



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 0B2 / Noyau 0B2

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

THIS DOCUMENT CONTAINS A SECURITY
REQUIREMENT / CE DOCUMENT CONTIENT DES
EXIGENCES RELATIVES À LA SÉCURITÉ

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

7B3, Place du Portage, Phase III

Gatineau, Québec K1A 0S5

Title - Sujet CBSA, CCTV AT JEAN LESAGE AIRPORT		
Solicitation No. - N° de l'invitation 47419-189043/A	Date 2018-08-28	
Client Reference No. - N° de référence du client 1000339042		
GETS Reference No. - N° de référence de SEAG PW-\$\$HN-467-75387		
File No. - N° de dossier hn467.47419-189043	CCC No./N° CCC - FMS No./N° VME	
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2018-10-11		Time Zone Fuseau horaire Eastern Daylight Saving Time EDT
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input type="checkbox"/> Other-Autre: <input type="checkbox"/>		
Address Enquiries to: - Adresser toutes questions à: Dubé, Robert		Buyer Id - Id de l'acheteur hn467
Telephone No. - N° de téléphone (873) 469-3936 ()		FAX No. - N° de FAX (819) 953-4944
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: CANADA BORDER SERVICES AGENCY NC REGION Ottawa Ontario K1A 0L5 Canada		

Instructions: See Herein

Instructions: Voir aux présentes

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

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PART 1 - GENERAL INFORMATION

1.1 Introduction

The bid solicitation is divided into seven parts plus attachments and 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;

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, 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 (SOW), the Pricing Sheet, the Basis of Payment, Security Requirements, and the Federal Contractors Program for Employment Equity - Certification, the Task Authorizations Form, the Insurance Requirements and any other annexes.

1.2 Summary

1.2.1 The Canada Border Services Agency (CBSA) has a requirement to upgrade and expand their current closed circuit television (CCTV) system at the Jean Lesage International Airport in Québec (Québec).

The work includes the design, supply, installation, testing, provide operational and technical training and establish maintenance and support agreements for the upgrade and expand their current closed circuit television (CCTV) system at the Jean Lesage International Airport at 500 Principale Street Quebec (Quebec) as described in the Statement of Work (SOW) (Refer to Annex A). Work will have to be accomplished with minimum disruption to the daily operation and security of the site.

The Contractor must provide the documentation and the technical drawings in relation to the installation as well as train the employees in the use of the CCTV system, as described in the present document.

The Contractor will also be required to perform additional minor tasks as part of the turn key commissioning of the system. This includes, but is not limited to, role management programming, images viewing configurations, adjustment of installed cameras.

Delivery is requested to be completed within 16 weeks after contract award.

1.2.2 There are security requirements associated with this requirement. For additional information, consult Part 6 - Security, Financial and Other Requirements, and Part 7 - Resulting Contract Clauses.

1.2.3 The requirement is subject to the provisions of the World Trade Organization Agreement on Government Procurement (WTO-AGP), the North American Free Trade Agreement (NAFTA), the Canada-European Union Comprehensive Economic and Trade Agreement (CETA).and the Canadian Free Trade Agreement (CFTA).

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1.2.4 There is a mandatory bidders' site visit associated with this requirement where personnel security screening is required "for all employees, sub-contractors and personnel" prior to gaining access to the site. Please refer to Part 2 - Bidder Instructions, Section 2.6 – Mandatory Site Visit for instructions.

1.3 Debriefings

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

PART 2 - BIDDER INSTRUCTIONS

2.1 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](https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) (<https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual>) issued by Public Works and Government Services Canada.

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 (2018-05-22) Standard Instructions - Goods or Services - Competitive Requirements, are incorporated by reference into and form part of the bid solicitation.

Subsection 5.4 of 2003, Standard Instructions - Goods or Services - Competitive Requirements, is amended as follows:

Delete: 60 days
Insert: 120 days

The 2003 standard instructions is amended as follows:

- Section 5, entitled Submission of bids, is amended as follows:
 - subsection 1 is deleted entirely and replaced with the following: "Canada requires that each bid, at solicitation closing date and time or upon request from the Contracting Authority, for example in the case of epost Connect service, be signed by the Bidder or by an authorized representative of the Bidder. If a bid is submitted by a joint venture, it must be in accordance with the section entitled Joint venture."
 - subsection 2.d is deleted entirely and replaced with the following: "send its bid only to the specified Bid Receiving Unit of Public Works and Government Services Canada (PWGSC) identified in the bid solicitation, or to the address specified in the bid solicitation, as applicable;"
 - subsection 2.e is deleted entirely and replaced with the following: "ensure that the Bidder's name, return address and procurement business number, bid solicitation number, and solicitation closing date and time are clearly visible on the bid; and,"
- Section 6, entitled Late bids, is deleted entirely and replaced with the following: "PWGSC will return bids delivered after the stipulated solicitation closing date and time, unless they qualify as a delayed bid as described in the section entitled Delayed bids. For bids submitted using means other than the Canada Post Corporation's epost Connect service, the bid will be returned. For bids submitted using Canada Post Corporation's epost Connect service, conversations initiated by the Bid Receiving Unit via the epost Connect service that contain access, records and information pertaining to a late bid will be deleted."
- Section 07, entitled Delayed bids, is amended as follows:
 - Subsection 1 is amended to add the following piece of evidence: "d: a CPC epost Connect service date and time record indicated in the epost Connect conversation activity."
- Section 8, entitled Transmission by facsimile, is deleted and replaced by the following:

"Transmission by facsimile or by epost Connect

 1. Facsimile
 - a. Unless specified otherwise in the bid solicitation, bids may be submitted by facsimile. The only acceptable facsimile number for responses to bid solicitations issued by PWGSC headquarters is 819-997-9776 or, if applicable, the facsimile number identified in the bid solicitation. The facsimile number for responses to bid solicitations issued by PWGSC regional offices is identified in the bid solicitation.
 - b. For bids transmitted by facsimile, Canada will not be responsible for any failure attributable to the transmission or receipt of the faxed bid including, but not limited to, the following:
 - i. receipt of garbled or incomplete bid;
 - ii. availability or condition of the receiving facsimile equipment;
 - iii. incompatibility between the sending and receiving equipment;
 - iv. delay in transmission or receipt of the bid;

- v. failure of the Bidder to properly identify the bid;
 - vi. illegibility of the bid; or
 - vii. security of bid data.
 - c. A bid transmitted by facsimile constitutes the formal bid of the Bidder and must be submitted in accordance with the section entitled Submission of bids.
- 2. ePost Connect
 - a. Unless specified otherwise in the bid solicitation, bids may be submitted by using the epost Connect service provided by Canada Post Corporation (https://www.canadapost.ca/web/en/products/details.page?article=epost_connect_send_a).
 - b. To submit a bid using epost Connect service, the Bidder must either:
 - i. send directly its bid only to the specified PWGSC Bid Receiving Unit, using its own licensing agreement for epost Connect provided by Canada Post Corporation; or
 - ii. send as early as possible, and in any case, at least six business days prior to the solicitation closing date and time, an email that includes the bid solicitation number to the specified PWGSC Bid Receiving Unit requesting to open an epost Connect conversation. Requests to open an epost Connect conversation received after that time may not be answered.
 - c. If the Bidder is sending an email to the Bid Receiving Unit, the Bid Receiving Unit will then initiate an epost Connect conversation which will allow the Bidder to transmit its bid afterward at any time prior to the solicitation closing date and time. The epost Connect conversation will create an email notification from Canada Post Corporation prompting the Bidder to access the message within the conversation, and the Bidder can reply to the email notification by transmitting its bid.
 - d. If the Bidder is using its own licensing agreement to send its bid, the Bidder must keep the epost Connect conversation open until at least 30 business days after solicitation closing date and time.
 - e. The email address of PWGSC Bid Receiving Unit in Headquarters is: TPSGC.DGAreceptiondessoumissions-ABBidReceiving.PWGSC@tpsgc-pwgsc.gc.ca. The solicitation number must be identified in the epost Connect message field of all electronic transfers.
 - f. It should be noted that the use of epost Connect service requires a Canadian mailing address. Should a bidder not have a Canadian address, they may use the Bid Receiving Unit address specified on page 1 of the solicitation in order to register for the epost Connect service.
 - g. For bids transmitted by epost Connect service, Canada will not be responsible for any failure attributable to the transmission or receipt of the bid including, but not limited to, the following:
 - i. receipt of a garbled or incomplete bid;
 - ii. availability or condition of the epost Connect service;
 - iii. incompatibility between the sending and receiving equipment;
 - iv. delay in transmission or receipt of the bid;
 - v. failure of the Bidder to properly identify the bid;
 - vi. illegibility of the bid;
 - vii. security of bid data; or
 - viii. inability to create an electronic conversation through the epost Connect service.
 - h. A bid transmitted by epost Connect service constitutes the formal bid of the Bidder and must be submitted in accordance with the section entitled Submission of bids."

2.2 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 facsimile to PWGSC will not be accepted.

2.3 Enquiries - Bid Solicitation

All enquiries must be submitted in writing to the Contracting Authority no later than ten (10) calendar days before the bid closing date. Enquiries received after that time may not be answered.

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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 question(s) or may request that the Bidder do so, so that the proprietary nature of the question(s) is eliminated and the enquiry can be answered to all Bidders. Enquiries not submitted in a form that can be distributed to all Bidders may not be answered by Canada.

2.4 Applicable Laws

Any resulting contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in **(to be inserted at contract award)**.

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.

2.5 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 fourteen (14) days before the bid closing date. Canada will have the right to accept or reject any or all suggestions.

2.6 Mandatory Site Visit

It is mandatory that the Bidder or a representative of the Bidder visit the work site. Arrangements have been made for site visit to be held on **September 18, 2018 at 10:00 AM** at the Jean Lesage International Airport in Quebec (Quebec). Interested Bidders shall meet at the international arrivals, CBSA office of the Jean Lesage International Airport at 500 Principale Street Quebec (Quebec) G2G 2T9. Bidders will be required to sign an attendance form at the site visit.

Bidders should confirm in their bids that they have attended the site visit. Bidders who do not attend or send a representative to the site visit will not be given an alternative appointment and their bids will be rejected as non-compliant.

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.

The Bidder must have at least one attendee at the site visit.

It is also a mandatory condition of this requirement that all attendees provide an e-mail confirming their attendance to the site visit.

Bidders are requested to clearly identify the name of the participant, the name of the company, e-mail address, telephone number and provide the information requested in Section 2.6.1 Mandatory Conditions for the Site Visit below within the body of their e-mail along with a valid government issued piece of identification (ID) (i.e. Front and Back of Driver's License or Passport) and submit it to the Contracting Authority by e-mail at robert.dube@tpsgc-pwgsc.gc.ca or by fax to (819) 953-4944. It is requested that this information be received by this office no later than **September 14, 2018**.

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Site visit request information received after **September 14, 2018** may not be accepted. A site clearance obtained for work performed under similar requirements is not acceptable.

Bidders should submit in writing to the Contracting Authority, a list of issues or questions that they wish to table and the language they would like to address questions and answers, no later than five (5) calendar days prior to the scheduled site visit.

Bidders are advised that any clarifications or changes resulting from the site visit shall be included as an amendment to the bid solicitation document through buyandsell.gc.ca.

As proof of attendance, the Bidder must sign the attendance form provided by the CBSA representative at the site visit.

2.6.1 Mandatory Conditions for the Site Visit

For each individual who will attend the site visit and before they are given access to the Site Map Drawings by or on behalf of Canada in connection with the Project, the following conditions must be met:

the Bidder must provide for all individuals who will require access to classified or protected information, assets or sensitive work sites:

- a) the name of the individual;
- b) the date of birth of the individual; and
- c) if available, the individual's security information (i.e. CISC ID Number, Security Level Status, etc.).

2.6.2 Instructions and Access to the Site Map Drawings

Due to the nature of the work taking place at the facility and the Security Requirements, Site Map Drawings for Jean Lesage International Airport will not be provided to bidders during the site visit, but they will have the opportunity to make arrangements to view the Site Map Drawings at the CBSA Fixed Infrastructure Office.

On the day of the site visit all Bidders will be invited to attend a meeting immediately following the walk thru of the site to view the Site Map Drawings and ask any questions.

Further, two additional dates of **September 25 and 26, 2018** will be set aside for Bidders to view the Site Map Drawings at the international arrivals, CBSA office of the Jean Lesage International Airport at 500 Principale Street Quebec (Quebec) G2G 2T9.

The Bidders must contact Mathieu Hébert-Sabourin by email at Mathieu.Hebert-Sabourin@cbsa-asfc.gc.ca to make an appointment. The Bidders must present themselves to the international arrivals, CBSA office of the Jean Lesage International Airport at 500 Principale Street Quebec (Quebec) G2G 2T9 and ask for Mathieu Hébert-Sabourin.

To ensure consistency and fairness to all Bidders, all questions and answers will be recorded and submitted to the Contracting Authority who will then issue an amended RFP for all Bidders to view the non-restricted information resulting from the viewing sessions.

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PART 3 - BID PREPARATION INSTRUCTIONS

3.1 Bid Preparation Instructions

If the Bidder chooses to submit its bid electronically, Canada requests that the Bidder submits its bid in accordance with section 8 of the 2003 standard instructions and as amended in Part 2 - Bidder Instructions, Article 2.1 Standard Instructions, Clauses and Conditions. Bidders are required to provide their bid in a single transmission. The epost Connect service has the capacity to receive multiple documents, up to 1GB per individual attachment.

The bid must be gathered per section and separated as follows:

Section I: Technical Bid
Section II: Management Bid
Section III: Support Bid
Section IV: Financial Bid
Section V: Certifications
Section VI: Additional Information

If the Bidder is simultaneously providing a hard copy of the bid using another acceptable delivery method, and if there is a discrepancy between the wording of the soft copy and the hard copy, the wording of the soft copy will have priority over the wording of the hard copy.

If the Bidder chooses to submit its bid in hard copies, Canada requests that the Bidder submits its bid in separately bound sections as follows:

Section I: Technical Bid (3 hard copies and 2 soft copies on CD, DVD or USB key)
Section II: Management Bid (3 hard copies and 2 soft copies on CD, DVD or USB key)
Section III: Support Bid (3 hard copies and 2 soft copies on CD, DVD or USB key)
Section IV: Financial Bid (1 hard copy and 1 soft copy on CD, DVD or USB key)
Section V: Certifications (1 hard copy)
Section VI: Additional Information (1 hard copy)

If there is a discrepancy between the wording of the soft copy and the hard copy, the wording of the hard copy will have priority over the wording of the soft copy.

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

NOTE: Due to the nature of the bid solicitation, bids transmitted by facsimile will not be accepted.

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.

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

- 1) use 8.5 x 11 inch (216 mm x 279 mm) paper containing fibre certified as originating from a sustainably-managed forest and containing minimum 30% recycled content; and
- 2) use an environmentally-preferable format including black and white printing instead of colour printing, printing double sided/duplex, using staples or clips instead of cerlox, duotangs or binders.

Section I: Technical Bid

The Technical, Management and Support Bids must be concise and address, but not necessarily be limited to, the points that are subject to the evaluation criteria against which the Bid will be evaluated. Bidders must address the evaluation criteria in sufficient depth in their bid. Simply repeating the statement contained in the solicitation document is not sufficient. Bidders must explain and demonstrate how they propose to meet the requirements and how they will carry out the Work.

In order to facilitate the evaluation of the Bid, Canada requests:

- Bidder to include a Table that addresses on a paragraph by paragraph basis the Statement of Work (SOW) by indicating the paragraph and page number where the subject topic is addressed and indicating comply, understood, noted or not applicable. Bidders must provide reference within their bid package where they address their compliance.
- Bidders to address and present topics in the order of the Statement of Work (SOW) under the same headings.
- Bidders to avoid duplication by identifying the specific paragraph and page number where the subject topic has already been addressed in the Bid.

Section II: Management Bid

In their management bid, Bidders must describe their capability and experience, the project management team and provide client contact(s).

Section III: Support Bid

In their support bid, Bidders must demonstrate their understanding of the requirement and describe how they intend to meet the support requirements (operator/ maintenance training, manuals, spare parts list and plan).

Section IV: Financial Bid

3.1.1 Bidders must submit their financial bid as per the format of Annex B – Basis of Payment in accordance with the following Basis of Pricing. The total amount of Applicable Taxes must be shown separately.

3.1.2 Basis of Pricing

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

3.1.2.1 Design and Equipment

The bidder must submit a firm lot price for the design and related equipment for the Closed Circuit Television System (CCTV) Equipment for the Jean Lesage International Airport in Quebec (Quebec), excluding spare parts and test equipment.

3.1.2.2 Installation and Testing Costs

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The bidder must submit a firm lot price. The price must include all costs, including travel and living, related to the installation and testing of the equipment.

3.1.2.3 Testing of Equipment for Emergency Repairs, Delays and Task Authorizations

The bidder must submit a firm hourly rate for installation and testing during and outside normal working hours for each labour category required.

These hourly rates will apply for emergency repairs, delays and Task Authorizations and will be in effect for the entire length of any resulting contract.

Normal working hours are Monday to Friday, 7:30 to 16:00 with exception of statutory holidays.
In order to complete the work within the time line provided, additional hours outside of the noted normal hours may be incurred.

3.1.2.4 Travel and living expenses

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 a firm lot price, the estimated number of people and the estimated number of days, and the breakdown of the Firm Lot Price as indicated in Annex B – Basis of Payment.

3.1.2.5 On-site training as detailed in the SOW, section 7.3.

The bidder must submit a firm lot price for on-site training session, taking into account travel expenses.

3.1.2.6 Documentation

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

As-built drawings as detailed in SOW, section 7.3.

Operator and Maintenance Manuals as detailed in SOW, section 7.3

3.1.2.7 Software / Integration

The bidder must submit a firm lot price for the software / integration.

3.1.2.8 Option 1: Contractors Recommended Spare parts and Test Equipment

The bidder must submit a Spare Parts and/or Test Equipment List identifying each recommended spare parts and/or test equipment required. The bidder must also submit a firm unit price for each recommended spare part required and pricing for the item(s) in Annex B.

3.1.2.9 Bid Firm Lot Price Cost Breakdown

Prior to contract award Bidders must provide a line by line breakdown of the material and labour used to calculate the Bid Prices for Equipment and Design Lot Price identified within Annexe "B" - Basis of Payment.

The pricing provided will be used to calculate the cost of any Task Authorizations throughout the life of the contract.

3.1.3 Exchange Rate Fluctuation

C3011T (2013-11-06), Exchange Rate Fluctuation

Section V: Certifications

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Bidders must submit the certifications required under Part 5.

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.

Section VI: Additional Information

3.1.4. Delivery Offered

While delivery is requested as indicated above, the best delivery that could be offered is **(Bidder to insert a date).**

3.1.5 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: _____

3.1.6 Warranty Repairs

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 shall not exceed forty-eight (48) hours. The contact person is as follows:

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

3.1.7 Emergency Services / Repairs

If requested by the Canada Border Services Agency (CBSA), the Contractor shall 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 shall be paid as indicated herein. The response time shall not exceed four (4) hours. The contact person is as follows:

Name: _____
Telephone No.: _____
Facsimile No.: _____

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Email/Internet Address: _____

3.1.8 Lifetime Spares

It shall be a condition of any contract resulting here from that the Contractor undertakes to supply spare parts for the equipment proposed during the life expectancy of the equipment.

The Bidder must indicate the number of years for the life of the equipment: _____ years.

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

For the purpose of the Evaluation Process only, "Bidder" means the person or entity (or, in the case of a joint venture, the persons or entities) submitting a bid to perform a contract for goods, services or both. It may also include the parent or subsidiaries of the Bidder.

