with a complete description of all maintenance procedures required on all installed equipment including time intervals (hour usage), required inspection, periodic maintenance, fault diagnosis and repair/replacement of parts/components.
28. Installation guide, system documentation, system structure and setup information must be made available to the CBSA.
29. System operation must be made available to the CBSA.
30. User documentation clearly defines procedures for all processes.
31. Documentation can be copied and distributed within the CBSA without restriction.
32. All documentation shall be available in English and French.
33. The Contractor will provide a written warranty statement detailing each manufacturer's hardware and software warranties. The written warranty is to cover all system components. The written warranty is to describe, in detail, the warranty policy for each equipment manufacturer.
34. Testing verification report in accordance with paragraph 16, Compliance verification testing.
35. All documentation and training material provided (hard and soft copy) must be created using the Microsoft Suite of Products.

Maintenance

36. The service provider must provide a 24/7 contact in the event of failure or support.
37. The service supplier must have a certified technician available 24/7 for maintenance in the event of system or component failure.

38. The service provider must have a response time of 6 hours or less for a technician or a preauthorized subcontractor to be on-site in the event of system or component failure.
39. The service provider must repair and return the replaced defective part within fifteen (15) calendar days.

Constraints

40. The Contractor must adhere to CBSA requirements for the installation of audio/video, network and power cabling infrastructure.
41. The contractor must provide knowledge, labour, materials, tools, equipment and services to install equipment, devices and components required for a complete operational audio/video system.
42. The contracting authority will be responsible to organize a mandatory site visit prior to submitting proposals
43. CBSA security restrictions require that all system updates be installed on site using a Compact Disc and not using the internet.

Compliance Verification Testing

44. The Contractor must perform compliance verification tests with the project authority, prior to final delivery and acceptance of the system. The Contractor must provide personnel, equipment, instruments and other supplies to perform the test. The compliance test shall demonstrate that the installed AVMS components function and comply with the project technical expectation and specifications.
45. All camera location input points must be recorded singly (camera cabling direct to site storage media) both at night and day for a minimum of two (2) minutes each.
46. All physical and functional system requirements must be demonstrated as operable.
47. The contractor will record each component's serial number, manufacturer name with complete model number, and IP address (where applicable), and submit a typed list along with the testing verification report.
48. Camera positioning and performance are to CBSA's satisfaction.

Section 2: Mandatory Technical Statement of Requirements (TSoR)

Section 2.1 Cameras

Table 1: General Camera Requirements for ALL Cameras

Criteria	Weight
1. Open Architecture – Camera must provide an application programming interface (API) for system integration: 1.1. <u>Direct access</u> to video stream using a URL. 1.2. Software development kit (SDK) to control, and change camera settings remotely. It must be possible to change all of the following settings remotely: Resolution, Video Compression, Network settings, Frame rate.	MUST
2. Video – Camera must support the following video settings: 2.1. Multiple compression formats, not limited to, but supporting MJPEG and H.264 at minimum required resolution. 2.2. Resolution and frame rate must be controllable for each stream, and camera must support at least dual stream video and support simultaneous streaming of different formats.	MUST
3. Power – Camera must be Power over Ethernet compatible. Camera may have additional power sources (i.e. High POE) for cooling or heating units.	MUST
4. Exposure Settings – Must be configurable for different lighting conditions such as shutter speed, and exposure.	MUST
5. Environment Enclosure - All cameras must be contained in a housing and securely mounted - All outdoor cameras and enclosures must have an operating range of – 40° C to + 50° C, resistance to humidity changes and ice. Outdoor camera assemblies must have an Ingress Protection (IP) rating of IP65 or greater	MUST

Table 2: Requirements for Fixed Indoor Camera

Criteria	Weight
1. Resolution - Camera must have at least 1 Megapixel image resolution.	MUST
2. Lens/Focus/Zoom - Camera must have auto focus or auto back focus. The lens used must provide at least an 80 degree horizontal field of view.	MUST
3. Frames Per Second (FPS) – Camera must support at least 12 frames per second at the minimum resolution specified above.	MUST

Table 3: Requirements for Fixed Outdoor Cameras

Criteria	Weight
1. Resolution - Camera must have at least 1 Megapixel image resolution	MUST
2. Night capability - The camera must be a true Day/Night camera with a mechanical IR cut filter.	MUST
3. Lens/Focus/Zoom – Camera must support digital zoom and the lens must support at least 2.5X optical zoom. Must have auto focus or auto back focus. Must provide at least a 50 degree horizontal field of view.	MUST
4. Frames Per Second (FPS) – Camera must support at least 12 frames per second at the minimum resolution specified above.	MUST
5. Audio – Camera must have at least one audio input port that uses a standard 3.5mm plug, so that a microphone may be connected to the camera to receive audio..	MUST

Table 4: Requirements for Fixed Outdoor Cameras (Wide Angle)

Criteria	Weight
1. Resolution - Camera must have at least 3 Megapixel image resolution	MUST
2. Night capability - The camera must be a true Day/Night camera with a mechanical IR cut filter.	MUST
3. Lens/Focus/Zoom - Camera must be compatible with CS mount lenses. Must have auto focus or auto back focus. The lens used must provide at least an 84 degree horizontal field of view.	MUST
4. Frames Per Second (FPS) – Camera must support at least 12 frames per second at the minimum resolution specified above.	MUST
5. Wide Dynamic Range – Camera must support wide dynamic range for bright or backlit scenes.	MUST

Table 5: PTZ Outdoor Camera

Criteria	Weight
1. PTZ – Camera must be a Pan-Tilt-Zoom (PTZ) camera. This means that the camera can be made to move left and right, move up and down and zoom in and out.	MUST
2. Resolution - Camera must have at least High-definition television (HDTV) 720p image resolution.	MUST
3. Night capability - The camera must be a true Day/Night camera with a mechanical IR cut filter.	MUST
4. Lens/Focus/Zoom - The camera must support digital zoom and the lens support at least 18X optical zoom. Must have auto focus or auto back focus. Must provide at least a 45 horizontal degree field of view.	MUST
5. Range of Motion – Must have a pan range of at least 350 degrees. Must have a tilt range of 180 degrees.	MUST
6. Frames Per Second (FPS) – Camera must support at least 12 frames per second at the minimum resolution specified above.	MUST

Table 6. Camera Quantities and Types Required

Camera #	Camera Type	Location	Specification (Refer to Table # above)
1	PTZ Outdoor	Traffic Building Outdoor	1,5
2	Fixed Outdoor Wide Angle	Traffic Building Outdoor	1,4
3	Fixed Indoor	Interview Room	1,2
4	Fixed Indoor	Interview Room	1,2
5	Fixed Indoor	Cell	1,2
6	Fixed Indoor	Cell	1,2
7	Fixed Indoor	Cell	1,2
8	Fixed Indoor	Counter	1,2
9	Fixed Outdoor Wide Angle	Link	1,4
10	Fixed Outdoor Wide Angle	Link	1,4
11	Fixed Outdoor	Link	1,3
12	Fixed Outdoor	Link	1,3
13	Fixed Outdoor	Link	1,3
14	Fixed Indoor	Cell	1,2
15	Fixed Indoor	Public Area	1,2
16	Fixed Outdoor	Commercial Building Outdoor	1,3
17	Fixed Outdoor	Commercial Building Outdoor	1,3

Section 2.2: Storage Server Requirements

Table 7: Storage Server Requirements

Criteria	Weight
Storage server Requirements: 1. The storage server must have "Microsoft Windows Server 2003 / 2008" and the Video Management Software installed. 1.1. The Video Management Software meeting the requirements outlined in Appendix 1 Section 3, must be installed on this server machine.	MUST
2. The server solution must have capacity to have thirty days retention for all cameras at the specified resolutions and frame rates. 2.1. The server solution must have a minimum capacity of 16 Terabytes (TB) of writeable space	MUST
3. The server provides redundancy features to ensure access to all live and archived data at all times.	MUST
4. Scalability 4.1. The server is scalable without migration to another platform. It must be possible to connect more cameras to the server	MUST
5. The server must have expansion slots for additional hard drives.	MUST
6. The server must have hot-swappable disks	MUST
7. The server must have a power backup (e.g. UPS)	MUST

Section 2.3 Video Management System (VMS)