4.1 Evaluation Procedures

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

4.1.1 Technical Evaluation

The Technical, Management and Support Bids should be concise and address, but not necessarily be limited to, the points that are subject to the evaluation criteria against which the Bid will be evaluated. Bidders should address the evaluation criteria in sufficient depth in their bid. Simply repeating the statement contained in the solicitation document is not sufficient. Bidders should explain and demonstrate how they propose to meet the requirements and how they will carry out the Work.

In order to facilitate the evaluation of the Bid, Canada requests:

- Bidder to include a Table that addresses on a paragraph by paragraph basis the Statement of Work (SOW) by indicating the paragraph and page number where the subject topic is addressed and indicating comply, understood, noted or not applicable.
- Bidders to address and present topics in the order of the Statement of Work (SOW) under the same headings.
- Bidders to avoid duplication by identifying the specific paragraph and page number where the subject topic has already been addressed in the Bid.

4.1.1.1 Mandatory Technical Criteria

Simply stating a compliancy to a criteria is insufficient. Bidders must present a clearly organized, printed (i.e., not handwritten) proposal that includes all necessary technical and descriptive information, in order to clearly demonstrate their compliancy to all items presented in the Statement of Work (SOW) at Annex A, as well as related specifications.

Responses will be evaluated on a simple, stringent pass/fail basis. Proposals not meeting each mandatory requirement will be considered non-responsive (non-compliant) and given no further consideration.

- Address, as described, Annex A, Statement of Work (SOW)
- Bidders must obtain the required minimum points (70%) for each of the following evaluation criteria – technical, management and support, which are subject to point rating;
- Bidder must clearly identify in their Bid the name of the following resources assigned to the Project:
 - 1. Project Manager;
 - 2. Primary Back-up Project Manager;
 - 3. Project Supervisor;
 - 4. Primary Back-up Project Supervisor;
 - 5. Technician; and
 - 6. Primary Back-up Technician.

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- Bidders must obtain the required minimum points identified in Attachment 1 - Evaluation Criteria, Sections 1.1, 1.2.1, 2.2.1, 2.2.2 and 2.2.3.

The technical bid should be structured in the same format as the Statement of Work presented at Annex A, through which the bidder will clearly explain and demonstrate how they propose to meet the requirements and how they will carry out the Work.

4.1.1.2 Point Rated Technical Criteria

The Technical, Management and Support Bid will be evaluated and rated as per Attachment 1 to Part 4 – Point Rated Evaluation Criteria and Scoring Sheet.

4.1.2 Financial Evaluation

4.1.2.1 Mandatory Financial Criteria

The price of the bid will be evaluated in Canadian dollars, Applicable Taxes excluded, DDP destination, Canadian customs duties and excise taxes included.

The following Mandatory factors will be taken into consideration in the evaluation of each bid;

Compliance with Basis of Pricing; and
Prices must be submitted for all items listed in the Annex B – Basis of Payment

4.2 Basis of Selection

The responsive Bidder with the lowest evaluated aggregate bid price will be recommended for award of a contract.

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ATTACHMENT 1 TO PART 4 – POINT RATED EVALUATION CRITERIA AND SCORING SHEET

1 Point Rated Technical Proposal Criteria

The Bidder must obtain an overall pass score of 70 percent of the Technical Proposal and achieve the minimum mandatory points identified for each criterion, as applicable. The rating is performed on a scale of 100 points. The Technical Proposal should include, but not be limited to:

Point Rated Technical Proposal Criteria	Pts	Comments
<p>1.1 Understanding of the Technical Requirements (a maximum of 45 points is available)</p> <p>Demonstrate understanding of the technical requirements of the system which must include sufficient detail such as preliminary drawings, diagrams, photographs and sketches showing system architecture, equipment configuration, and technical information / literature/brochure on products offered.</p> <p>The Bidder's Technical Proposal will be specifically reviewed to determine whether the proposed solution meets the requirements defined in the Statement of Work (SOW) and supporting documents.</p> <p>The Bidder should demonstrate that the requirements as identified in the SOW and supporting documents have been met, by clearly describing how these will be achieved.</p> <p>(0 points) The proposal indicates that the Bidder does not understand the requirements identified in the SOW and supporting documents.</p> <p>(35 points) The proposal indicates that the Bidder understands the main concept of what is required. The Bidder's solution meets the operability, environmental, reliability, maintainability, testing and validation requirements.</p> <p>(45 points) The proposal clearly indicates that the proposed solution exceeds the requirement in at least 2 instances that are specifically and uniquely identified in the Technical Proposal</p> <p>*Minimum mandatory points required: 35</p>		

1.2 Quality Assurance and Acceptance Test Plans Description of the proposed quality assurance procedures/processes and acceptance test plan(s) to ensure quality requirements are met and how the Bidder intends to demonstrate to the Crown that the system functions correctly, both off site (Factory Acceptance Testing) and following on-site installation (Site Acceptance Testing). A detailed list of tests to be performed with pass/fail parameters should be provided. Maximum points are broken down as follows:		
Point Rated Technical Proposal Criteria	Pts	Comments
1.2.1 Quality Assurance (a maximum of 16 points is available) How the Bidder intends to ensure quality requirements are met, a description of inspection, testing, and documentation procedures as well as quality metrics. (2 points per item) The Bidder will be awarded two points per element for clearly indicating how the proposal will meet each of the elements identified below to a limit of 16 points. The following is a list of elements pertaining to quality assurance. The proposal indicates: <ul style="list-style-type: none"> a) That the Bidder has quality assurance procedures and processes; b) That the results will be recorded/analyzed and conflicts will be resolved; c) When, how and by whom the quality requirements will be reviewed; d) How documents and data will be controlled; e) Relevant quality control processes for purchases; f) How the production, assembly and on-site installation processes will be controlled to ensure quality requirements are met; g) How measuring and test equipment is controlled and describes the format and test results to be provided; h) How non-conforming products are identified and controlled to prevent misuse until proper disposal. 		
*Minimum mandatory points required: 6		
Sub-section Total		
1.2.2 Site Acceptance Test Plan (a maximum of 20 points is available) How the Bidder intends to demonstrate to the Crown that the system functions correctly after installation (Site Acceptance Testing), a detailed list of tests to be performed with pass/fail parameters should be provided. (4 points per item) The Bidder will be awarded four points per item for clearly indicating how the proposal will meet each of the items identified above in a) through e) to a limit of 20 points. The proposal indicates that the Bidder has: <ul style="list-style-type: none"> a) Demonstrated the requirements for testing the system after installation (Site Acceptance Testing); b) Provided a test plan; c) Provided test sheets; d) Provided test sheets including pass/fail parameters; e) Provided test sheets, including specific parameters. 		

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Sub-Section Total		
1.3 Technical Risk Elements (a maximum of 19 points is available) How the Bidder intends to meet the technical requirements, a description of the technical risks elements detailing how the Bidder intends to mitigate them. The risks identified must be limited to a minimum of two Technical concerns only as non-Technical risks are evaluated separately. (0 points) The proposal indicates that the Bidder has not identified: a) A minimum of two Technical risk elements, nor b) Technical risk mitigation. (10 points) The proposal indicates that the Bidder has identified : a) Two or more Technical risk elements, and b) Risk management process, but c) Bidder does not provide a technical risk mitigation plan. (14 points) As above, plus the Bidder has provided a) A risk mitigation plan. (19 points) The proposal indicates that the Bidder has as above, plus: a) Identified the impact of the technical risks; b) Associated the technical risks with the bidder, supplier, subcontractor, customer, integration, or equipment performance; c) Described mitigation strategies for the identified technical risks; d) Identified decision points for any approaches proposed to mitigate technical risks; e) Proposed approaches to the mitigation of technical risk that support the requirements of the project.		
Sub-Section Total		
Total Technical Proposal (maximum 100 points)		

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2 Point Rated Project Management Proposal Criteria

The Bidder must obtain an overall pass score of 70 percent for the Project Management Proposal and achieve the minimum mandatory points identified for each criterion, as applicable. The rating is performed on a scale of 100 points. The Project Management Proposal should include, but not be limited to:

2.0 Previous Project Management Experience The Bidder, the project manager, the project supervisor and the technicians will be evaluated The proposal must demonstrate a detailed description of the qualification and previous experience pertaining to similar projects in terms of size, tasks, clients, and responsibilities.		
Point Rated Project Management Proposal Criteria	Pts	Comments
2.1 Experience of the Bidder within the last four (4) years (a maximum of 10 points is available) (2 points per item) The Bidder will be awarded two points per item for clearly indicating how the proposal will meet each of the items identified in a) through e) to a limit of 10 points. Similar project(s) that have been successfully completed and have provided them with experience pertaining to the following elements. a) Similarity of project in terms of scope and/or clients; b) Dollar value over \$100K; c) Installation; d) Training; e) Drawings and Manuals		
Sub-Section Total		

<p>2.2.1 Project Manager's (and Primary Back-up Project Manager) Overall Experience (years, size of project & complexity) and Qualifications (a maximum of 12 points is available)</p> <p>In order to maximize the number of points awarded, the proposal must include the following for each identified resource:</p> <ul style="list-style-type: none"> a) A detailed description, (including dates – Month and Year) the number of years of experience in the specified role for similar projects in terms of size, dollar value, complexity, tasks, clients, and responsibilities. b) Their Professional Certification(s) –at least one of PMP, PMI, MBA, P.Eng, or bachelor degree. c) A copy of their certification or degree. <p>The proposal must indicate that either the designated Project Manager or Primary Back up Project Manager has the stated levels of experience in the design, supply, installation and integration of systems similar to those described in the SOW.</p> <p>(0 points) – Project Manager & Primary Back-Up Project Manager One or both lack experience with projects of similar size and complexity, regardless of professional certifications</p> <p>(4 points) – Project Manager & Primary Back-Up Project Manager One or both have:</p> <ul style="list-style-type: none"> i. Less than 4 years experience with projects of similar size and complexity; and ii. No professional certifications <p>(6 points) – Project Manager & Primary Back-Up Project Manager One or both have:</p> <ul style="list-style-type: none"> i. Less than 4 years experience with projects of similar size and complexity; and ii. Professional certifications <p>(8 points) – Project Manager & Primary Back-Up Project Manager One or Both have:</p> <ul style="list-style-type: none"> i. Between 4 and 10 years experience with projects of similar size and complexity; and ii. Professional certifications <p>(12 points) – Project Manager & Primary Back-Up Project Manager Both have</p> <ul style="list-style-type: none"> i. Greater than 10 years experience with projects of similar size and complexity; and ii. Professional certifications <p>*Minimum mandatory points required: 6</p>		
Sub-Section Total		

2.2.2 Project Supervisor's (and Primary Back-Up Project Supervisor's) Overall Experience (years, size of project & complexity) and Qualifications (a maximum of 8 points is available)

In order to maximize the number of points awarded, the proposal must include the following for each identified resource

- a) A detailed description, (including dates – Month and Year) the number of years of experience in the specified role for similar projects in terms of size, dollar value, complexity, tasks, clients, responsibilities.
- b) A copy of their professional or technical certification, degree or diploma in any of the electrical, electro-mechanical, electronics, mechanical, software development, computer programming, network technology or telecommunications fields.

Note: Certifications from Manufacturer's courses are not considered as equivalent to a Diploma.

The proposal must indicate that either the designated Project Supervisor or Primary Back up Project Supervisor has the stated levels of experience in the design, supply, installation and integration of systems similar to those described in the SOW.

(0 points) – Project Supervisor & Primary Back-Up Project Supervisor
One or both lack supervisory experience with projects of similar size and complexity, regardless of professional certifications.

(4 points) – Project Supervisor & Primary Back-Up Project Supervisor
One or both have

- i. Less than 4 years Supervisory experience with projects of similar size and complexity; and
- ii. No professional or technical certifications

(6 points) – Project Supervisor & Primary Back-Up Project Supervisor
Both have

- i. At least 4 years Supervisory experience with projects of similar size and complexity; and
- ii. Professional or technical certifications.

(8 points) – Project Supervisor & Primary Back-Up Project Supervisor

- a) Both have
 - i. Greater than 10 years Supervisory experience with projects of similar size and complexity; and
 - ii. Professional or technical certifications

***Minimum mandatory points required: 4**

Sub-Section Total

2.2.3 Technician and Primary Back-up Technicians' Overall Experience (years, size of project & complexity) and Qualifications (a maximum of 8 points is available)

In order to maximize the number of points awarded, the proposal must include the following for each identified resource:

- a) A detailed description, (including dates – Month and Year) the number of years of experience in the specified role for similar projects in terms of size, dollar value, complexity, tasks, clients, responsibilities
- b) A copy of their technical certifications in any of the electrical, electro-mechanical, electronics, mechanical, software development or computer programming including, certifications from Manufacturer's courses.

The proposal must indicate that either the designated Technician or Primary Back up Technician has the stated levels of experience in the design, supply, installation and integration of systems similar to those described in the SOW.

- (0 points) – Technician & Primary Back-Up Technician
One or both lack experience with projects of similar size and complexity, regardless of technical certifications
- (4 points) – Technician & Primary Back-Up Technician
One or both have
 - i. Between 6 months and 4 years experience with projects of similar size and complexity; and
 - ii. No Technical or manufacturers certifications
- (6 points) – Technician & Primary Back-Up Technician
One or both have
 - i. At least 4 years experience with projects of similar size and complexity; and
 - ii. Technical or manufacturers certifications.
- (8 points) – Technician & Primary Back-Up Technician
Both have
 - i. Greater than 10 years experience with projects of similar size and complexity; and
 - ii. Technical or manufacturers certifications.

***Minimum mandatory points required: 4**

Sub-Section Total

<p>2.2.4 The proposal indicates that one or more of the identified resources (stated in response to evaluation criteria 2.2.1, 2.2.2 and 2.2.3) has stated levels of experience in the design, supply, installation and integration of the systems similar to those described in the SOW, as follows: (a maximum of 10 points is available)</p> <p>(0 points) No stated experience.</p> <p>(4 points) Stated experience with private industry or Provincial Governments.</p> <p>(8 points) Stated experience with other Border Services Agency or similar organizations.</p> <p>(10 points) Stated experience with Canada Border Services Agency (CBSA).</p>		
Sub-Section Total		
<p>2.3 Project Management Structure and Procedures Project management structure and procedures describing the implementation of this project.</p>		
Point Rated Project Management Proposal Criteria	Pts	Comments
<p>2.3.1 Project Management Organization and Responsibilities (a maximum of 10 points is available)</p> <p>This refers only to management personnel and the way that the Bidder plans to organize the project team for this contract.</p> <p>(0 points) The proposal indicates that the Bidder has:</p> <ul style="list-style-type: none"> a) No project management organization in place, b) No plans identified to designate a separate project management team. <p>(4 points) The proposal indicates that the Bidder has:</p> <ul style="list-style-type: none"> a) No project management organization in place; b) A well-developed plan in place to set up a team of trained personnel. <p>(8 points) The proposal indicates that the Bidder has:</p> <ul style="list-style-type: none"> a) A project management organization/structure defined with 'matrix' personnel resources that can be made available to this project; b) Personnel are identified for the positions of Project Manager, the Project Supervisor, Technicians and Electricians. <p>(10 points) The proposal indicates that the Bidder has:</p> <ul style="list-style-type: none"> a) As above; plus b) A well-defined Project Management structure; c) Identified the Personnel that will be executing specific tasks; d) Clearly defined the responsibilities of these Personnel. 		
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<p>2.3.2 Project Management Procedures (a maximum of 12 points is available)</p> <p>This criterion will rate the systems used by the Bidders to implement their project management approach.</p> <p>(0 points) The proposal indicates that Project Management (PM) implementation is not addressed.</p> <p>(4 points) The proposal indicates that PM implementation is addressed but the Bidder has not provided sufficient details to demonstrate that a fully functional PM system is in place.</p> <p>(8 points) The proposal indicates a Project Management system is in place that will allow the bidder to manage the project and has identified:</p> <ul style="list-style-type: none"> a) A project management organization/structure with 'matrix' personnel resources that will be made available to this project; b) Personnel for the positions of Project Manager, Project Supervisor, Technicians and Electricians; <p>(12 points) - As above plus:</p> <ul style="list-style-type: none"> a) Project management based on employment of Program Evaluation Review Technique (PERT) or Critical Path Method (CPM); b) Work breakdown structure is linked to project management; c) The PM system closely tracks status and progress of tasks. 		
Sub-Section Total		
<p>2.4 Schedule, Milestones and Project Management Tools</p> <p>A project schedule of events for all deliverables with milestones and rationale of how realistic and achievable they are should be provided. Availability and usage of a Project Management specific tool and the capability and implementation of supporting a secure customer facing portal that provides real time access to project specific information, including schedules and all customer facing project drawings and documents.</p>		
Point Rated Project Management Proposal Criteria	Pts	Comments

<p>2.4.1 Schedule/Milestones (a maximum of 10 points is available)</p> <p>A project schedule/schedule of events for all deliverables with milestones and rationale of how realistic and achievable they are including tools for addressing project slippage.</p> <ul style="list-style-type: none"> a) Major milestones are identified. b) Logical sequence is proposed. c) Contingency time identified. d) Time estimates are realistic. <p>(0 points) The proposal schedule only addresses 1 of the 4 areas identified above.</p> <p>(5 points) The proposal schedule only addresses 2 of the 4 areas identified above.</p> <p>(8 points) The proposal schedule addresses 3 of the 4 areas identified above.</p> <p>(10 points)</p> <ul style="list-style-type: none"> a) The proposal schedule addresses all of the 4 areas identified above; and b) The proposed schedule contains milestones, significant contract events, projected delivery dates and production schedules. 		
Sub-Section Total		
<p>2.4.2 Project Management Tools (a maximum of 10 points is available)</p> <p>These criteria will rate the Bidder on their availability and usage of a Project Management (PM) specific tool and capability of supporting a secure customer facing portal provides real time access to project specific information, including schedules and all customer facing project drawings and documents.</p> <p>(0 points)The proposal indicates that the Bidder has not identified the PM specific software.</p> <p>(8 points)The proposal indicates that the Bidder has identified the specialized PM software but does not support a secure customer facing portal that provides real time access to project specific information.</p> <p>(10 points)The proposal indicates that the Bidder has identified the specialized PM software and supports a secure customer facing portal that provides real time access to project specific information including schedules, reports and meeting minutes.</p>		
Sub-Section Total		

2.4.3 Project Risks Elements (a maximum of 10 points is available)

A description of the project risks, excluding all technical risks previously identified, related to the proposed approach and processes for managing all project risk elements (such as resources, cost, schedule and all external elements) of the project detailing how well the Bidder understands the project risks and how they propose to mitigate them.

(0 points) The proposal indicates that the Bidder has not clearly identified any:

- a) Non-technical risks associated with the project; and
- b) Non-technical risk mitigation plan.

(4 points) The proposal indicates that the Bidder has clearly identified:

- a) The non-technical risks associated with the project, including impacts:
 - i. Management
 - ii. Schedule
 - iii. Scope changes
 - iv. Financial impact
 - v. Resource issues
- b) Their non-technical risk management process,
- c) That the Bidder has not provided a non-technical risk mitigation plan.

(8 points) The proposal indicates that the Bidder has clearly identified:

- a) As above, plus,
- b) Their non-technical risk mitigation plan.

(10 points) The proposal indicates that the Bidder has clearly identified:

- a) As above; plus
- b) The identified risks are appropriately associated with the Bidder, Subcontractor, Customer, Integration, or Equipment Performance;
- c) That the proposed non-technical mitigation approaches are closely aligned with the requirements of the project;
- d) The decision points are identified and aligned with the proposed risk mitigation approaches.

Sub-Section Totals

Total Project Management Proposal (maximum 100 points)

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3 Point Rated Support Proposal Criteria

The Bidder must obtain an overall pass score of 70 percent for the Support Proposal and achieve the minimum mandatory points identified for each criterion, as applicable. The rating is performed on a scale of 100 points. The Support Proposal should include, but not be limited to:

Point Rated Support Proposal Criteria	Pts	Comments
3.0 Operator Training Plan Outline, Training and Manuals An understanding of the Operator Training requirements. Description of the proposed training plan, approach, team and information to meet the Operator training requirements. Maximum points are broken down as follows:		
Point Rated Support Proposal Criteria	Pts	Comments
3.1.1 Operator training plan outline (a maximum of 15 points is available) (0 points) The proposal indicates that the operator training plan outline does not meet the requirements. (12 points) The proposal indicates that the operator training plan outline meets the requirements. (15 points) The proposal indicates that the operator training plan outline: a) Meets the requirements; and b) Exceeds the minimum requirements as identified within the SOW in at least 2 instances that are uniquely and specifically identified, including the reasons for identifying them, in the Bidder's proposal.		
Sub-Section Total		
3.1.2 Operator Training approach, methodology and team (a maximum of 15 points is available) (0 points) That the proposal does not meet training requirements. (12 points) a) The proposal meets the training requirements and the training team is identified; b) The training approach meets the requirements. (15 points) Exceeds the minimum requirements as identified within the SOW in at least 2 instances that are uniquely and specifically identified, including the reasons for identifying them, in the Bidder's proposal.		
Sub-Section Total		

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<p>3.1.3 Operator Manuals (a maximum of 15 points is available)</p> <p>(0 points) The proposal indicates that the documented information does not meet the requirements.</p> <p>(12 points) The proposal indicates that the documented information meets the requirements.</p> <p>(15 points) Exceeds the minimum requirements as identified within the SOW in at least 2 instances that are uniquely and specifically identified, including the reasons for identifying them, in the Bidder's proposal.</p>		
Sub-Section Total		
<p>3.2 Maintenance Personnel Training Outline, Training and Manuals</p> <p>An understanding of the Maintenance Training requirements. Description of the proposed training plan, approach, team and information to meet the Maintenance training requirements. Maximum points are broken down as follows:</p>		
Point Rated Support Proposal Criteria	Pts	Comments
<p>3.2.1 Maintenance Training Plan Outline (a maximum of 15 points is available)</p> <p>(0 points) That the proposal does not meet the maintenance training requirements.</p> <p>(12 points)</p> <ul style="list-style-type: none"> a) The proposal meets the maintenance training requirements and the training team is identified, b) The training approach meets the requirements. <p>(15 points) Exceeds the minimum requirements as identified within the SOW in at least 2 instances that are uniquely and specifically identified, including the reasons for identifying them, in the Bidder's proposal.</p>		
Sub-Section Total		
<p>3.2.2 Maintenance Training Approach, Methodology and Team (a maximum of 15 points is available)</p> <p>(0 points) That the proposal does not meet training requirements.</p> <p>(12 points)</p> <ul style="list-style-type: none"> a) The proposal meets the training requirements and the training team is identified; b) The training approach meets the requirements. <p>(15 points) Exceeds the minimum requirements as identified within the SOW in at least 2 instances that are uniquely and specifically identified, including the reasons for identifying them, in the Bidder's proposal.</p>		
Sub-Section Total		

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3.2.3 Maintenance Manuals(a maximum of 15 points is available) (0 points) The proposal indicates that the documented information does not meet the requirements. (12 points) The proposal indicates that the documented information meets the requirements. (15 points) Exceeds the minimum requirements as identified within the SOW in at least 2 instances that are uniquely and specifically identified, including the reasons for identifying them, in the Bidder's proposal.		
Sub-Section Total		
3.3 Spare Plan and Spare Parts List (a maximum of 10 points is available) (0 points) The proposal indicates that the spares plan and spare parts list does not meet the requirements. (6 points) The proposal indicates that the spares plan and spare parts list meets the requirements. (10 points) Exceeds the minimum requirements as identified within the SOW in at least 2 instances that are uniquely and specifically identified, including the reasons for identifying them, in the Bidder's proposal.		
Sub-Section Total		
Total Support Proposal (maximum 100 points)		

PART 5 – CERTIFICATIONS AND ADDITIONAL INFORMATION

Bidders must provide the required certifications and additional information to be awarded a contract.

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

The Contracting Authority will have the right to ask for additional information to verify the Bidder's certifications. Failure to comply and to cooperate with any request or requirement imposed by the Contracting Authority will render the bid non-responsive or constitute a default under the Contract.

5.1 Certifications Required with the Bid

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

5.1.1 Declaration of Convicted Offences

As applicable, pursuant to subsection Declaration of Convicted Offences of section 01 of the Standard Instructions, the Bidder must provide with its bid, a completed [Declaration Form](http://www.tpsgc-pwgsc.gc.ca/ci-if/formulaire-form-eng.html) (<http://www.tpsgc-pwgsc.gc.ca/ci-if/formulaire-form-eng.html>), to be given further consideration in the procurement process.

5.1.2 Status and Availability of Resources

The Bidder certifies that, should it be awarded a contract as a result of the bid solicitation, every individual proposed in its bid will be available to perform the Work as required by Canada's representatives and at the time specified in the bid solicitation or agreed to with Canada's representatives. If for reasons beyond its control, the Bidder is unable to provide the services of an individual named in its bid, the Bidder may propose a substitute with similar qualifications and experience. The Bidder must advise the Contracting Authority of the reason for the substitution and provide the name, qualifications and experience of the proposed replacement. For the purposes of this clause, only the following reasons will be considered as beyond the control of the Bidder: death, sickness, retirement, resignation, dismissal for cause or termination of an agreement for default.

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

Signature

Date

5.1.3 Education and Experience

The Bidder certifies that all the information provided in the résumés and supporting material submitted with its bid, particularly the information pertaining to education, achievements, experience and work history, has been verified by the Bidder to be true and accurate. Furthermore, the Bidder warrants that every individual proposed by the Bidder for the requirement is capable of performing the Work described in the resulting contract.

Signature

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5.1.4 Compliance Certification Statement

By submitting a Bid the Bidder certifies that they comply with and understand the Statement of Work and supporting documents that form part of the Requirement.

The Bidder certifies that in the performance of the work detailed in the Statement of Work, that their equipment is certified to function with CBSA equipment and servers. CBSA equipment will not be impacted by the installation and upgrade from the Bidder's hardware and software.

Should any technical dysfunction be predicted, the Contractor may require a test environment to be used prior to any changes or installations to mitigate the effect on the performance of CBSA's equipment.

Signature

Date

5.2 Certifications Precedent to Contract Award and Additional Information

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

5.2.1 Integrity Provisions – List of Names

Bidders who are incorporated, including those bidding as a joint venture, must provide a complete list of names of all individuals who are currently directors of the Bidder.

Bidders bidding as sole proprietorship, as well as those bidding as a joint venture, must provide the name of the owner(s).

Bidders bidding as societies, firms or partnerships do not need to provide lists of names.

5.2.2 Federal Contractors Program for Employment Equity - Bid Certification

By submitting a bid, the Bidder certifies that the Bidder, and any of the Bidder's members if the Bidder is a Joint Venture, is not named on the Federal Contractors Program (FCP) for employment equity "[FCP Limited Eligibility to Bid](http://www.labour.gc.ca/eng/standards_equity/eq/emp/fcp/list/inelig.shtml)" list (http://www.labour.gc.ca/eng/standards_equity/eq/emp/fcp/list/inelig.shtml) available from [Employment and Social Development Canada \(ESDC\) - Labour's](#) website.

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

5.2.3 General Environmental Criteria Certification

The Bidder must select and complete one of the following two certification statements.

- A) The Bidder certifies that the Bidder is registered or meets ISO 14001.

Bidders' Authorized Representative Signature

Date

OR

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- B) The Bidder certifies that the Bidder meets and will continue to meet throughout the duration of the contract, a minimum of four (4) out of six (6) criteria identified in the table below.

The Bidder must indicate which four (4) criteria, as a minimum, are met.

Green Practices within the Bidders' organization	Insert a checkmark for each criterion that is met
Promotes a paperless environment through directives, procedures and/or programs	
All documents are printed double sided and in black and white for day to day business activity unless otherwise specified by your client	
Paper used for day to day business activity has a minimum of 30% recycled content and has a sustainable forestry management certification	
Utilizes environmentally preferable inks and purchase remanufactured ink cartridges or ink cartridges that can be returned to the manufacturer for reuse and recycling for day to day business activity.	
Recycling bins for paper, newsprint, plastic and aluminum containers available and emptied regularly in accordance with local recycling program.	
A minimum of 50% of office equipment has an energy efficient certification.	

Bidders' Authorized Representative Signature

Date

PART 6 - SECURITY, FINANCIAL AND OTHER REQUIREMENTS

6.1 Security Requirements

1. 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 sites must meet the security requirements 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;
2. Bidders are reminded to obtain the required security clearance promptly. Any delay in the award of a contract to allow the successful Bidder to obtain the required clearance will be at the entire discretion of the Contracting Authority.
3. For additional information on security requirements, Bidders should refer to the [Contract Security Program](http://www.tpsgc-pwgsc.gc.ca/esc-src/introduction-eng.html) of Public Works and Government Services Canada (<http://www.tpsgc-pwgsc.gc.ca/esc-src/introduction-eng.html>) website.

6.2 Financial Capability

1. The Bidder must have the financial capability to fulfill this requirement. To determine the Bidder's financial capability, the Contracting Authority may, by written notice to the Bidder, require the submission of some or all of the financial information detailed below during the evaluation of bids. The Bidder must provide the following information to the Contracting Authority within fifteen (15) working days of the request or as specified by the Contracting Authority in the notice:
 - a. Audited financial statements, if available, or the unaudited financial statements (prepared by the Bidder's outside accounting firm, if available, or prepared in-house if no external statements have been prepared) for the Bidder's last three fiscal years, or for the years that the Bidder has been in business if this is less than three years (including, as a minimum, the Balance Sheet, the Statement of Retained Earnings, the Income Statement and any notes to the statements).
 - b. If the date of the financial statements in (a) above is more than five months before the date of the request for information by the Contracting Authority, the Bidder must also provide, unless this is prohibited by legislation for public companies, the last quarterly financial statements (consisting of a Balance Sheet and a year-to-date Income Statement), as of two months before the date on which the Contracting Authority requests this information.
 - c. If the Bidder has not been in business for at least one full fiscal year, the following must be provided:
 - i. the opening Balance Sheet on commencement of business (in the case of a corporation, the date of incorporation); and
 - ii. the last quarterly financial statements (consisting of a Balance Sheet and a year-to-date Income Statement) as of two months before the date on which the Contracting Authority requests this information.

-
- d. A certification from the Chief Financial Officer or an authorized signing officer of the Bidder that the financial information provided is complete and accurate.
 - e. A confirmation letter from all of the financial institution(s) that have provided short-term financing to the Bidder outlining the total of lines of credit granted to the Bidder and the amount of credit that remains available and not drawn upon as of one month prior to the date on which the Contracting Authority requests this information.
 - f. A detailed monthly Cash Flow Statement covering all the Bidder's activities (including the requirement) for the first two years of the requirement that is the subject of the bid solicitation, unless this is prohibited by legislation. This statement must detail the Bidder's major sources and amounts of cash and the major items of cash expenditures on a monthly basis, for all the Bidder's activities. All assumptions made should be explained as well as details of how cash shortfalls will be financed.
 - g. A detailed monthly Project Cash Flow Statement covering the first two years of the requirement that is the subject of the bid solicitation, unless this is prohibited by legislation. This statement must detail the Bidder's major sources and amounts of cash and the major items of cash expenditures, for the requirement, on a monthly basis. All assumptions made should be explained as well as details of how cash shortfalls will be financed.
2. If the Bidder is a joint venture, the financial information required by the Contracting Authority must be provided by each member of the joint venture.
 3. If the Bidder is a subsidiary of another company, then any financial information in 1. (a) to (f) above required by the Contracting Authority must be provided by the ultimate parent company. Provision of parent company financial information does not by itself satisfy the requirement for the provision of the financial information of the Bidder, and the financial capability of a parent cannot be substituted for the financial capability of the Bidder itself unless an agreement by the parent company to sign a Parental Guarantee, as drawn up by Public Works and Government Services Canada (PWGSC), is provided with the required information.
 4. **Financial Information Already Provided to PWGSC:** The Bidder is not required to resubmit any financial information requested by the Contracting Authority that is already on file at PWGSC with the Contract Cost Analysis, Audit and Policy Directorate of the Policy, Risk, Integrity and Strategic Management Sector, provided that within the above-noted time frame:
 - a. the Bidder identifies to the Contracting Authority in writing the specific information that is on file and the requirement for which this information was provided; and
 - b. the Bidder authorizes the use of the information for this requirement.

It is the Bidder's responsibility to confirm with the Contracting Authority that this information is still on file with PWGSC.
 5. **Other Information:** Canada reserves the right to request from the Bidder any other information that Canada requires to conduct a complete financial capability assessment of the Bidder.
 6. **Confidentiality:** If the Bidder provides the information required above to Canada in confidence while indicating that the disclosed information is confidential, then Canada will treat the information in a confidential manner as permitted by the [Access to Information Act](#), R.S., 1985, c. A-1, Section 20(1) (b) and (c).

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7. **Security:** In determining the Bidder's financial capability to fulfill this requirement, Canada may consider any security the Bidder is capable of providing, at the Bidder's sole expense (for example, an irrevocable letter of credit from a registered financial institution drawn in favour of Canada, a performance guarantee from a third party or some other form of security, as determined by Canada).

PART 7 - RESULTING CONTRACT CLAUSES

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

7.1 Statement of Requirement

The Contractor must design, supply, install, test, provide operational and technical training and establish maintenance and support agreements for the upgrade and expansion of the closed circuit television system (CCTV) equipment for the Jean Lesage International Airport in Quebec (Quebec) as described in the Statement of Work (SOW) (Refer to Annex A). The Contractor must provide acceptable documentation for the maintenance of this system.

Refer to Annex A for Statement of Work (SOW) and applicable Technical Specifications Documents. The purpose of the SOW document is to define the technical aspects for the upgrade and expansion of the closed circuit television system (CCTV) equipment for the Jean Lesage International Airport in Quebec (Quebec). The SOW will indicate the extent to which both general and particular CBSA specifications are applicable to the implementation of this requirement.

7.1.1 Option to Purchase Contractor Recommended Spare Parts and/or Test Equipment

- a) The Contractor hereby grants to Canada and Canada shall retain an irrevocable option exercisable at any time during the Contract to procure any or all of the spare parts and/or test equipment described in the supplier's proposal.
- b) The Contractor shall be given a minimum of thirty (30) working days notice in writing by the Contracting Authority indicating that Canada intends to exercise the option.
- c) The option may only be exercised by the Contracting Authority, and the exercise of the option will be evidenced through a formal Contract Amendment.
- d) Price support may be requested.

7.1.2 Task Authorization

The Work or a portion of the Work to be performed under the Contract will be on an "as and when requested basis" using a Task Authorization (TA). The Work described in the TA must be in accordance with the scope of the Contract.

7.1.2.1 Task Authorization Process

1. The Technical Authority will provide the Contractor with a description of the task using the "Task Authorization Form for non-DND clients" form specified in Annex C.
2. The Task Authorization (TA) will contain the details of the activities to be performed, a description of the deliverables, and a schedule indicating completion dates for the major activities or submission dates for the deliverables. The TA will also include the applicable basis and methods of payment as specified in the Contract.
3. The Contractor must provide the Technical Authority within 14 calendar days of its receipt, the proposed total estimated cost for performing the task and a breakdown of that cost, established in accordance with the Basis of Payment specified in the Contract.
4. The Contractor must not commence work until a TA authorized by the Contracting Authority has been received by the Contractor. The Contractor acknowledges that any work performed before a TA has been received will be done at the Contractor's own risk.

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7.1.2.2 Task Authorization Limit

All task authorizations must be authorized by the Contracting Authority before issuance.

7.1.2.3 Periodic Usage Reports - Contracts with Task Authorizations

The Contractor must compile and maintain records on its provision of services to the federal government under authorized Task Authorizations issued under the Contract.

The Contractor must provide this data in accordance with the reporting requirements detailed below. If some data is not available, the reason must be indicated. If services are not provided during a given period, the Contractor must still provide a "nil" report.

The data must be submitted on a quarterly basis to the Contracting Authority.

The quarterly periods are defined as follows:

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

The data must be submitted to the Contracting Authority no later than ten (10) calendar days after the end of the reporting period.

Reporting Requirement- Details

A detailed and current record of all authorized tasks must be kept for each contract with a task authorization process. This record must contain:

For each authorized task:

- i. the authorized task number or task revision number(s);
- ii. a title or a brief description of each authorized task;
- iii. the total estimated cost specified in the authorized Task Authorization (TA) of each task, exclusive of Applicable Taxes;
- iv. the total amount, exclusive of Applicable Taxes, expended to date against each authorized task;
- v. the start and completion date for each authorized task; and
- vi. the active status of each authorized task, as applicable.

For all authorized tasks:

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

7.2 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](https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) (https://buyandsell.gc.ca/policy-and-guidelines/standard-acquisition-clauses-and-conditions-manual) issued by Public Works and Government Services Canada.

7.2.1 General Conditions

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

7.2.2 Supplemental General Conditions

4001 (2015-04-01) Hardware Purchase, lease and Maintenance;
4003 (2010-08-16) Licensed Software;
4004 (2013-04-25) Maintenance and Support Services for Licensed Software; and
4006 (2010-08-16) Contractor to Own Intellectual Property Rights in Foreground Information

apply to and form part of the Contract.

7.2.3 SACC Manual Clauses

B1501C (2018-06-21) Electrical Equipment
A9068C (2010-01-11) Site Regulations
A2000C (2006-06-16) Foreign Nationals (Canadian Contractor)
A2001C (2006-06-16) Foreign Nationals (Foreign Contractor)

7.3 Security Requirements

1. The Contractor/Offeror must, at all times during the performance of the Contract/Standing Offer, 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/Offeror 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.
3. The Contractor/Offeror **MUST NOT** remove any **PROTECTED** information or assets from the identified work site(s), and the Contractor/Offeror 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/Offeror must comply with the provisions of the:
 - a) Security Requirements Check List and security guide (if applicable), attached at Annex D; and
 - b) Industrial Security Manual (Latest Edition).

7.4 Term of Contract

7.4.1 Period of the Contract

The system design, the delivery of all related equipment, the completion of all installation, testing and contract related work is to be completed at the Site on or before ***(Delivery as offered and as accepted will be inserted at contract award)***.

The Contractor must submit a final delivery and installation schedule within 10 calendar days after the contract award date.

7.4.2 Shipping Instructions - Delivery at Destination

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

DDP Delivered Duty Paid to the Jean Lesage International Airport at 500 Principale Street Quebec (Quebec) G2G 2T9, Incoterms 2000 for shipments from a commercial supplier.

7.4.2.1 Inspection and Final Acceptance

1) Inspection

Inspection shall be carried out by the Technical Authority or the authorized representative at destination.