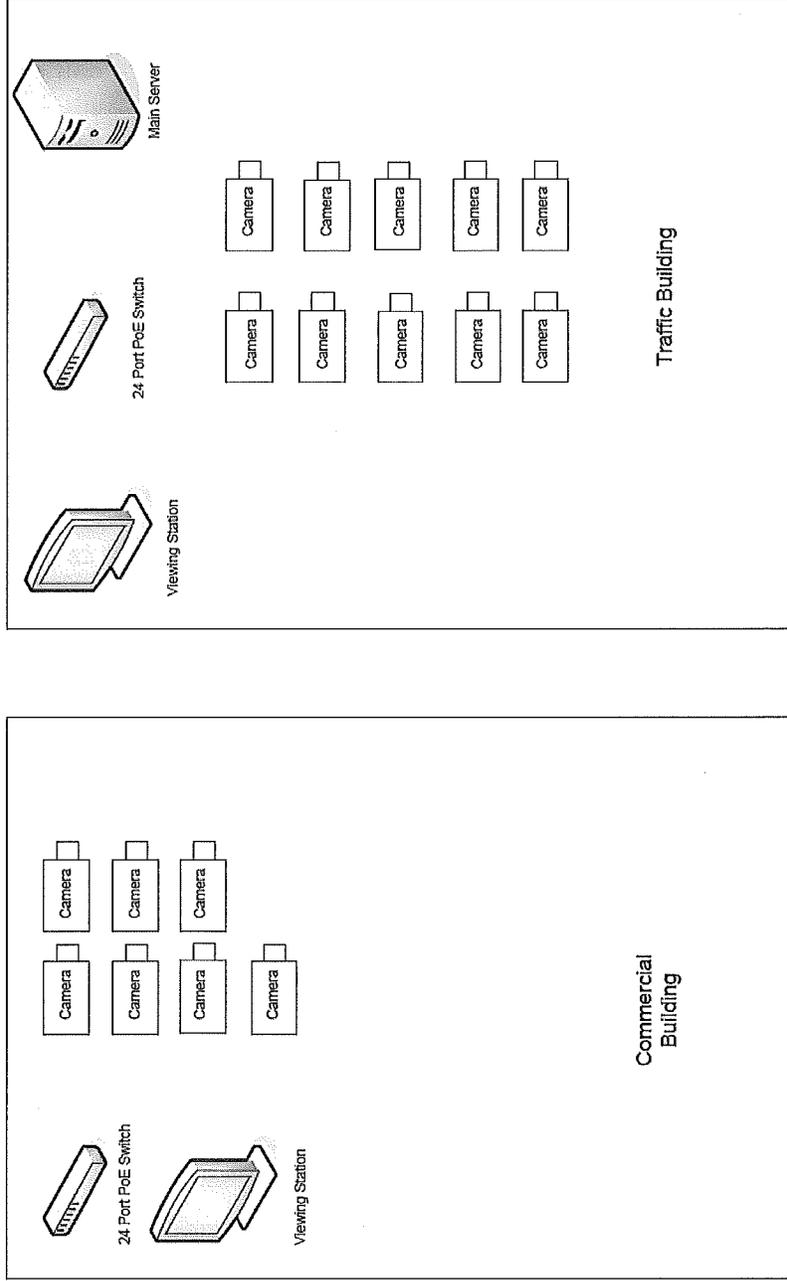
Table 9: Requirements for Video Management Software (for viewing and archiving video data)

Criteria	Weight
<p>Software Requirements The software used to control and manage the cameras must offer a client-server model. The server application is in a remote location and provides camera control (live viewing, PTZ controls) and video archiving functions. The client application connects to the server to access: live video from cameras, and archived videos. The individual requirements for the server and client applications are outlined below.</p> <p>All of the following requirements are mandatory.</p>	<p>MUST</p>
<p>Architecture</p> <ol style="list-style-type: none"> 1. The product supports "Open Standards" architecture to interoperate with a variety of cameras, encoder, and IT infrastructure. <ol style="list-style-type: none"> 1.1. Software Development Kits (SDK) with sample code and documentation are provided. 1.2. The product supports commercial off the shelf (COTS) client workstations, servers and customer selected archiving system. 1.3. The product is compatible with open architecture industry leading camera manufacturers including but not limited to: Sony, Axis and Panasonic. 1.4. The product provides an application programming interface (API) for integration of third party software such as video analytics. 2. The product uses a widely recognized database management system (DBMS). <ol style="list-style-type: none"> 2.1. The product supports customer programmer access to the database. 2.2. The database must have a configurable metadata engine. 3. The product provides multicast and unicast transmission. 4. It must be possible to use a traditional CCTV keyboard and connect it to the control centre PC to allow full virtual matrix control without the need for PC keyboard and mouse control. 5. The server and client application is Microsoft Windows compatible. 	<p>MUST</p>
<p>PTZ Controls</p> <ol style="list-style-type: none"> 1. Pan-tilt-zoom function must be supported by traditional CCTV keyboard such that the PC keyboard and mouse are not required / mandatory for normal pan-tilt-zoom. 2. Variable speed and direction pan-tilt-zoom control must be available using the PC mouse by dragging a directional pointer around the video pane. This includes zoom in, zoom out, focus near, focus far and multiple speed pan and tilt operations. 3. The control of pan-tilt-zoom must be able to grant rights to the user with the higher user priority and enable immediate control of any pan-tilt-zoom operations where a user with lower priority attempts to take control. 	<p>MUST</p>
<p>Video Archiving and Retrieval</p> <ol style="list-style-type: none"> 1. The product supports management, distribution and storage of video surveillance data in a centralized and distributed network environment. 2. The product supports multiple recording modes and formats: <ol style="list-style-type: none"> 2.1. Recording modes such as: Always Recording, Pre and post motion recording, and scheduled recording. 2.2. The product supports video recording in multiple standard compression formats including but not limited to H.264, configured at the camera level. 	<p>MUST</p>