2) Final Acceptance

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

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

7.5 Authorities

7.5.1 Contracting Authority

The Contracting Authority for the Contract is:

Robert (Bob) Dubé
Supply Specialist

Public Works and Government Services Canada
Acquisitions Branch
Logistics, Electrical, Fuel and Transportation Directorate, "HN" Division
7B3, Place du Portage, Phase III, 11 Laurier Street
Gatineau, QC, K1A 0S5

Telephone: (873) 469-3936
Facsimile: (819) 953-4944
E-mail address: robert.dube@pwgsc-tpsgc.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.

7.5.2 Technical Authority

The Technical Authority for the Contract is:

(To be completed at time of Contract award)

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

The Technical Authority named above is the representative of the department or agency for whom the Work is being carried out under the Contract and is responsible for all matters concerning the technical content of the Work under the Contract. Technical matters may be discussed with the Technical Authority, however the Technical Authority has no authority to authorize changes to the scope of the Work. Changes to the scope of the Work can only be made through a contract amendment issued by the Contracting Authority.

7.5.3 Contractor's Representative

Name and telephone number of the person responsible for:

(To be completed at time of Contract award)

General enquiries

Name: _____
Telephone: _____
Facsimile: _____
E-mail: _____

Delivery follow-up

Name: _____
Telephone: _____
Facsimile: _____
E-mail: _____

7.5.4 Warranty Repairs

The contact person for warranty repairs to be performed on site as it may be necessary is as follows:

(To be completed at time of Contract award)

Response Time: _____
Name: _____
Telephone: _____
Facsimile: _____
E-mail: _____

7.5.5 Emergency Services/Repairs

If requested by Canada Border Services Agency (CBSA), the Contractor shall 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 shall be paid as indicated herein. The response time shall not exceed four (4) hours. The contact person is as follows:

(To be completed at time of Contract award)

Name: _____
Telephone: _____

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Facsimile: _____
E-mail: _____

7.6 Payment

7.6.1 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 for the equipment, installation and testing, travel expenses, on-site training, as-built drawings and manuals as specified in the Contract. Customs duties are included and Applicable Taxes are extra.

The Contractor will be paid firm hourly rates as follows, for work associated with emergency repairs, delays and performed in accordance with the Contract. Customs duties are included and Applicable Taxes are extra.

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

Task Authorizations

The Contractor will be reimbursed for the costs reasonably and properly incurred in the performance of the Work specified in the authorized Task Authorization (TA), as determined in accordance with the Basis of Payment in Annex B, to the limitation of expenditure specified in the authorized Task Authorization.

Canada's liability to the Contractor under the authorized Task Authorization must not exceed the limitation of expenditure specified in the authorized TA. Customs duties are included and Applicable Taxes are extra.

No increase in the liability of Canada or in the price of the Work specified in the authorized TA resulting from any design changes, modifications or interpretations of the Work will be authorized or paid to the Contractor unless these design changes, modifications or interpretations have been authorized, in writing, by the Contracting Authority before their incorporation into the Work.

Travel for Task Authorized Work

The Contractor will be reimbursed for the authorized travel and living expenses reasonably and properly incurred in the performance of the Work, at cost, without any allowance for overhead or profit, in accordance with the meal, private vehicle and incidental expense allowances specified in Appendices B, C and D of the [National Joint Council Travel Directive](#) and with the other provisions of the directive referring to "travellers", rather than those referring to "employees".

All travel must have the prior authorization of the Technical Authority. All payments are subject to government audit.

Estimated cost: \$ ***(to be inserted at contract award)***

7.6.2 Limitation of Price

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

7.6.3 Limitation of Expenditure - Cumulative Total of all Task Authorizations

1. Canada's total liability to the Contractor under the Contract for all authorized Task Authorizations (TAs), inclusive of any revisions, must not exceed the sum of \$ ***(to be inserted at contract award)***. Customs duties and Applicable Taxes are included.

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2. No increase in the total liability of Canada will be authorized or paid to the Contractor unless an increase has been approved, in writing, by the Contracting Authority.
3. The Contractor must notify the Contracting Authority in writing as to the adequacy of this sum:
 - a. when it is 75 percent committed, or
 - b. four (4) months before the contract expiry date, or
 - c. as soon as the Contractor considers that the sum is inadequate for the completion of the Work required in all authorized TAs, inclusive of any revisions, whichever comes first.
4. If the notification is for inadequate contract funds, the Contractor must provide to the Contracting Authority, a written estimate for the additional funds required. Provision of such information by the Contractor does not increase Canada's liability.

7.6.4 Discretionary Audit

The Contractor's certification that the price or rate is not in excess of the lowest price or rate charged anyone else, including the Contractor's most favoured customer, for the like quality and quantity of the goods, services or both, is subject to verification by government audit, at the discretion of Canada, before or after payment is made to the Contractor.

If the audit demonstrates that the certification is in error after payment is made to the Contractor, the Contractor must, at the discretion of Canada, make repayment to Canada in the amount found to be in excess of the lowest price or rate or authorize the retention by Canada of that amount by way of deduction from any sum of money that may be due or payable to the Contractor pursuant to the Contract.

If the audit demonstrates that the certification is in error before payment is made, the Contractor agrees that any pending invoice will be adjusted by Canada in accordance with the results of the audit. It is further agreed that if the Contract is still in effect at the time of the verification, the price or rate will be lowered in accordance with the results of the audit

7.6.5 Time Verification

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

7.7 Progress Payment Claim and Invoicing Instructions

7.7.1 Progress Payment Claim (Including Task Authorization Payments)

1. The Contractor must submit a claim for payment using form [PWGSC-TPSGC 1111](#), Claim for Progress Payment.

Each claim must show:

- a. all information required on form [PWGSC-TPSGC 1111](#);
- b. all applicable information detailed under the section entitled "Invoice Submission" of the general conditions;
- c. a list of all expenses;
- d. expenditures plus pro-rated profit or fee; and
- e. the description and value of the milestone claimed as detailed in the Contract.

Each claim 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, travel and living expenses; and
 - c. a copy of the monthly progress report.
2. Applicable Taxes must be calculated on the total amount of the claim before the holdback is applied. At the time the holdback is claimed, there will be no Applicable Taxes payable as it was claimed and payable under the previous claims for progress payments.
3. The Contractor must prepare and certify one original and two (2) copies of the claim on form PWGSC-TPSGC 1111, and forward it to the Technical Authority identified under the section entitled "Authorities" of the Contract for appropriate certification after inspection and acceptance of the Work takes place.

The Technical Authority will then forward the original and two (2) copies of the claim to the Contracting Authority for certification and onward submission to the Payment Office for the remaining certification and payment action.

4. The Contractor must not submit claims until all work identified in the claim is completed.

7.7.2 Invoicing Instructions

1. The Contractor must submit invoices in accordance with the section entitled "Invoice Submission" of the general conditions.
2. By submitting invoices the Contractor is certifying that the goods and services have been delivered and that all charges are in accordance with the Basis of Payment provision of the Contract, including any charges for work performed by subcontractors.
3. Invoices must be distributed as follows:
 - a. The Contractor must send the invoice to vendors-fournisseurs@cbsa-asfc.gc.ca for payment. This email address is to be used only for submitting invoices and for payment status inquiries.
 - b. One (1) copy must be forwarded to the Contracting Authority identified under the section entitled "Authorities" of the Contract.

7.7.3 Schedule of Milestones

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

1 st Milestone	Design of the System	100% Design	List value – 10%	Approved Final Design Report
2 nd Milestone	Delivery of Equipment	100% Equipment	List value – 10%	Approved Packing Slip
3 rd Milestone	50% of Installation, including travel and living associated with installation	50% Installation, 100% travel and living associated with installation	(50% value of Installation + Travel and Living) – 10%	Approved Progress Report
4 th Milestone	Installation completion, software integration	50% installation, 100% software	(50% installation + 100% software integration +	Acceptance Tests Completed,

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	and testing including travel	integration and testing, 100% travel and living associated with Installation	100% testing + Associated travel) – 10%	All deficiencies resolved in Acceptance Test.
5 th Milestone	On-site Training and Documentation including travel	100% on-site training 100% Documentation 100% Travel and Living associated with On-site Training	(100% on-site training + 100% documentation + Travel and Living) – 10%	Handover sheets and training course Summary sheets, signed by trainees.
6 th Milestone	Holdback			All Deliverables Provided

7.7.4 Method of Payment – Emergency Repairs and Delays

7.7.4.1 Single Payment

Canada will pay the Contractor upon completion and delivery of the Work in accordance with the payment provisions of the Contract if:

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

7.7.4.2 Travel and Living Expenses – Emergency Repairs, delays and design changes

The Contractor will be reimbursed its authorized travel and living expenses reasonably and properly incurred in the performance of the Work, at cost, without any allowance for profit and/or administrative overhead, in accordance with the meal, private vehicle and incidental expenses provided in Appendices B, C and D of the [National Joint Council Travel Directive](#) and with the other provisions of the directive referring to "travellers", rather than those referring to "employees".

All travel must have the prior authorization of the Technical Authority.

All payments are subject to government audit.

7.8 Certifications

7.8.1 Compliance

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

7.9 Applicable Laws

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The Contract must be interpreted and governed, and the relations between the parties determined, by the laws in force in **(name of the province to be inserted at contract award)**.

7.10 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 supplemental general conditions:
 - (i) 4001 (2015-04-01) Hardware Purchase, lease and Maintenance;
 - (ii) 4003 (2010-08-16) Licensed Software;
 - (iii) 4004 (2013-04-25) Maintenance and Support Services for Licensed Software; and
 - (iv) 4006 (2010-08-16) Contractor to Own Intellectual Property Rights in Foreground Information
- (c) the general conditions 2030 (2018-06-21), General Conditions - Higher Complexity - Goods;
- (d) Annex A, Statement of Work (SOW) or Requirement (SOR);
- (e) Annex B, Basis of Payment;
- (f) the signed Task Authorizations (including all of its annexes, if any);
- (g) Annex D, Security Requirements Check List (SRCL); and
- (h) the Contractor's bid dated _____, *(insert date of bid)* *(If the bid was clarified or amended, insert at the time of contract award: ", as clarified on _____" or ", as amended on _____" and insert date(s) of clarification(s) or amendment(s)).*

7.11 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.

7.12 Meetings

A meeting may be convened after contract award at a location to be determined by the Contracting Authority to review contractual and technical requirements. The Contractor will be responsible for the preparation and distribution of the minutes of meeting. The meeting will be held with representatives of the Contractor, the Department of Public Services and Procurement Canada and Canada Border Services Agency (CBSA).

7.13 Contractor's Facilities

The Contracting Authority and the Technical Authority, or their delegated representative shall be afforded access to the Contractor's plant and all other premises where pertinent processes are being performed.

7.14 Delay by Canada

In the event that an installation crew proceeds to the site but is unable to perform the work due to any disturbance or other delays caused by Canada at the site, the Contractor shall immediately notify the Technical Authority. The cost of holding the installation crew on standby shall be paid as indicated herein. In no event shall a crew remain on standby for more than four (4) hours per day without prior authorization.

7.15 After Sales Service

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The Contractor certifies that it is capable of providing after sales service, subsequent to the warranty period, including servicing personnel and facilities during the lifetime expectancy of the equipment.

7.16 Lifetime Spares

It shall be a condition of any contract resulting here from that the Contractor undertakes to supply spare parts for the equipment proposed during the life expectancy of the equipment.

Life of the equipment: **(to be inserted at contract award)** years.

Should the Contractor discontinue the manufacture of the equipment being procured during the life expectancy of the equipment, it shall notify Canada sufficiently in advance to permit the purchase of spares for the remaining life of the equipment or, at the discretion of Canada, either make satisfactory arrangements with a third party to establish a continuing source of spares or provide to Canada, at no charge, a non-exclusive royalty free license to manufacture and have manufactured for its own use spare parts, and provide copies of all drawings, technical information, specifications, manufacturing instructions and patterns necessary to manufacture the spares.

7.17 Disclosure of Information

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

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ANNEX A - STATEMENT OF WORK (SOW)

CANADA BORDER SERVICES AGENCY (CBSA)

CLOSED-CIRCUIT TELEVISION (CCTV) SYSTEM AT THE JEAN-LESAGE INTERNATIONAL AIRPORT IN QUEBEC CITY

ABBREVIATIONS TABLE

Abbreviation	Expansion
ABM	Advanced Battery Management
ACL/ACLs	Access Control Lists
ANSI	American National Standards Institute
API	Application Programming Interface
ASF	Advanced System Format
AVI	Audio Video Interleave
AVMS	Advanced Video Management Systems
CAS	Card Access System
CBSA	Canadian Border Services Agency
CCTV	Closed Circuit Television
CLI	Command Line Interface
COTS	Commercial Off the Shelf
CSA	Canadian Standards Association
C/W	Complete With
DEU	Drug Enforcement Unit
DVDs	Digital Versatile Disc
DHCP	Dynamic Host Configuration Protocol
EIA	Electronic Industries Alliance
EPDU	Electrical Power Distribution Unit
FO	Failover
FPS	Frames per second
GBAC	Group Based Access Control
Gbps	Billions of bits per second
GUI	Graphical User Interface
HP	Hewlett Packard
IEEE	Institute of Electrical and Electronic Engineers

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IP	Internet Protocol
ICMP	Internet Control Message Protocol
ID	Identification
IGMP	Internet Group Management Protocol
iSCSI	Internet small computer systems interface
ISP	Internet Service Provider
IT	Information Technology
KVA	Kilo Volts Amperes
KVM	Keyboard Video Mouse
LAN	Local Network Area
LLDP	Link Layer Discovery Protocol
MAC	Media Access Control
MIB	Management Information Base
MLD	Multicast Listener Discovery
MPIO	Multipath Input Output
NAS	Network Area Storage
NIC	Network Interface Controller
NFPA	National Fire Protection Association
NMS	Network Management System
NTP	Network Time Protocol
O.S.H. A	Occupational Safety and Health Act
OELA	Open Enterprise Level Architecture
ONVIF	Open Network Video Interface Forum
PC	Personal Computer
PCVS	Personal Computer Viewing Station
PDA	Power Distribution Unit
PDU	Power Distribution Unit
PIL	Primary Inspection Lane
PIN	Personal Identification Number
POEs	Ports of Entry
PoE	Power over Ethernet
PoE +	High Power over Ethernet
PPM	Periodic Preventative Maintenance
PSPC	Public Services and Procurement Canada

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PTZ	Pan and Tilt Zoom
QoS	Quality of Service
RAIDS	Redundant Array of Independent Discs
RBAC	Role Based Access Control
RC	Remote Closet
RFC 1918	Request for Comment
RFP	Request for Proposal
RMON	Remote Network Monitoring
RPM	Remote Power Module
RPO	Remote Power Off
ROO	Remote On/Off
SAN	Storage Area Network
SCSI	Small computer system interface
SDK	Software Development Kit
SET	Secondary Enforcement Team
sFLOW	Sampled Flow
SFP	Small Form factor pluggable transceiver
SMA	Service Management Agreement
SMTP	Simple Mail Transfer Protocol
SNMP	Simple Network Management Protocol
SNMPc	Simple Network Management Protocol console
SNMPv3	Simple Network Management Protocol version 3
SOW	Statement of Work
SSHv2	Secure Shell version 2
SSL	Secure sockets layer
TIA	Telecommunications Industry Association
TBD	To Be Determined
TCP/UDP	Transmission Control Protocol
UDLD	Uni-Directional Link Detection
UPS	Uninterrupted Power Supply
USB	Universal Serial Bus
ULC	Underwriters Laboratories of Canada
VACIS	Vehicle and Cargo Inspection System
VLAN	Virtual Local Area Network

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VMS	Video Management System
VPN	Virtual Private Network
VTP	VLAN Trunking Protocol
WORM	Virus that replicates itself
XRMON	Extended Remote Network Monitoring

1. OBJECTIVE

The Canada Border Services Agency (CBSA) has a requirement to acquire and install closed-circuit television (CCTV) equipment at the Jean-Lesage International Airport in Quebec City.

2. BACKGROUND

It is the policy of the CBSA to use audio-video monitoring and recording technology in support of its programs, its operations, and for the protection of its employees and assets, while respecting the laws of Canada and the privacy rights of individuals and employees. The use of closed-circuit television cameras to monitor facilities and operations are an integral part of the CBSA's security framework and operations management.

3. SCOPE

The Contractor will be responsible for the supply, installation, programming and start the equipment listed in Appendix A - CCTV System specifications at the CBSA premises located at the following address:

Canada Border Services Agency
Jean-Lesage International Airport, Quebec City, International arrivals
500 Principale Street
Quebec, Quebec
G2G 2T9

The CCTV system installation will be procured as a turn-key solution to cover all requirements defined in Appendix A - CCTV System specifications.

4. MEETINGS

Upon award of the contract, the Contractor and the CBSA will participate in a kick-off meeting or teleconference to review the project schedule and any relevant information towards the successful completion of the project.

5. TASKS

The contractor must provide, install, cable, connect, program and start up the equipment as describe in this SOW and in accordance with the specifications described in Appendix A - CCTV System specifications.

The Contractor must provide the documentation and the technical drawings in relation to the installation as well as train the employees in the use of the CCTV system, as described in the present document.

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The Contractor will also be required to perform additional minor tasks as part of the turn key commissioning of the system. This includes, but is not limited to, role management programming, images viewing configurations, adjustment of installed cameras.

6. ITEMS PROVIDED BY CBSA

The following items have already been installed by CBSA:

- a) The conduits.
- b) The copper cables CAT5e / CAT6 from the cameras to the server room and the fibre optic cables for the cameras located more than 80m from their grouping point. The fibre optic cables have also been installed between the server room and the satellite room.
- c) The "H" frame.
- d) The patch panel panels.
- e) All the mechanical systems (ventilation, electricity, etc.).
- f) The scoop of the completed work – Items provided by CBSA – will have to be validated by the Contractor at the beginning of the project.

7. DELIVERABLES

7.1. Delivery and installation

- 7.1.1. Delivery of the goods required to complete the project must be completed by the date indicated in Article 9 "Schedule".
- 7.1.2. Installation must be completed by the date indicated in Article 9 "Schedule" at the latest.

7.2. Commissioning

At the latest, by the date indicate in Article 9 "Schedule"

- 7.2.1. The Contractor must ensure that the system operates in conformity with project requirements and the design intent, in accordance with the contract.
- 7.2.2. Commissioning includes extensive documenting and verifying activities related to the design, static verification, functional performance testing, and start-up of system components, sub-systems, and integrated systems.
- 7.2.3. The contractor must ensure that all functional, performance and operational requirements have been correctly interpreted and implemented.
- 7.2.4. The contractor must confirm comprehensive operation and maintenance documentation is available; the documentation must verify and demonstrate that all systems operate consistently at peak efficiencies, under all normal load conditions, as per the specifications in Appendix A - CCTV System specifications.

7.3. Documentation, Shop Drawings and Training

At the latest, by the date indicate in Article 9 "Schedule", the Contractor must:

- 7.3.1. Provide complete documentation, covering all technical aspects and the operations of the system, must be provided in both official languages. The documentation must include:
 - a) A user-friendly guide, for employees in charge of the system; and
 - b) A system planning guide, for data collection and distribution. All required planning assistance must be provided.
- 7.3.2. Provide all shop drawings, original drawings and modified standard drawings, to illustrate details of work, and a set of "as-built" drawings that indicate the location of system equipment.
- 7.3.3. Provide all electronic drawings in AutoCAD 2013 format, as well as PDF format.
- 7.3.4. Provide all updated digital drawings as necessary to reflect as-built information.
- 7.3.5. Provide the complete documentation in French and English. This documentation must be covering all technical and operational aspects of the system, and the necessary documents for system maintenance, as well as warranty certificates.
- 7.3.6. Provide an on-site advanced training course, focused on the operation of the CCTV equipment, manipulation of system parameters, data management, and functional use of all visualisation equipment and software. The contractor must also provide the training materials for new operational employees. This training must be offered in English or French for up to 10 CBSA officers, and should not be less than two (2) hours and cannot exceed five (5) hours of instruction. This training must be completed by the date indicated in Article 9 "Schedule".
- 7.3.7. Ensure CBSA is granted full "Administrator" rights, to all CCTV equipment computer systems, servers and subsystems.
- 7.3.8. Ensure that the CBSA is provided with a list of all user account types and passwords for all CCTV equipment computer systems, servers and subsystems.

7.4. Warranty

- 7.4.1. The Contractor's obligations include the on-site replacement, repair, transportations, reinstallation and verification of all defective equipment due to equipment failure or installation, at no additional cost.
- 7.4.2. The warranty period will be 36 months after delivery and acceptance of the Work or the length of the Contractor's or manufacturer's standard warranty period, whichever is longer.
- 7.4.3. The warranty must include any-and-all maintenance service as necessary to maintain the safety, operational capabilities and performance of CCTV System equipment. Maintenance service includes, but is not limited to: preventive maintenance, diagnostics, corrective maintenance, calibration, repair or replacement parts, and verification testing.

7.4.4. The contractor must perform a minimum of one visit per month for the first six months of the warranty; after this period, two visits per year (six month apart) where the contractor must:

- a) Check and/or clean the camera lens if needed;
- b) Check the System and VMS logs in order to ensure the CCTV System is working properly in accordance with the original specifications as per Appendix A - CCTV System specifications;
- c) Create a VMS installation report in a readable format (pdf, word, or text) that has to be provided to the project authority identified in 10.1 and the technical authority identified in 10.2; and
- d) Create a manual visit/maintenance report provided as a checklist to the project authority identified in 10.1 and the technical authority identified in 10.2.

7.4.5. Calls for repairs must be responded to within 24 hours, and repair service must be available 24 hours a day, 365 days a year, including statutory holidays.

8. CONSTRAINTS

8.1. Security

The present SOW contains security requirements and the Contractor will be escorted at all times during the performance of the Work. For additional information, refer to Part 6: security, financial and other related requirements; and Part 7: resulting contract clauses of the request for proposal (RFP).

8.2. Language

All deliverables under section 7 must be provided in English and French.

8.3. Operational Down-Time

Where a site already has an operating CCTV system in place, the existing systems operational down time must be kept to a minimum. All down time will be planned and coordinated with onsite staff and submitted to the CBSA project authority for approval. The contractor's staff may be required to work during evenings, nights and/or weekends to reduce the amount of down time and to meet operational requirements.

8.4. Institutional Operations

The contractor must take every precaution to minimize any disturbance to institutional operations. The contractor and his staff on site must cooperate fully with operational staff and conform to all security requirements.

8.5. Final Cleaning

Upon completion of the Work, the contractor's personnel will remove tools, waste material and leave worksite in a clean, optimal operational condition.

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8.6. Equipment

Unless approved by the Contracting authority, the supplied equipment is to be new, not used or refurbished.

9. SCHEDULE

- 9.1. A kick-off meeting will be scheduled within two (2) weeks of contract award.
- 9.2. The Contractor will provide a delivery and installation schedule within ten (10) calendar days following the date of contract award.
- 9.3. The contractor must complete the full installation for the CCTV system, the commissioning, the training as well as making all the documentation and technical drawing available within 16 weeks of contract award.

10. AUTHORITIES

10.1. Project Authority

The project Authority is the person responsible for the CCTV program at a regional level and who will assist in coordinating the project with the Port of Entry's Superintendent.

The Project Authority for this project is:

(To be inserted following the contract award)

Name: _____
Title: _____
Organisation: _____
Address: _____

Telephone: _____
Fax: _____
E-mail: _____

10.2. Technical Authority

The Technical Authority is the person with in-depth knowledge for the specifications at a national level that is a subject matter expert in the specifications contained in Appendix A - CCTV System specifications.

The Technical Authority for this project is:

(To be inserted following the contract award)

Name: _____
Title: _____
Organisation: _____
Address: _____

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Telephone: _____
Fax: _____
E-mail: _____

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APPENDIX A to ANNEX A

Specifications of the CCTV system for the Jean-Lesage Airport

Performances expected

The contractor warranty the following performances of the complete CCTV Solution:

Power supply availability

- The CCTV System must be resilient in the event of a grid failure, by using a UPS device for the first 20 minutes. CBSA will ensure that a generator will take over the UPS before the runtime expires.

Video Viewing Performance

- At minimum, all cameras must be configured to have live stream at the specified resolution and frame rate for each camera type, unless otherwise specified.
- The minimum frame rate in viewing mode must be 30 FPS, unless otherwise specified.

Video Recording Performance

- At minimum, all cameras must be configured to record 24/7 continuously at the specified resolution and frame rate for each camera type, unless otherwise specified.
- The minimum frame rate for recording is 15 FPS, unless otherwise specified. Video Recording on motion should not be configured unless otherwise specified.

Video Playback Performance

- At minimum, all cameras must be configured to playback at the specified resolution and frame rate for each camera type, unless otherwise specified.
- The minimum frame rate in Playback mode must be 15 FPS, unless otherwise specified.

Video Retention Period

- The retention time for all camera footage must be of at least 30 days, unless otherwise specified.

Recording availability (Failover)

- The video surveillance system must continue to record with the same performance, all camera footage in the event of a Video Recording Server failure.
- In the event of a machine failure of the Video Recording Server, a Video Recording Failover Server must be configured to take over automatically the recording in less than one (1) minute.
- The Video Recording Failover server must provide a minimum of 5 days of storage.
- Live and archived video associated with the Video Recording Failover Server must be accessible at all times by the client applications.

Management availability (Failover)

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- In the event of a machine failure of the Video Management Server, a Video Management Failover Server must be configured to take over automatically the video Management in less than one (1) minute.
 - Live videos must be accessible at all times by the client applications.

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Requirements concerning the CCTV System equipment in General

General considerations

The bidder must describe the list of equipment proposed; including quantity and any applicable configuration details (i.e. hard drive model / quantity, RAM size, etc...).

The supplied equipment must be new, unused and not refurbished.

Generally, where applicable, the equipment proposed by the bidder must be compliant and compatible with the existing CBSA environment that hosts the equipment like the server room, the technical rooms or the surveillance rooms; these includes, but are not limited to: the specified* CBSA AC electric power capacity, the existing AC plug types, the existing AC voltages and the specified* heat dissipation capacity (BTU). It is recommended, if applicable, to utilize a higher voltage source downstream of the UPS, for greater efficiency and power saving. It is the contractor's responsibility to ensure that the equipment it provides and it installs respect this compliance and compatibility.

The bidder must commit in a written manner in his proposal to provide detailed specifications sheets and documentations related to the CCTV equipment and installation to CBSA contracting authority for the concerned project.

The bidder must demonstrate and commit that the resource that will install the CCTV System has a valid VMS manufacturer's certification, particularly for the deployment, configuration, and administration of the VMS software to provide an optimized, high-performance CCTV system.

Technical acceptance criteria

The equipment and services provided must meet or exceed, as the case may be, all the mandatory stated requirements define in the *Specifications* tables below.

Please note that compliance with the stated criteria must be demonstrated by submission of supporting documentation such as technical literature/brochures, operating manuals, and/or written statement describing how each requirement is met. If a bidder only states "comply" without any further details, this is not considered as a demonstration of compliance.

Systems not meeting all the following Mandatory Specifications will be considered non-compliant.

If a server or desktop computer model is proposed then the bidder must describe the Processor/RAM/Hard Drives configuration for each of them in order to demonstrate that the expected performances will be met.

By submitting a proposal, the bidder commits to proceed to an acceptance test at the delivery phase based on the features and performances defined in the contract for the install of the CCTV System.

In order to minimize Bid failure, it is imperative to be aware of case examples of typical errors which compromised the bid acceptance:

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- **First example of evaluation failure (native camera resolution):** If a proposed camera resolution is less or exceeds the specified native resolution, then the camera will be rejected. It is not acceptable to downgrade the resolution setting to meet a targeted resolution. For example, if a camera must have a native resolution between 1.08MP and 1.32MP, the minimum resolution accepted will be 1.08MP and the maximum resolution accepted will be 1.32MP.
 - **Second example of evaluation failure (camera Field of View):** If a proposed **Maximum** Field of View (FoV) is greater or lower than the FoV being specified, then the proposed camera will be rejected. e.g. if a **Maximum** FoV is required to be between 97 to 113 degrees, a proposed camera having maximum FoV of 96 degrees or less or 114 degrees or higher will be rejected.
 - **Third example of evaluation failure (UPS topology):** If a proposed UPS is a "line interactive" topology and the criteria requires an "**on-line**" topology, then the proposed UPS will be rejected.
 - **Fourth example of evaluation failure (Switch power redundancy):** If the proposed Switch solution is missing a required double power supply, as required for redundancy, then it will be rejected.
 - **Fifth example of evaluation failure (Switch Protocols):** If the proposed Switch solution is missing a required protocol, then it will be rejected. Make sure the proposed Switch solution have all the protocol and features required.

Equipment mentioned as an example

For most of the devices requested in the section "CCTV System Equipment list", one or more product examples are provided that meet all the stated requirements. The bidder can propose these products or if the identified product is no longer available, the bidder can chose an equivalent product. However, it is the bidder's responsibility in this case, to validate and demonstrate that each and every stated requirement is met by the replacement product.

Certification

The personnel that will install and configure the VMS must have a valid certification from the manufacturer for the proposed VMS. Proof of certification must be included.

Mandatory deliveries for the technical submission

- Provide a list of the proposed equipment, describing quantities and when applicable, the specific hardware configuration for each computer, server.
- Provide a data sheet for each proposed equipment,
- Provide all the Specification tables provided in this document, fulfilled with the mention "compliant" and with the appropriate reference to the equipment. For the viewing stations and the VMS server, the bidder must provide the VMS manufacturer requirements that demonstrate how the live viewing or recording function will meet the expected performances with the hardware solution proposed,
- Provide VMS Certifications document of the expert that will execute the install.

Installation

The supplied equipment must be thoroughly tested prior to installation.

The bidder commits to follow at a minimum the CCTV equipment configuration specified in the section "CCTV System Installation Specifications" at the contract signature.

Warranty

The supplied equipment and services must carry at least 36 months manufacturer's warranty covering parts and labor, where the contractor is the primary warranty contact for CBSA.

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Glossary

- **Surveillance location:** This is an area that one or several Officers can use to observe video surveillance images provided by one or more CCTV computers. These computers have embedded Client Management Software that are dedicated to allow viewing of live or playback videos, that can be interactively managed by the operator.
- **Viewing Station:** This is the workstation / computer dedicated to a video surveillance function where a Video Management Client Software is embedded in order to allow viewing of images from CCTV cameras and allows the Officer to interactively control the System through keyboard/mouse.
- **Monitor:** This is a dedicated screen, usually connected to a Viewing Station located in the same Room as the screen. The monitor can extend the viewing capability of the standard/typical Viewing Station or can be used in order to investigate an event on a given camera while the regular screen displays the overview of the area of interest.
- **Video Wall:** This is a dedicated screen, typically connected to a Remote Viewing Station located in the Server Room. The Screen has fixed camera views and is not operated/controlled by the user, as the choice of the images are defined at the configuration phase. This is typically used within a control Center, in order to have an overview of a given area.

* The CBSA AC electric power capacity and the Heat dissipation capacity (BTU) of the server room and the technical Rooms are specified in the "Architecture" section.

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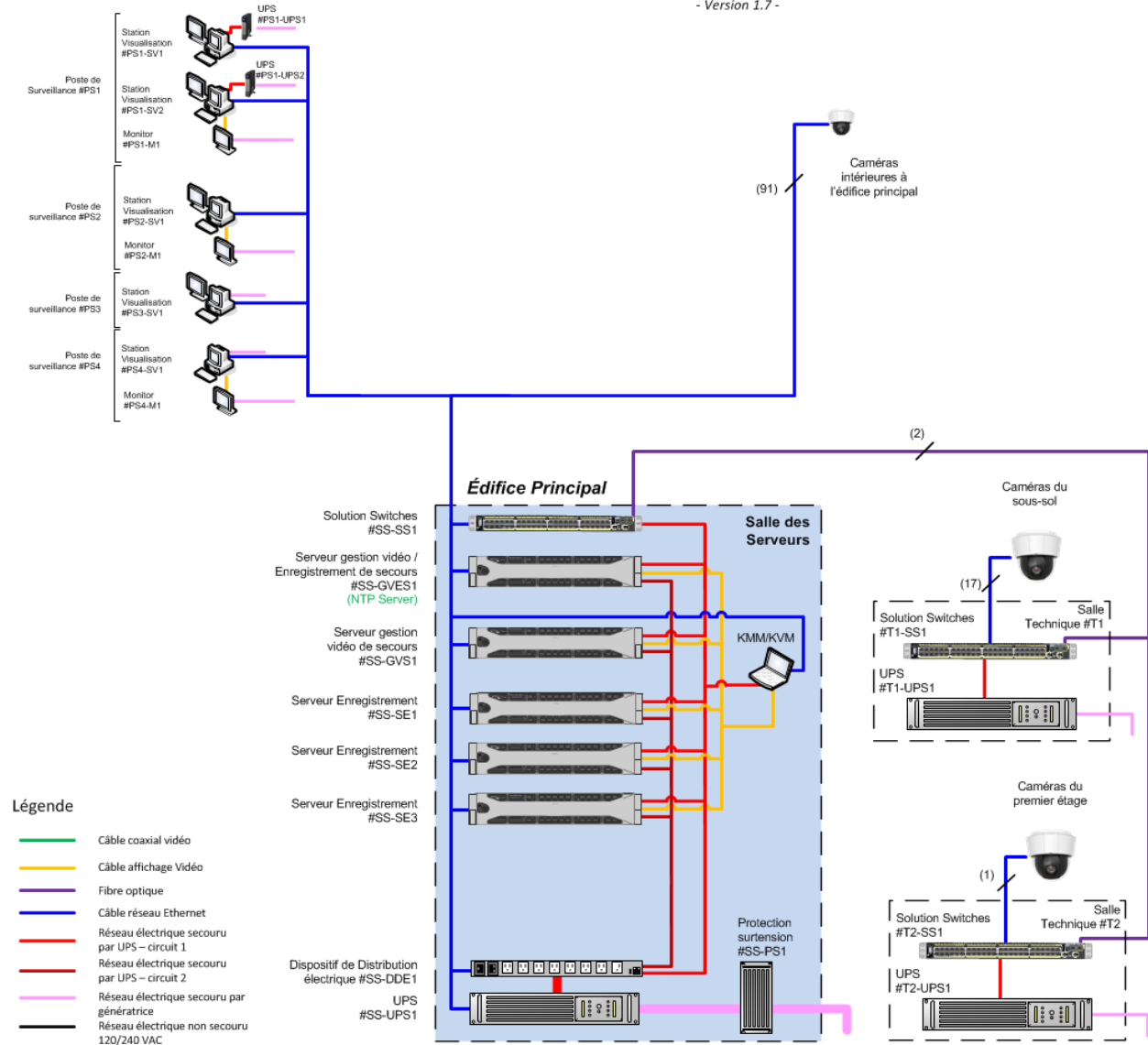
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CCTV System Architecture Specifications

Aéroport International Jean-Lesage

- Version 1.7 -



CCTV System Architecture Diagram

The diagram above represents the CCTV System architecture for the CBSA controlled areas of the concerned POE site.

This management and recording device is sized to be able to manage about 150 cameras, which includes future extension of cameras. Only 109 cameras will be procured and installed on this project phase. The site includes a server room which contains the CCTV equipment including but not limited to, servers, switches, UPS as listed in the table below and all necessary IT accessories that will allow the assembly of these CCTV equipment.

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The CCTV solution includes:

- One (1) x Video Management / Video Recording Failover Server
- One (1) x Video Management Failover Server
- Three (3) x Video Recording Server

Note that the first server hosts both the Video Management and the Video Recording Failover applications. Video recording for all cameras should be done by default on the Video Recording Servers. In the event of a Video Recording Server failure, all assigned cameras to this server must switch to record on the Video Management / Video Recording Failover Server.

In the event of a Video Management failure, the Video Management Failover Server must become automatically and rapidly active allowing an availability of the viewing function for all cameras at any time.

The total capacity of the storage solution must be at least 127 TB and must allow in any cases a retention period of at least 30 days for each camera, while the backup storage which must be at least of 5 days is estimated to be at least 20 TB.

The electrical power required for the Server Room must be at least 9.0 kW, in order to power the CCTV server rack and all CCTV equipment that are hosted there. The cooling system in the Server Room must also be capable of dissipating approximately 11,000 BTU heat generated by the equipment housed, and maintain a stable temperature according to the standards imposed by PWGSC.

Five viewing stations will allow operations officers to operate the video surveillance system.

On the viewing station located in the superintendent office, an additional screen dedicated to alarms will monitor the health of the CCTV system and in particular whether the management and recording servers or the cameras are working properly.

The Video Management and Recording device located in the server room will be powered by a main redundant UPS system that will be supported by the site generator. This main UPS will support the rack equipment in the server room, and may in case of power failure, keep the equipment power with a medium runtime, as defined in the UPS requirements table. Once the battery is below a minimum threshold, the UPS will softly shutdown all the equipment in a sequential manner.

All viewing stations will be powered by the circuit rescued supported by the site generator.

The main viewing stations, located in the main officer room will be powered by UPS.