<p>2.3. The product should record audio (if available) that is synchronized with the video</p> <p>3. The product provides automatic load balance over the network.</p> <p>4. The product supports internal and external storage devices, including but not limited to servers, NAS / SAN solutions.</p> <p>5. The product provides advanced search functions, including but not limited to time-line search, event search, and object search.</p> <p>6. The product provides different levels of access control at individual and user group levels</p> <p>7. The product provides redundancy features to ensure access to all live and archived data at all times.</p>	
<p>Alarm/Event Logging and Management</p> <p>1. The product provides automatic logging of Alarms and Events.</p> <p>2. It must be possible to program a motion zone in a audio / video camera's field of view for motion detection.</p> <p>3. There should be an interface to define "Events" E.g. motion or time of day etc.</p> <p>3.1. It should be possible to associate "actions" with "events".</p> <p>3.2. The product provides motion detection with adjustable sensitivity in user defined motion zones.</p> <p>4. Events should trigger associated alarms. The alarm should alert operator via popup display, or send e-mail or SMS messages, based on user preferences.</p> <p>4.1. The product provides user options to log text descriptions of Event Triggers, Actions, and Alarms.</p> <p>5. Alarms should be associated with user defined actions. The product supports "multiple conditions trigger one action" or "single condition triggers multiple actions".</p>	MUST
<p>Scalability</p> <p>1. The product is upgradeable without migration to another platform.</p> <p>2. The sever application should be scalable, i.e. the same application should be able to support 2 or 200 cameras, without additional upgrades or purchases.</p> <p>3. The product supports unlimited number of motion zones, events, and alarms.</p>	MUST
<p style="text-align: center;">Client Workstation (Application) Requirements</p> <p>Live Viewer</p> <p>1. The live viewer client application should display live video from cameras connected to the server located in a remote location.</p> <p>2. The live viewer should:</p> <p>2.1. Provide a highly intuitive Graphical User Interface (GUI).</p> <p>2.2. Support two languages: English and French.</p> <p>2.3. Provide help options to locate a function or feature.</p> <p>2.4. Must have the capability of displaying live video at 30 FPS and have an adjustable frame rate.</p> <p>2.5. Display live video at different resolutions.</p> <p>2.6. Provide Snap Shot function, to allow the operator to take a snap shot at any instant in time</p> <p>3. Provides configurable live audio functions, including but not limited to audio ON/OFF, audio synchronized with video and adjustable audio volume.</p> <p>4. Live viewer software must have synchronous play back mode</p> <p>5. A record icon / button must be available on the live controls to allow instant recording of the audio / video from any camera</p> <p>6. The operator must have the ability to choose playback layouts including 2x2, 4x4 and various customs layouts;</p>	MUST

<p>Archive Player</p> <ol style="list-style-type: none"> 1. The product provides multiple playback functions, including but not limited to play, pause, fast forward, rewind, and variable play speed functions. 2. The product provides synchronized playback from multiple cameras. <ol style="list-style-type: none"> 2.1. The archive player should have multiple layouts to playback videos from multiple cameras e.g. It should be possible to play 2, 4, or 16 videos synchronously 2.2. It should be possible to disable audio during playback. 3. The product supports efficient video export functions. <ol style="list-style-type: none"> 3.1. The exported video should be in standard formats such as H.264, MPEG-4, AVI, or ASF. 	<p>MUST</p>
<p>User (Client) Management</p> <ol style="list-style-type: none"> 1. The product should provide the following user authentication features: <ol style="list-style-type: none"> 1.1. User ID and Password protection for each client connection to the server application. 1.2. Automatic password expiry function. 1.3. Encryption of stored Passwords. 1.4. Multiple administrator and user levels. 2. There must be a capability to control who has access to the software and camera features and to audit any changes. These requirements relate to this. <ol style="list-style-type: none"> 2.1. The proposed solution must provide at a minimum, username and password authentication consistent with the CBSA's standards for Active Directory for Windows®. 2.2. The proposed solution must support role-based access control (RBAC) or group-based access control (GBAC) where privileged users can define roles or groups and can assign users to roles or groups. 2.3. The proposed solution must allow the assigning of granular permissions to users, groups or roles. 2.4. The proposed solution must provide the administrator the ability to define the functions and tasks that can be performed by different users, groups or roles. 2.5. The proposed solution must have an audit capability that can provide a log of user actions including privileged administrator functions. 2.6. Product must be able to record (audit) camera changes; modifications or product changes to an audit file that associates the changes with a user. 2.7. The proposed solution must provide the capability to determine who has access to the camera images. 3. External vendors must have no access to any of the technology or technology components implemented unless explicitly authorized by the CBSA technology authority. 	<p>MUST</p>

Section 3: Component/Hardware Distribution Diagram



Emerson AVMS System
(Buildings should be linked by fibre)