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CCTV System Equipment List

#	Equipment	Reference #
1	FL0-C1-DT19	D-2.3-100/V
2	FL0-C2-DT18	D-2.3-100/V
3	FL0-C3-DT10	D-1.2-100/V
4	FL0-C4-DT15	C-1.5-120:11/V
5	FL0-C5-DT9	D-1.2-100/V
6	FL0-C6-DT14	C-1.5-120:11/V
7	FL0-C7-DT13	C-1.5-120:11/V
8	FL0-C8-DT12	C-1.5-120:11/V
9	FL0-C9-DT17	D-2.3-100:Co/V
10	FL0-C10-DT8	D-1.2-100/V
11	FL0-C11-AM1	D-2.3-100:Co/V
12	FL0-C12-DT11	C-1.5-120:11/V
13	FL0-C13-DT16	D-1.2-100/V
14	FL0-C14-DT20	D-5-80:Co/V
15	FL0-C15-DT1	D-2.3-100/V
16	FL0-C16-DT2	D-2.3-100/V
17	FL0-C17-AM2	D-1.2-100/V
18	FL1-C1-DTAS	D-1.2-100/V
19	FL1-C2-SE13	D-2.3-100/V
20	FL1-C3-CO1	D-1.2-100/V

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21	FL1-C4-EM1	D-2.3-100:Co/V
22	FL1-C5-ET5	D-1.2-100:Au/V
23	FL1-C6-ET4	D-1.2-100:Au/V
24	FL1-C7-ET3	D-1.2-100:Au/V
25	FL1-C8-ET2	D-1.2-100:Au/V
26	FL1-C9-ET1	D-1.2-100:Au/V
27	FL1-C10-ET7	D-2.3-100/V
28	FL1-C11-ET6	D-2.3-100/V
29	FL1-C12	D-2.3-100:Co/V
30	FL1-C13-SE6	D-1.2-100/V
31	FL1-C14	D-2.3-100/V
32	FL1-C15-SE7	Z-1-60-x30
33	FL1-C16-SE12	D-1.2-100/V
34	FL1-C17-SE11	D-1.2-100/V
35	FL1-C18-SE5	D-2.3-100/V
36	FL1-C19-SE4	D-2.3-100/V
37	FL1-C20-SE2	D-5-80/V
38	FL1-C21-SE8	D-2.3-100/V
39	FL1-C22-SE9	D-2.3-100/V
40	FL1-C23-SE10	D-2.3-100:Co/V
41	FL1-C24-SE1	D-2.3-100/V
42	FL1-C25-SE3	Z-1-60-x30
43	FL1-C26-SF2	D-1.2-100/V

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44	FL1-C27-CA1	D-1.2-100/V
45	FL1-C28-SO1	D-2.3-100:Co/V
46	FL1-C29-SO2	D-2.3-100/V
47	FL1-C30-SO3	D-2.3-100/V
48	FL1-C31	D-1.2-100/V
49	FL1-C32	D-2.3-100/V
50	FL1-C33-SF1	D-2.3-100/V
51	FL1-C34-SE13	D-2.3-100/V
52	FL1-C35-BA1	Z-1-60-x30
53	FL1-C35-EM2	D-1.2-100:Co/V
54	FL1-C36-BA3	Z-1-60-x30
55	FL1-C36-SF3	D-1.2-100/V
56	FL1-C37-BA2	Z-1-60-x30
57	FL1-C37-IS1	D-1.2-100/V
58	FL1-C38	D-5-80/V
59	FL1-C38-SE14	D-2.3-100:Co/V
60	FL1-C39	D-5-80/V
61	FL1-C39-SE15	D-5-80/V
62	FL1-C40	D-5-80:Co/V
63	FL1-C40-SE16	D-2.3-100/VE
64	FL1-C41	D-5-80:Co/V
65	FL1-C42	D-5-80:Co/V
66	FL1-C43	D-5-80:Co/V

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67	FL1-C44	D-5-80/V
68	FL1-C45	D-5-80/V
69	FL1-C46	D-5-80/V
70	FL1-C47	D-5-80/V
71	FL1-C48	D-5-80:Co/V
72	FL1-C49	D-5-80:Co/V
73	FL1-C50	D-5-80:Co/V
74	FL1-C51	D-5-80:Co/V
75	FL1-C52	D-5-80/V
76	FL1-C53	D-5-80/V
77	FL1-C54	D-5-80/V
78	FL1-C55-PR1	D-5-80/V
79	FL1-C56-PR2	Z-1-60-x30
80	FL1-C57-PR3	D-5-80/V
81	FL1-C58-PR4	Z-1-60-x30
82	FL1-C59-PR6	D-2.3-100/V
83	FL1-C60-PR5	D-2.3-100/V
84	FL1-C61-PR7	D-2.3-100/V
85	FL1-C62-PR8	D-5-80/V
86	FL1-C63-PR9	D-5-80/V
87	FL1-C64-PR10	D-2.3-100/V
88	FL1-C65-PR11	D-2.3-100/V
89	FL1-C66-PR12	D-5-80/V

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90	FL1-C67-PR13	D-5-80/V
91	FL1-C68-PR14	D-1.2-100/V
92	FL1-C69-PR15	D-1.2-100/V
93	FL1-C70-PR16	D-1.2-100/V
94	FL1-C71-PR17	D-1.2-100/V
95	FL1-C72-PR18	D-1.2-100/V
96	FL1-C73-AR1	D-2.3-100:Co/VW5
97	FL1-C73-PR19	D-1.2-100/V
98	FL1-C74-AR2	D-2.3-100:Co/VW5
99	FL1-C74-PR20	D-1.2-100/V
100	FL1-C75-AR3	D-2.3-100:Co/VW5
101	FL1-C75-PR21	D-1.2-100/V
102	FL1-C76-AR4	D-2.3-100:Co/VW5
103	FL1-C76-PR22	D-5-80/V
104	FL1-C77-AR5	D-2.3-100:Co/VW5
105	FL1-C77-PR23	D-5-80/V
106	FL1-C78	D-2.3-100/VW5
107	FL1-C79	D-2.3-100/VW5
108	FL1-C80-PR24	Z-1-60-x30
109	FL2-C1-DM1	D-1.2-100/V
110	Rack #SS-R1	RCK-4532:GEN
111	Rack #T1-R1	RCK-W-1226:GEN
112	Rack #T2-R1	RCK-W-1226:GEN

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113	Joystick #1	JOY-I:U
114	KMM #1	KMM:VGA-2USB
115	KVM #1	KVM:8
116	Surveillance location #PS1 / Viewing Station #PS1-M1	UI-MNT:24
117	Surveillance location #PS2 / Viewing Station #PS2-M1	UI-MNT:42
118	Surveillance location #PS4 / Viewing Station #PS4-M1	UI-MNT:24
119	Power Distribution Unit #SS-DDE1	PDS-U/8
120	Recording Server #SS-SE1	SRV-R-L:R/R6-42TB
121	Recording Server #SS-SE2	SRV-R-L:R/R6-42TB
122	Recording Server #SS-SE3	SRV-R-L:R/R6-42TB
123	Failover Management Server #SS-GVS1	SRV-R-S:MF
124	Video Management Server and Failover Recording Server #SS-GVES1	SRV-R-L:MRF/R5-24TB
125	Surge Protector #SS-PS1	SUR-U/120
126	Solution Switch #SS-SS1	SWT-R:BB/POE+
127	Solution Switch #T1-SS1	SWT-R:E/POE+
128	Solution Switch #T2-SS1	SWT-R:E/POE+
129	UPS #PS1-UPS1	UPS-T:WST1.5
130	UPS #PS1-UPS2	UPS-T:WST1.5
131	UPS #SS-UPS1	UPS-R:H7
132	UPS #T1-UPS1	UPS-R:M1.5
133	UPS #T2-UPS1	UPS-R:M1.5
134	Surveillance location #PS1 / Viewing Station #PS1-SV1 (Static)	VST-D-G2-M32:CV/32H
135	Surveillance location #PS1 / Viewing Station #PS1-SV2	VST-D-G2-M27x2:CV/32H

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136	Surveillance location #PS2 / Viewing Station #PS2-SV1 (Static)	VST-D-G4-M42x2:CV/48H
137	Surveillance location #PS3 / Viewing Station #PS3-SV1	VST-D-G2-M42x2:CV/32H
138	Surveillance location #PS4 / Viewing Station #PS4-SV1	VST-D-G2-M32:CV/32H
139	Surveillance location #PS1 / Viewing Station #PS1-SV1	VMS-C
140	Surveillance location #PS1 / Viewing Station #PS1-SV2	VMS-C
141	Surveillance location #PS2 / Viewing Station #PS2-SV1	VMS-C
142	Surveillance location #PS3 / Viewing Station #PS3-SV1	VMS-C
143	Surveillance location #PS4 / Viewing Station #PS4-SV1	VMS-C
144	Server VMS #SS-VMS1	VMS-M:F/LRM

Equipment summary

Reference #	Equipment count
D-2.3-100/V	23
D-5-80:Co/V	9
D-1.2-100/V	24
C-1.5-120:11/V	5
D-2.3-100:Co/V	7
Z-1-60-x30	8
D-1.2-100:Co/V	1
D-5-80/V	19
D-2.3-100/VE	1
D-1.2-100:Au/V	5
D-2.3-100:Co/VW5	5

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D-2.3-100/VW5	2
RCK-4532:GEN	1
RCK-W-1226:GEN	2
JOY-I:U	1
KMM:VGA-2USB	1
KVM:8	1
UI-MNT:24	2
UI-MNT:42	1
PDS-U/8	1
SRV-R-L:R/R6-42TB	3
SRV-R-S:MF	1
SRV-R-L:MRF/R5-24TB	1
SUR-U/120	1
SWT-R:BB/POE+	1
SWT-R:E/POE+	2
UPS-T:WST1.5	2
UPS-R:H7	1
UPS-R:M1.5	2
VST-D-G2-M32:CV/32H	2
VST-D-G2-M27x2:CV/32H	1
VST-D-G4-M42x2:CV/48H	1
VST-D-G2-M42x2:CV/32H	1
VMS-C	5

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Cabling Recommendations

Cabling standards

CBSA CCTV systems cabling must meet at least the following list of standards, where applicable:

- ANSI/TIA/EIA-568B (or CAN/CSA T529 M), Commercial Building Telecommunications wiring standard and all the Telecommunications Bulletin Boards (TSBs') and Addenda issued by the above standard body at the time of tender.
- CSA C22.1 Canadian Electrical Code, Part 1 19TH Edition (2002) and BC Amendments.
- CAN/CSA C22.2 No. 232-M Optical Fibre Cables
- EIA/TIA-568-B2 (2001) Commercial Building Standard for Telecommunications Cabling Standard Part 2 (Balanced Twisted – Pair Cable component).
- EIA/TIA-606-A (2002) - Administration Standard for Commercial Telecommunications appendix.
- ANSI/EIA/TIA-607 (or CSA T527), Commercial Building Grounding and Bonding requirements for telecommunications.
- BICSI Telecommunications Distribution Method Manual 10th Edition.
- BICSI Information Transport System Manual 4th Edition
- CAN/ULC S102.4-M – (1987) Test for Fire and Smoke Characteristics of electrical Wiring and Cable
- ANSI/TIA/EIA-492AAAB (1998), Detailed Specification for 50mm Core Diameter/125 mm Cladding Diameter Class 1a Multimode, Graded-Index Multimode Optical Waveguide Fibres.
- ANSI/TIA/EIA-492BAAA, Detailed Specifications for Class IVa Dispersion-Unshifted Singlemode Optical Waveguide Fibres Used In Communications Systems.
- ANSI/TIA/EIA-455-61, FOTP-61 Measurement of Fibre or Cable Attenuation
- ANSI/TIA/EIA-526-14A, OFSTP14A (1998) Optical Power Loss Measurement of Installed Multimode Fibre Cable Plant.
- ANSI/TIA/EIA-604-3, FOCIS 3 Fibre Optic Connector Intermateability Standard.
- ANSI/ICEA S-83-596, Fibre Optic Premises Distribution Cable
- National Building Code / Provincial Building Code
- ANSI Z136.2, American Standards For The Safe Operation Of Optical Fibre Communication Systems Utilizing Laser Diode And LED Sources.
- Treasury Board Information Technology Standard (TBITS) No. 6.9 – Profile for the Telecommunications Wiring System in Government Owned and Leased Buildings.
- ANSI/TIA-568 C.0-2009, Generic Telecommunication Cabling for Customer Premises.
- ANSI/TIA-568 C.1-2009, Commercial Building Telecommunications Cabling Standard.
- ANSI/TIA-568 C.2-2009, Balanced Twisted Pair Telecommunications Cabling and Components Standard.
- TIA-569B Commercial Building Standard for Telecommunications Pathways and Spaces

Location of conduits

Given that the CCTV cameras transmit "Protected B" data over a network or coaxial cable, dedicated conduits for the exposed CCTV cables and equipment must be provided in accordance not only with applicable electrical standards, but also with *Shared Services Canada's* data protection requirements.

The CCTV conduits must be routed and sized based on the CCTV System Design Document (D), which specifies the physical location of the cameras throughout the buildings and the grounds surrounding them.

Size of conduits

The size of the CCTV conduits will depend on the cables to be run through them, which will depend on the selected camera groupings.

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Type of cabling

The cabling installed for the CCTV System must meet all applicable fire and building codes, including the use of plenum rated cabling where required by the building code.

Generally speaking, unless otherwise specified, all IP cameras installed at the site will be connected through a single network cable using PoE (power over Ethernet). Therefore, a single network cable, Cat 6 or higher, will be required per camera. Where the cable can reach the server room directly (critical distance of less than ~80 m), the switch supplies power to the cameras through its PoE ports.

For each analog camera, a coaxial wiring is needed as well as a specific wiring for the power supply. For distances greater than the capacity of the coaxial cable, media converters must be used to extend the range of the coaxial connection

PTZ-specific cabling

The PoE standard for PTZ IP cameras, that is, their power supply standard, is different from that of conventional cameras, since they require a power supply of 60 watts, as opposed to the traditional 15 to 30 watts. Because of line loss, they therefore cannot be powered from the server room. One injector per PTZ camera must therefore be provided, and these high-PoE "super injectors" need to be positioned (and protected from weather) along the PTZ camera cable route, as close to the camera as possible. These injectors must be properly electrically powered.

For each analog PTZ camera, a coaxial wiring is needed as well as a specific wiring for the power supply and the command. For distances greater than the capacity of the coaxial cable, media converters should be used to extend the range of the coaxial connection.

Potential need for indoor/outdoor junction boxes

If the length of the standard network cables exceeds the critical distance of about ~80 m and depending on the criteria of *Shared Services Canada*, an indoor or outdoor (as applicable) junction box will be required. This junction box will have a switch function, properly electrically powered, to enable the connection of all cameras within a radius of less than 80 m and interconnect via fibre-optic to the server room.

Generally speaking, if the boxes are not in an area with restricted access, they must be capable of being locked by key and it must be specified if they are intended for an outdoor environment.

Server room cabling

The server room must have the required electrical power specified in the CCTV system specification document (S) to power all of the planned CCTV equipment, and must have an air conditioning system capable of evacuating the quantity of heat also indicated in the CCTV system specification document (S), in accordance with the standards set by *Public Works and Government Services Canada*. Bidders are responsible for proposing equipment that is compatible and consistent with the electrical environment and heat dissipation of the server room.

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Camera Specifications

General Camera Specifications <i>All stated requirements are mandatory</i>		Reference to bid document (document name, page, and paragraph number)
Open Architecture	Cameras must be IP if not specifically mentioned. Cameras must support ONVIF profile S. All camera connected to the VMS must be approved and explicitly certified by the manufacturer.	
Video	If the camera is IP, it must support the following video settings: Multiple compressions formats, including but not limited to H.264 and MJPEG. Camera must be able to output at least two video streams simultaneously and must also support simultaneous streaming of multiple formats. Frame rate must be controllable for each stream.	
Power	IP Cameras must be POE or High POE compatible.	
Disabled Audio	All cameras which are audio capable must have audio capability disabled from the camera and video management software (VMS), unless otherwise noted.	
Exposure Settings	Must be configurable for different lighting conditions such as shutter speed, and gain. Must allow an automatic compensation of the image level with regard to the lighting conditions variations	
Connectivity	All cameras of the CCTV System must be wired, except where this is specifically mentioned. This also applies, without limitation, to cameras for elevator, etc...	

Reference: D-1.2-100/V Indoor Camera 1.2MP Wide Angle, Vandal Resistant <i>All stated requirements are mandatory</i>		Reference to bid document (document name, page, and paragraph number)
Enclosure	The camera must be resistant to tampering. The camera must be contained in Dome housing type and securely mounted.	
Environment	The camera assembly must be dustproof and waterproof and must be rated IP52 or better. Only a compliant manufacturer approved enclosure may be considered acceptable	
VandalProof	These cameras must be resistant to vandalism and tampering. Must be rated IK10 or better.	
Field of View	The camera must provide a maximal horizontal field of view between 95 and 110 degrees.	
Focus	The camera must have remote focus.	
Frame per Second (FPS)	The camera must be able to support at least 30 frames per second at the minimum resolution specified above.	

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Night Capability	The camera must be a true Day/Night camera with a mechanical IR cut filter.	
Native Resolution	The camera must have a native camera resolution between 1.08MP and 1.32MP.	
Optical zoom	The camera must support at least a 2X optical zoom.	
Example	Camera such as Axis P3364-V 6mm or equivalent can be used.	

Reference: Z-1-60-x30 Indoor PTZ Camera 1MP <i>All stated requirements are mandatory</i>		Reference to bid document (document name, page, and paragraph number)
Enclosure	The camera must be resistant to tampering. The camera must be contained in Dome housing type and securely mounted.	
Environment	The camera assembly must be dustproof and waterproof and must be rated IP52 or better. Only a compliant manufacturer approved enclosure may be considered acceptable	
Field of View	The camera must provide a maximal horizontal field of view between 55 and 65 degrees.	
Focus	The camera must have auto focus.	
Frame per Second (FPS)	The camera must be able to support at least 30 frames per second at the minimum resolution specified above.	
Native Resolution	The camera must have a native camera resolution between 0.9MP and 1.1MP.	
Optical zoom	The camera must support at least 30X optical zoom.	
Range of motion	Must have a pan range of 360 degrees endless. Must have a tilt range of at least 180 degrees.	
Pre-set positions	The camera must have at least 100 pre-set positions	
Return Home when inactive	The camera PTZ must be able to return in a Home position automatically when a period of inactivity is detected. A configuration tool for the PTZ must be able to define this period of inactivity in a range from 1 second to 5 minutes.	
Example	Camera such as Axis Q6054 or equivalent can be used.	

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Reference: D-5-80/V Indoor Camera 5MP, Vandal Resistant <i>All stated requirements are mandatory</i>		Reference to bid document (document name, page, and paragraph number)
Enclosure	The camera must be resistant to tampering. The camera must be contained in Dome housing type and securely mounted.	
Environment	The camera assembly must be dustproof and waterproof and must be rated IP52 or better. Only a compliant manufacturer approved enclosure may be considered acceptable	
VandalProof	These cameras must be resistant to vandalism and tampering. Must be rated IK10 or better.	
Field of View	The camera must provide a maximal horizontal field of view between 75 and 85 degrees.	
Focus	The camera must have remote focus.	
Frame per Second (FPS)	The camera must be able to support at least 12 frames per second at the minimum resolution specified above.	
Night Capability	The camera must be a true Day/Night camera with a mechanical IR cut filter.	
Native Resolution	The camera must have a native camera resolution between 4.5MP and 5.5MP.	
Optical zoom	The camera must support at least a 2X optical zoom.	
Example	Camera such as Axis P3367-V or equivalent can be used.	

Reference: D-1.2-100:Co/V Indoor Camera 1.2MP Wide Angle, Corridor Format <i>All stated requirements are mandatory</i>		Reference to bid document (document name, page, and paragraph number)
Enclosure	The camera must be resistant to tampering. The camera must be contained in Dome housing type and securely mounted.	
Environment	The camera assembly must be dustproof and waterproof and must be rated IP52 or better. Only a compliant manufacturer approved enclosure may be considered acceptable	
VandalProof	These cameras must be resistant to vandalism and tampering. Must be rated IK10 or better.	
Field of View	The camera must provide a maximal horizontal field of view between 95 and 110 degrees.	

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Focus	The camera must have remote focus.	
Frame per Second (FPS)	The camera must be able to support at least 30 frames per second at the minimum resolution specified above.	
Night Capability	The camera must be a true Day/Night camera with a mechanical IR cut filter.	
Native Resolution	The camera must have a native camera resolution between 1.08MP and 1.32MP.	
Optical zoom	The camera must support at least a 2X optical zoom.	
Corridor	The camera must support a rotation of 0°, 90°, 180° and 270°. The camera must be installed and configured to be in corridor mode where the orientation is vertical "portrait".	
Example	Camera such as Axis P3364-V 6mm or equivalent can be used.	

Reference: D-2.3-100/V Indoor Camera 2.1MP, Vandal Resistant <i>All stated requirements are mandatory</i>		Reference to bid document (document name, page, and paragraph number)
Enclosure	The camera must be resistant to tampering. The camera must be contained in Dome housing type and securely mounted.	
Environment	The camera assembly must be dustproof and waterproof and must be rated IP52 or better. Only a compliant manufacturer approved enclosure may be considered acceptable	
VandalProof	These cameras must be resistant to vandalism and tampering. Must be rated IK10 or better.	
Field of View	The camera must provide a maximal horizontal field of view between 95 and 110 degrees.	
Focus	The camera must have remote focus.	
Frame per Second (FPS)	The camera must be able to support at least 30 frames per second at the minimum resolution specified above.	
Night Capability	The camera must be a true Day/Night camera with a mechanical IR cut filter.	
Native Resolution	The camera must have a native camera resolution between 1.89MP and 2.31MP.	
Optical zoom	The camera must support at least a 2X optical zoom.	
Example	Camera such as Axis Q3505-V or equivalent can be used.	

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Reference: D-2.3-100/VE Outdoor Camera 2.1MP, Vandal Resistant <i>All stated requirements are mandatory</i>		Reference to bid document (document name, page, and paragraph number)
Enclosure	The camera must be resistant to tampering. The camera must be contained in Dome housing type and securely mounted.	
Environment	The camera assembly must be dustproof and waterproof and must be rated IP66 or better. The camera assembly must have an operating temperature range between -40 to +40 C. A custom enclosure will not be considered acceptable.	
VandalProof	These cameras must be resistant to vandalism and tampering. Must be rated IK10 or better.	
Field of View	The camera must provide a maximal horizontal field of view between 95 and 110 degrees.	
Focus	The camera must have remote focus.	
Frame per Second (FPS)	The camera must be able to support at least 30 frames per second at the minimum resolution specified above.	
Night Capability	The camera must be a true Day/Night camera with a mechanical IR cut filter.	
Native Resolution	The camera must have a native camera resolution between 1.89MP and 2.31MP.	
Optical zoom	The camera must support at least a 2X optical zoom.	
Example	Camera such as Axis Q3505-VE or equivalent can be used.	

Reference: D-2.3-100/VW5 Indoor Camera 2.1MP, Vandal Resistant, Very Wide Dynamic Range <i>All stated requirements are mandatory</i>		Reference to bid document (document name, page, and paragraph number)
Enclosure	The camera must be resistant to tampering. The camera must be contained in Dome housing type and securely mounted.	
Environment	The camera assembly must be dustproof and waterproof and must be rated IP52 or better. Only a compliant manufacturer approved enclosure may be considered acceptable	
VandalProof	These cameras must be resistant to vandalism and tampering. Must be rated IK10 or better.	
Field of View	The camera must provide a maximal horizontal field of view between 95 and 110 degrees.	

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Focus	The camera must have remote focus.	
Frame per Second (FPS)	The camera must be able to support at least 30 frames per second at the minimum resolution specified above.	
Night Capability	The camera must be a true Day/Night camera with a mechanical IR cut filter.	
Native Resolution	The camera must have a native camera resolution between 1.89MP and 2.31MP.	
Optical zoom	The camera must support at least a 2X optical zoom.	
Wide Dynamic Range	The camera must feature at least 120 dB of 'Wide Dynamic Range'	
Example	Camera such as Axis Q3505-V or equivalent can be used.	

Reference: D-2.3-100:Co/V Indoor Camera 2.1MP, Vandal Resistant, Corridor Format <i>All stated requirements are mandatory</i>		Reference to bid document (document name, page, and paragraph number)
Enclosure	The camera must be resistant to tampering. The camera must be contained in Dome housing type and securely mounted.	
Environment	The camera assembly must be dustproof and waterproof and must be rated IP52 or better. Only a compliant manufacturer approved enclosure may be considered acceptable	
VandalProof	These cameras must be resistant to vandalism and tampering. Must be rated IK10 or better.	
Field of View	The camera must provide a maximal horizontal field of view between 95 and 110 degrees.	
Focus	The camera must have remote focus.	
Frame per Second (FPS)	The camera must be able to support at least 30 frames per second at the minimum resolution specified above.	
Night Capability	The camera must be a true Day/Night camera with a mechanical IR cut filter.	
Native Resolution	The camera must have a native camera resolution between 1.89MP and 2.31MP.	
Optical zoom	The camera must support at least a 2X optical zoom.	
Corridor	The camera must support a rotation of 0°, 90°, 180° and 270°. The camera must be installed and configured to be in corridor mode where the orientation is vertical "portrait".	
Example	Camera such as Axis Q3505-V or equivalent can be used.	

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Reference: D-1.2-100:Au/V Indoor Camera 1.2MP Wide Angle, Vandal Resistant, with audio <i>All stated requirements are mandatory</i>		Reference to bid document (document name, page, and paragraph number)
Enclosure	The camera must be resistant to tampering. The camera must be contained in Dome housing type and securely mounted.	
Environment	The camera assembly must be dustproof and waterproof and must be rated IP52 or better. Only a compliant manufacturer approved enclosure may be considered acceptable	
VandalProof	These cameras must be resistant to vandalism and tampering. Must be rated IK10 or better.	
Field of View	The camera must provide a maximal horizontal field of view between 95 and 110 degrees.	
Focus	The camera must have remote focus.	
Frame per Second (FPS)	The camera must be able to support at least 30 frames per second at the minimum resolution specified above.	
Night Capability	The camera must be a true Day/Night camera with a mechanical IR cut filter.	
Native Resolution	The camera must have a native camera resolution between 1.08MP and 1.32MP.	
Optical zoom	The camera must support at least a 2X optical zoom.	
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.	
Example	Camera such as Axis P3364-V 6mm or equivalent can be used.	

Reference: C-1.5-120:I1/V Indoor Camera 1.5MP, Corner, Vandal Resistant <i>All stated requirements are mandatory</i>		Reference to bid document (document name, page, and paragraph number)
Enclosure	The camera must be contained in a corner mount housing, having no grip design and securely mounted.	
Environment	The camera assembly must be dustproof and waterproof and must be rated IP52 or better. Only a compliant manufacturer approved enclosure may be considered acceptable	
VandalProof	These cameras must be resistant to vandalism and tampering. Must be rated IK10 or better.	

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Field of View	The camera must provide a maximal horizontal field of view between 115 and 125 degrees.	
Frame per Second (FPS)	The camera must be able to support at least 30 frames per second at the minimum resolution specified above.	
Night Capability	The camera must be a true Day/Night camera with a mechanical IR cut filter.	
Native Resolution	The camera must have a native camera resolution between 1.35MP and 1.65MP.	
Privacy mask	Must support privacy mask	
Infrared illuminator built-in	The camera must feature integrated IR illumination.	
Example	Camera such as Bosch Flexidome IP corner 9000MP or equivalent can be used.	

Reference: D-5-80:Co/V Indoor Camera 5MP, Vandal Resistant, Corridor Format <i>All stated requirements are mandatory</i>		Reference to bid document (document name, page, and paragraph number)
Enclosure	The camera must be resistant to tampering. The camera must be contained in Dome housing type and securely mounted.	
Environment	The camera assembly must be dustproof and waterproof and must be rated IP52 or better. Only a compliant manufacturer approved enclosure may be considered acceptable	
VandalProof	These cameras must be resistant to vandalism and tampering. Must be rated IK10 or better.	
Field of View	The camera must provide a maximal horizontal field of view between 75 and 85 degrees.	
Focus	The camera must have remote focus.	
Frame per Second (FPS)	The camera must be able to support at least 12 frames per second at the minimum resolution specified above.	
Night Capability	The camera must be a true Day/Night camera with a mechanical IR cut filter.	
Native Resolution	The camera must have a native camera resolution between 4.5MP and 5.5MP.	
Optical zoom	The camera must support at least a 2X optical zoom.	
Corridor	The camera must support a rotation of 0°, 90°, 180° and 270°. The camera must be installed and configured to be in corridor mode where the orientation is vertical "portrait".	
Example	Camera such as Axis P3367-V or equivalent can be used.	

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Reference: D-2.3-100:Co/VW5 Indoor Camera 2.1MP, Vandal Resistant, Very Wide Dynamic Range, Corridor Format <i>All stated requirements are mandatory</i>		Reference to bid document (document name, page, and paragraph number)
Enclosure	The camera must be resistant to tampering. The camera must be contained in Dome housing type and securely mounted.	
Environment	The camera assembly must be dustproof and waterproof and must be rated IP52 or better. Only a compliant manufacturer approved enclosure may be considered acceptable	
VandalProof	These cameras must be resistant to vandalism and tampering. Must be rated IK10 or better.	
Field of View	The camera must provide a maximal horizontal field of view between 95 and 110 degrees.	
Focus	The camera must have remote focus.	
Frame per Second (FPS)	The camera must be able to support at least 30 frames per second at the minimum resolution specified above.	
Night Capability	The camera must be a true Day/Night camera with a mechanical IR cut filter.	
Native Resolution	The camera must have a native camera resolution between 1.89MP and 2.31MP.	
Optical zoom	The camera must support at least a 2X optical zoom.	
Wide Dynamic Range	The camera must feature at least 120 dB of 'Wide Dynamic Range'	
Corridor	The camera must support a rotation of 0°, 90°, 180° and 270°. The camera must be installed and configured to be in corridor mode where the orientation is vertical "portrait".	
Example	Camera such as Axis Q3505-V or equivalent can be used.	

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Rack Specifications

This section contains the minimum performance specifications with respect to power, temperature, humidity and dust control in a server room/enclosure which contains the servers, UPS systems, switches, local workstations, etc.

For server rooms, the *PWGSC Mechanical Design Guidelines - MD 15116-2006 "Computer Room Air Conditioning Systems"* is to be followed. Where a server room is not available, an environmentally controlled, secure rack enclosure is specified.

<http://www.tpsgc-pwgsc.gc.ca/biens-property/sngp-npms/bi-rp/tech/telecommunications/im-id-15116-06-eng.html>

Power specifications and estimated BTU load for the server room/enclosure are to be included in vendor proposals.

General Rack Specifications <i>All stated requirements are mandatory</i>		Reference to bid document (document name, page, and paragraph number)
General	<p>Some performance are required with respect to power, temperature, humidity and dust control in a server room/enclosure which contains the servers, UPS systems, switches, local workstations, etc.</p> <p>Where applicable, the <i>"PWGSC Mechanical Design Guidelines - MD 15116-2006 Computer Room Air Conditioning Systems"</i> (http://www.tpsgc-pwgsc.gc.ca/biens-property/sngp-npms/bi-rp/tech/telecommunications/im-id-15116-06-eng.html) is to be followed for server rooms. Where a server room is not available, an environmentally controlled, secure rack enclosure can be specified.</p> <p>Important: Power requirements and estimated BTU load for the server room/enclosure are to be included in vendor proposals.</p>	

Reference: RCK-4532:GEN Large Video Surveillance Enclosure <i>All stated requirements are mandatory</i>		Reference to bid document (document name, page, and paragraph number)
Function	The enclosure must be able to contain all servers, the UPS, switch(es) and IT accessories of the CCTV system.	
Standards	The enclosure must be compliant with approved safety standards for use in Canada.	
Form Factor	<p>The enclosure must be a Server Rack type.</p> <p>The enclosure must be standalone and closed.</p> <p>The enclosure must be a 4 <i>Post Server Equipment Rack Enclosure</i> type.</p> <p>The enclosure must have vertical Wire Managers.</p>	
Sizes	<p>The enclosure must be a « Rackmount » standard with a width of 19".</p> <p>The enclosure must have sufficient depth to accommodate all the CCTV equipment for which the cabinet is dedicated and depth must be greater or equal to 32".</p> <p>The enclosure must have sufficient useful height to contain all the CCTV equipment for which the cabinet is dedicated and height must be less than or equal to 45U.</p>	
Front Panel	Must be a key locking door.	

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Rear Panel	Must be a key locking door.	
Knockouts	The enclosure must have electrical knockouts at the top and bottom of the rack for the passage of all the network cables and power wires.	
Rack Ventilation	The enclosure must have side vented panels and vented panel at the rear and front door so that there can be a ventilation and an access control to the embedded equipment. The enclosure must have at least one (1) fan at the top panel.	
Wheels	The enclosure must have wheel installed.	
Accessories	The enclosure must include all the mechanical and electrical accessories needed to mount and configure properly the switches, servers, UPSs and all equipment that are hosted.	
Example	Rack such as Middle Atlantic BGR-SA Series Rack - 45 RU - 32 or equivalent can be used.	

Reference: RCK-W-1226:GEN Very small Wall Mount Video Surveillance Enclosure <i>All stated requirements are mandatory</i>		Reference to bid document (document name, page, and paragraph number)
Function	The enclosure must be able to contain all servers, the UPS, switch(es) and IT accessories of the CCTV system.	
Standards	The enclosure must be compliant with approved safety standards for use in Canada.	
Form Factor	The enclosure must be a Server Rack type. The enclosure must be standalone and closed. The enclosure must be a Wall Mount Server Equipment Rack Enclosure type. The equipment bearing portion is hinged to allow it to be swung open for accessibility to equipment rear panels, wiring and wiring conduits. The enclosure must have Wire Managers.	
Sizes	The enclosure must be a « Rackmount » standard with a width of 19". The enclosure must have sufficient depth to accommodate all the CCTV equipment for which the cabinet is dedicated and depth must be greater or equal to 26". The enclosure must have sufficient useful height to contain all the CCTV equipment for which the cabinet is dedicated and height must be less than or equal to 12U.	
Knockouts	The enclosure must have electrical knockouts at the top of the rack for the passage of all the network cables and power wires.	
Lock	The enclosure must have a front door that can be locked by key, as well as the same key lock to secure the hinged sections together.	
Rack Ventilation	The enclosure must have side vented panel and vented front door so that there can be a ventilation and an access control to the embedded equipment. The enclosure must have at least one (1) fan at the top or bottom panel.	

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Holding	The wall mount enclosure must be able to be firmly anchored to the supporting structure, taking into account all the manufacturer's related stipulations. The gauge and construction must be rated to support the weight of the equipment to be housed with a minimum 50% margin.	
Accessories	The enclosure must include all the mechanical and electrical accessories needed to mount and configure properly the switches, servers, UPSs and all equipment that are hosted.	
Example	Rack such as Middle Atlantic DWR Series Rack - 12 RU - 26PD or equivalent can be used.	

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Joystick Specifications

Reference: JOY-I:U 3 axis joystick device for video surveillance <i>All stated requirements are mandatory</i>		Reference to bid document (document name, page, and paragraph number)
Function	The video surveillance joystick must allow to select a specific PTZ on a LAN and to control it according to all axes: vertical, horizontal and according to the zoom.	
Form Factor	The device is a finished product consisting of one or two boxes Contains an ergonomic joystick control and a keypad Must be able to easily fit on a desk	
PTZ command function	The joystick-type device must have a 3-axis joystick, with a rotary knob.	
Keyboard function	The joystick device must have integrated or separately, a keypad dedicated to video surveillance that allows to select the device to control.	
Compatibility	The joystick must be compatible with the version of Windows and also the VMS client software installed on the viewing station.	
Connexion	The joystick device must be able to connect the viewing station via USB.	
Example	Combination such as Axis T8311, Axis T8312 or equivalent can be used.	

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KVM/KMM Specifications

Reference: KMM:VGA-2USB Keyboard, Monitor and Mouse, rack format <i>All stated requirements are mandatory</i>		Reference to bid document (document name, page, and paragraph number)
Function	The device is a KMM integrated COTS product which includes the keyboard, monitor and mouse functions.	
Form Factor	The product must have a closable display screen. Width: The product must have 19-inch wide rack format, meeting the industry standards for installation purposes in a rack or cabinet. Height: The closed product must not exceed a 1U high. The product must have rails that allow drag the KMM outside the server rack and open the display screen.	
Input	The product must have a keyboard and a "touchpad"	
Connectivity	The KMM must be able to connect with a VGA (DB-15) and 2 USB 3.0 ports interfaces.	
Monitor resolution	The product must have a screen resolution of at least 1366 X 768.	
Monitor size	The product must include a 18.5 " or more, LCD or LED display screen.	
Power supply	The device must be able to be powered on 120VAC and 230VAC.	
Example	KVM/KMM such as Dell DKMMLED185-G01 - 18.5" 1U KMM Console or equivalent can be used.	

Reference: KVM:8 Analog KVM Switch, rack format <i>All stated requirements are mandatory</i>		Reference to bid document (document name, page, and paragraph number)
Function	The device is an KVM integrated COTS product (keyboard, video and mouse) for the inter connection between a set of monitor / keyboard / mouse and several computers or servers. The product allows switching and visualization using a KMM or remotely through an Ethernet connection.	
Form Factor	Width: The product must have 19-inch wide rack format, meeting the industry standards for installation purposes in a rack or cabinet. Height: The closed product must not exceed a 1U high.	
Connectivity	The KVM must have at least eight (8) ports each comprising: an analog VGA, mouse & keyboard connection. The KVM needs access to the equipment by all following links: USB, PS2 and Serial. The KVM must have at least a TCP / IP network connection for remote access. The KVM must have at least one connection port for remote access by telephone modem.	
Power supply	The device must be able to be powered on 120VAC and 230VAC.	

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Example	KVM/KMM such as KVM Avocent MergePoint Unity MPU108EDAC-001 1U or equivalent can be used.	
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Monitor Specifications

Reference: UI-MNT:24 24 inch monitor for viewing station <i>All stated requirements are mandatory</i>		Reference to bid document (document name, page, and paragraph number)
Function	The main function of the product must be a Monitor.	
Monitor Size	Must have 24" connected LCD or LED monitor.	
Monitor Resolution	Monitor(s) must have a minimum of 1920 X 1080 image resolution.	
Monitor Angle of view	The monitor must have a horizontal and vertical angle of view equal or better than 175 degrees.	
Monitor Static contrast	The monitor must have a static contrast ratio equal or better than 1000:1	
Monitor connexion	The monitor must be able to be connected through HDMI and one of these two VGA or DVI-i types of connexion. If the distance between the monitor and the computer or server exceeds the recommended limit for this type of connection, a video extender system must be installed to maintain the quality of the video signal between the computer or server and the monitor.	
Example	Monitors such as NEC EA244WMI-BK or equivalent can be used.	

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Reference: UI-MNT:42 42 inch monitor for viewing station <i>All stated requirements are mandatory</i>		Reference to bid document (document name, page, and paragraph number)
Function	The main function of the product must be a Monitor.	
Monitor Size	Must have 42" connected LCD or LED monitor.	
Monitor Resolution	Monitor(s) must have a minimum of 1920 X 1080 image resolution.	
Monitor Angle of view	The monitor must have a horizontal and vertical angle of view equal or better than 175 degrees.	
Monitor Static contrast	The monitor must have a static contrast ratio equal or better than 1000:1	
Monitor connexion	The monitor must be able to be connected through HDMI and one of these two VGA or DVI-i types of connexion. If the distance between the monitor and the computer or server exceeds the recommended limit for this type of connection, a video extender system must be installed to maintain the quality of the video signal between the computer or server and the monitor.	
Example	Monitors such as BOSCH UML-423-90 or equivalent can be used.	

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Power Distribution Unit Specifications

Reference: PDS-U/8 Power Distribution Solution <i>All stated requirements are mandatory</i>		Reference to bid document (document name, page, and paragraph number)
Function	The Power Distribution System (PDS) must be able to manage the power distribution of all the equipment supported by the main UPS , such as servers and other IT equipment. The PDS solution can be comprised of one or more Power Distribution Units (PDU).	
Form Factor	The PDS solution must be « Rackmount » standard, Width of 48.26 cm (19")	
Power	The PDS solution must be able to support the power rating of all the CCTV equipment connected to it and must be able to distribute at least 8 kVA in total.	
Input	The PDS solution input must be compatible with the electrical ratings of the environment to which it is connected in the CCTV rack. This means that the voltage and frequency rating and connection type must be compatible.	
Output	The PDS solution outputs must be compatible with the CCTV equipment to which they are connected in the CCTV rack. This means that the voltage and frequency rating and connection type must be compatible. The PDS solution must have enough outputs in order to be able to distribute power to all the CCTV equipment hosted by the CCTV rack with at least 3 spare outputs.	
Network Management	Must have network management interfaces that provide standards-based management via Web, SNMP and Telnet. Must allow users to access, configure, and manage units remotely.	
Power delays	The PDS solution must be able to allow users to configure the sequence in which power is turned on or off for each outlet.	
Visual indicators	The PDS solution must be able to visually indicate overload and warning conditions, based on the user-defined alarm thresholds.	
Example	Power Distribution Unit such as APC Switched Rack PDUs AP79xx or AP89xx series or equivalent can be used.	

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Server Specifications

General Server Specifications <i>All stated requirements are mandatory</i>		Reference to bid document (document name, page, and paragraph number)
General	<p>In the proposed solution, Servers must be provided with all the accessories, connectors, cables and firmware required to have a complete installation for a proper functional CCTV System based on the performance specified in this document.</p> <p>In the proposed solution, the servers must be able to be individually switched on or off, for maintenance or emergency purposes.</p> <p>In case of failure requiring replacement, the default server must be able to be independently replaced with a new server, without having to change the remaining functional servers.</p> <p>The Video Management software and the Video Recording Failover software must be installed on the same physical machine.</p> <p>RAID 6 setup is required for regular Video Recording Server storage, unless otherwise specified.</p> <p>RAID 5 setup is required for Video Recording Failover Server storage, unless otherwise specified.</p> <p>RAID 1 setup is required for all OS/Application drives.</p> <p>The availability Function cannot be done by using "redundant storage" of recorded video on multiple servers, unless otherwise specified.</p>	

Reference: SRV-R-S:MF Video Management Failover Server <i>All stated requirements are mandatory</i>		Reference to bid document (document name, page, and paragraph number)
Function Type	The server must have a Video Management Failover function.	
Form Factor	<p>Must be « Rackmount » standard, Width of 48.26 cm (19")</p> <p>Must have sliding rails with cable management arm.</p>	
Processor specifications	<p>Number of Processors required: 1 or more</p> <p>Number of Cores required : 4 or more</p> <p>Instruction Set: 64-bit</p>	
Processor Reference	Processor such as Intel Xeon E3-1200 v5 series or better.	
RAM Memory	12 GB RDIMM or higher	
RAID Controller	Must have 512 MB Battery Backed Cache or higher	
System/Application Drives	<p>The drives must be RAID 1 managed.</p> <p>The total usable capacity after RAID must be 250GB or higher.</p> <p>Minimum of two (2) 2.5" or 3.5" drives must be present.</p> <p>The type of drive must be SSD.</p>	

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	The drives must also be SAS type or better.	
Operating System	Must have Windows Server 2012 x64 installed. Server must be Certified by Microsoft for the version of Windows OS installed.	
Application Software	Video Management Failover application software must be installed on the OS drive space. The version of the Management Failover application software installed must be compatible with the OS installed. Data base used for the Video Management application must be installed and setup as recommended by the software manufacturer.	
Communication software to the UPS	The server must have automated power shutdown software installed on the OS partition and activated. When the UPS send the order, this software must softly shutdown all the embedded applications on the server and must turn off the device.	
Network	Must have dual 1Gb Ethernet connection capability.	
Power Supply	Must have dual, hot-plug redundant power supplies.	
Example	Server such as Dell PowerEdge R330 or equivalent can be used.	

Reference: SRV-R-L:MRF/R5-24TB Video Management System / Video Recording Failover Server <i>All stated requirements are mandatory</i>		Reference to bid document (document name, page, and paragraph number)
Function Type	The server must have a Video Management function AND also a Video Recording Failover function	
Form Factor	Must be « Rackmount » standard, Width of 48.26 cm (19") Must have sliding rails with cable management arm.	
Processor specifications	Number of Processors required: 2 or more Number of Cores required : 6 or more Instruction Set: 64-bit	
Processor Reference	Processor such as Intel Xeon E5-2600 v4 series or better.	
Motherboard	Supports Dual processor Socket	
RAM Memory	16 GB RDIMM or higher	
RAID Controller	Must have 512 MB Battery Backed Cache or higher	
System/Application Drives	The drives must be RAID 1 managed. The total usable capacity after RAID must be 250GB or higher. Minimum of two (2) 2.5" or 3.5" drives must be present. The type of drive must be SSD.	

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	The drives must also be SAS type or better.	
Video Recording Drives	Drives must be setup on RAID 5 mode. The total usable capacity after RAID must be 24TB or higher. Minimum of 5 x 3.5" 6TB hot swappable drives must be present. Minimum of 2 empty additional 3.5" hot swappable bays for future expansion must be present. Hard drive rotation speed must be at least 7.2K RPM or better Hard drives must be Near-line SAS type or better.	
Operating System	Must have Windows Server 2012 x64 installed. Server must be Certified by Microsoft for the version of Windows OS installed.	
Application Software	The Video Management and Video Recording Failover application software must be installed on the OS drive space. The version of the Video Management and Video Recording Failover application software installed must be compatible with the OS installed. Data base used for the application software must be installed and setup as recommended by the software manufacturer.	
NTP Software	Must have NTP server software installed on the OS partition and activated, able to communicate and synchronize its server time with all the Devices connected on the CCTV network.	
Communication software to the UPS	The server must have automated power shutdown software installed on the OS partition and activated. When the UPS send the order, this software must softly shutdown all the embedded applications on the server and must turn off the device.	
Network	Must have dual 1Gb Ethernet connection capability.	
Power Supply	Must have dual, hot-plug redundant power supplies.	
Example	Server such as Dell PowerEdge R730xd or equivalent can be used.	

Reference: SRV-R-L:R/R6-42TB Video Recording Server <i>All stated requirements are mandatory</i>		Reference to bid document (document name, page, and paragraph number)
Function Type	The server must have a Video Recording function.	
Form Factor	Must be « Rackmount » standard, Width of 48.26 cm (19") Must have sliding rails with cable management arm.	
Processor specifications	Number of Processors required: 2 or more Number of Cores required : 6 or more Instruction Set: 64-bit	

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Processor Reference	Processor such as Intel Xeon E5-2600 v4 series or better.	
Motherboard	Supports Dual processor Socket	
RAM Memory	16 GB RDIMM or higher	
RAID Controller	Must have 512 MB Battery Backed Cache or higher	
System/Application Drives	The drives must be RAID 1 managed. The total usable capacity after RAID must be 250GB or higher. Minimum of two (2) 2.5" or 3.5" drives must be present. The type of drive must be SSD. The drives must also be SAS type or better.	
Video Recording Drives	Drives must be setup on RAID 6 mode. The total usable capacity after RAID must be 42TB or higher. Minimum of 9 x 3.5" 6TB hot swappable drives must be present. Minimum of 2 empty additional 3.5" hot swappable bays for future expansion must be present. Hard drive rotation speed must be at least 7.2K RPM or better Hard drives must be Near-line SAS type or better.	
Operating System	Must have Windows Server 2012 x64 installed. Server must be Certified by Microsoft for the version of Windows OS installed.	
Application Software	The Video Recording application software must be installed on the OS drive space. The version of the Video Recording application software installed must be compatible with the OS installed. Data base used for the application software must be installed and setup as recommended by the software manufacturer.	
NTP Software	Must have NTP client software installed on the OS partition, able to communicate and synchronize the Device time with the NTP server installed on the CCTV network.	
Communication software to the UPS	The server must have automated power shutdown software installed on the OS partition and activated. When the UPS send the order, this software must softly shutdown all the embedded applications on the server and must turn off the device.	
Network	Must have dual 1Gb Ethernet connection capability.	
Power Supply	Must have dual, hot-plug redundant power supplies.	
Example	Server such as Dell PowerEdge R730xd or equivalent can be used.	

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Surge protector Specifications

Reference: SUR-U/120 Surge Protector 120kA <i>All stated requirements are mandatory</i>		Reference to bid document (document name, page, and paragraph number)
Function	Must be able to protect equipment such as UPS, Data center and other IT equipment, against overvoltage.	
Peak Current Normal Mode	The Surge Protector must be able to protect the equipment against a Peak Current of 120 kAmps in normal mode.	
Response time	The Surge Protector must be able to react and filter the over voltages in less than 1 ns in normal mode.	
EMI/RFI Noise rejection	The Surge Protector must have a EMI/RFI Noise rejection of at least 50 db between 100 kHz to 10 MHz.	
Input	The Surge Protector input must be compatible with the electrical environment available in the CCTV server room, which includes compatible voltage and frequency rating and connection type.	
Output	The Surge Protector output must be compatible with the devices it connects and supports, which includes compatible voltage and frequency rating and connection type.	
Power	The Surge Protector must be able to support the full power rating specified by the UPS and any other equipment that it protects.	
Example	Surge protector such as Eaton - 120KA Surge protector - SPD120 Series or equivalent can be used.	

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Switch Specifications

Reference: SWT-R:E/POE+ Secondary Switch(es) Solution <i>All stated requirements are mandatory</i>		Reference to bid document (document name, page, and paragraph number)
Function	The Edge Switch Solution must interconnect CCTV equipment on the same standalone network. The list includes mainly cameras and network accessories.	
Form Factor	The <i>Switch Solution</i> can include one or several interconnected switches. The <i>Switch Solution</i> must have 19 inch standard width and must be able to be installed in a grade server rack/cabinet.	
Standards	The <i>Switch Solution</i> must be compliant with the Canadian industry standards when apply.	
Ethernet Port Number	The Edge <i>Switch Solution</i> must have enough Ethernet ports in order to connect all the IP cameras of its neighbourhood zone and all needed IT accessories at the appropriate bandwidth, greater than 100 Mb/s at least. Unless elsewhere specified, the Edge Switch Solution must have at least two (2) Uplink Ports to interconnect the Core Switch Solution at the appropriate bandwidth, greater than 1 Gb/s at least. If it apply and if there is long communication distances or a high bandwidth required, the type of the uplink ports must be SFP optical fiber, equipped with optical fiber SFP type modules, to interconnect the <i>Edge Switch Solution</i> to the <i>Core Switch Solution</i> . The <i>Edge Switch Solution</i> must be sized to host 20% of additional cameras.	
Network Bandwidth	The Switch Solution must support at least two times the bandwidth of the traffic of all cameras of the considered zone being viewed and recorded continuously and simultaneously in the worst case scenario. Each camera is supposed to have an average bandwidth of 2Mb/s in recording mode and 3Mb/s in viewing mode. Each Port must support the bandwidth of the device connected.	
Protocols	The Switch Solution must allow optimizing bandwidth on the CCTV network, supporting routing type "Multicast" for IPv4 and IPv6. In particular it must enable monitoring IGMP (Internet Group Management Protocol) IPv4 and IPv6 MLD (versions 1 and 2) and must enable customers to rapidly join and leave multicast streams and limit intensive video traffic to bandwidth only applicants. Must support Multiple Spanning Tree Protocol (STP)	
Latency	The <i>Switch Solution</i> must be able to switch video streams in a transparent manner and must not contribute to generate latency more than 80ms on the CCTV network.	
IPv6	IPv6 host: enables switches to be managed and deployed at the IPv6 network's edge Dual stack (IPv4/IPv6): transitions from IPv4 to IPv6, supporting connectivity for both protocols MLD snooping: forwards IPv6 multicast traffic to the appropriate interface IPv6 ACL/QoS: supports ACL and QoS for IPv6 network traffic, preventing traffic flooding. IPv6 routing: supports static and OSPFv3	
Power over Ethernet (PoE/PoE+)	PoE in accordance with IEEE 802.3af All ports of switches connected cameras directly must be a minimum configurable PoE in accordance with IEEE 802.3af and thus must be able to provide a power of 15W to each camera that is connected to the port. PoE PLUS accordance with IEEE 802.3at All ports of switches connected directly to the cameras that require PoE +, must be configured PoE + according to IEEE 802.3at, and must thus be able to provide 30W to each device connected to the said port.	

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	<p>The total power budget or switches must be sufficient to withstand the power of PoE and PoE + ports needed.</p> <p>PoE that needs greater power than 30W</p> <p>If some equipment like heated PTZ cameras require greater power than 30W, independent power injectors may be used. For the cabling requirements refer please to the cabling section if applicable.</p>	
Backup Power	To get a high availability network, the Switch(es) Solution must be powered by an uninterruptible power supply (UPS) with a 20 minutes run time.	
Management	<p>Must have a full management capability.</p> <p>Remote Intelligent Mirroring:</p> <p>Mirrors selected ingress/egress traffic based on ACL, port, MAC address, or VLAN to a local or remote 8200zl, 6200yl, 5400zl, or 3500yl switch anywhere on the network.</p> <p>RMON, XRMON, and sFlow v5:</p> <p>Provide advanced monitoring and reporting capabilities for statistics, history, alarms, and events.</p> <p>IEEE 802.1AB Link Layer Discovery Protocol (LLDP):</p> <p>Automated device discovery protocol provides easy mapping by network management applications.</p> <p>Uni-Directional Link Detection (UDLD):</p> <p>Monitors cable between two switches and shuts down the ports on both ends if the cable is broken turning the bi-directional link into uni-directional; this prevents network problems such as loops.</p> <p>Remote Power Management:</p> <p>if applicable, must be capable of controlling the power to the individual ports, i.e. remote POE OFF/ON.</p>	
Security	<p>Access control lists (ACLs):</p> <p>Provide filtering based on the IP field, source/destination IP address/subnet, and source/destination TCP/UDP port number on a per-VLAN or per-port basis.</p> <p>Multiple user authentication methods:</p> <p>IEEE 802.1X users per port: provides authentication of multiple IEEE 802.1X users per port; prevents user "piggybacking" on another user's IEEE 802.1X authentication. Web-based authentication: authenticates from Web browser for clients that do not support IEEE 802.1X supplicant; customized remediation can be processed on an external Web server</p> <p>Virus throttling:</p> <p>Detects traffic patterns typical of WORM-type viruses and either throttles or entirely prevents the virus from spreading across the routed VLANs or bridged interfaces, without requiring external appliances</p> <p>DHCP protection:</p> <p>Blocks DHCP packets from unauthorized DHCP servers, preventing denial-of-service attacks.</p> <p>Secure management access:</p> <p>Securely encrypts all access methods (CLI, GUI, or MIB) through SSHv2, SSL 3.0, and/or SNMPv3.</p>	
Example	Switch such as HPE OfficeConnect 1920 Switch Series or equivalent can be used.	

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Reference: SWT-R:BB/POE+ Main Switch(es) Solution <i>All stated requirements are mandatory</i>		Reference to bid document (document name, page, and paragraph number)
Function	The Main Switch Solution must interconnect CCTV equipment on the same standalone network. The list includes, but is not limited to, servers, viewing stations, cameras and network accessories.	
Form Factor	The <i>Switch Solution</i> can include one or several interconnected switches. The <i>Switch Solution</i> must have 19 inch standard width and must be able to be installed in a grade server rack/cabinet.	
Standards	The <i>Switch Solution</i> must be compliant with the Canadian industry standards when apply.	
Ethernet Port Number	The <i>Main Switch Solution</i> must have enough Ethernet ports in order to interconnect all the servers, encoders and viewing stations at the appropriate bandwidth, greater than 1 Gb/s at least. If these equipment are too far, the <i>Main Switch Solution</i> must be have enough SFP or higher optical fiber ports, equipped with the adequate optical fiber SFP type modules, to interconnect the <i>Main Switch Solution</i> to these equipment. The <i>Main Switch Solution</i> must have enough Ethernet ports in order to connect all the IP cameras of its neighbourhood zone, the KVM and all needed IT accessories at the appropriate bandwidth, greater than 100 Mb/s at least. Once needed for instance du to long communication distances or a high bandwidth required, the <i>Main Switch Solution</i> must include enough SFP or higher optical fiber ports, equipped with the adequate optical fiber SFP type modules, to interconnect the <i>Main Switch Solution</i> to the different concerned equipment. The <i>Main Switch Solution</i> must be sized to host 20% of additional future cameras.	
Network Bandwidth	The Switch Solution must support at least two times the bandwidth of the cumulated traffic of all servers, viewing stations and cameras or the considered zone being viewed and recorded continuously and simultaneously in the worst case scenario. Each camera is supposed to have an average bandwidth of 2Mb/s in recording mode and 3Mb/s in viewing mode. Each Port must support the bandwidth of the device connected.	
Protocols	The Switch Solution must allow optimizing bandwidth on the CCTV network, supporting routing type "Multicast" for IPv4 and IPv6. In particular it must enable monitoring IGMP (Internet Group Management Protocol) IPv4 and IPv6 MLD (versions 1 and 2) and must enable customers to rapidly join and leave multicast streams and limit intensive video traffic to bandwidth only applicants. Must support Multiple Spanning Tree Protocol (STP)	
Latency	The <i>Switch Solution</i> must be able to switch video streams in a transparent manner and must not contribute to generate latency more than 80ms on the CCTV network.	
IPv6	IPv6 host: enables switches to be managed and deployed at the IPv6 network's edge Dual stack (IPv4/IPv6): transitions from IPv4 to IPv6, supporting connectivity for both protocols MLD snooping: forwards IPv6 multicast traffic to the appropriate interface IPv6 ACL/QoS: supports ACL and QoS for IPv6 network traffic, preventing traffic flooding. IPv6 routing: supports static and OSPFv3	
Power over Ethernet (PoE/PoE+)	PoE in accordance with IEEE 802.3af All ports of switches connected cameras directly must be a minimum configurable PoE in accordance with IEEE 802.3af and thus must be able to provide a power of 15W to each camera that is connected to the port. PoE PLUS accordance with IEEE 802.3at All ports of switches connected directly to the cameras that require PoE +, must be configured PoE + according to IEEE 802.3at, and must thus be able to provide 30W to each device connected to the said port.	

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	<p>The total power budget or switches must be sufficient to withstand the power of PoE and PoE + ports needed.</p> <p>PoE that needs greater power than 30W</p> <p>If some equipment like heated PTZ cameras require greater power than 30W, independent power injectors may be used. For the cabling requirements refer please to the cabling section if applicable.</p>	
Backup Power	To get a high availability network, the Switch(es) Solution must be powered by an uninterruptible power supply (UPS) with a 20 minutes run time.	
Management	<p>Must have a full management capability.</p> <p>Remote Intelligent Mirroring:</p> <p>Mirrors selected ingress/egress traffic based on ACL, port, MAC address, or VLAN to a local or remote 8200zl, 6200yl, 5400zl, or 3500yl switch anywhere on the network.</p> <p>RMON, XRMON, and sFlow v5:</p> <p>Provide advanced monitoring and reporting capabilities for statistics, history, alarms, and events.</p> <p>IEEE 802.1AB Link Layer Discovery Protocol (LLDP):</p> <p>Automated device discovery protocol provides easy mapping by network management applications.</p> <p>Uni-Directional Link Detection (UDLD):</p> <p>Monitors cable between two switches and shuts down the ports on both ends if the cable is broken turning the bi-directional link into uni-directional; this prevents network problems such as loops.</p> <p>Remote Power Management:</p> <p>if applicable, must be capable of controlling the power to the individual ports, i.e. remote POE OFF/ON.</p>	
Security	<p>Access control lists (ACLs):</p> <p>Provide filtering based on the IP field, source/destination IP address/subnet, and source/destination TCP/UDP port number on a per-VLAN or per-port basis.</p> <p>Multiple user authentication methods:</p> <p>IEEE 802.1X users per port: provides authentication of multiple IEEE 802.1X users per port; prevents user "piggybacking" on another user's IEEE 802.1X authentication. Web-based authentication: authenticates from Web browser for clients that do not support IEEE 802.1X supplicant; customized remediation can be processed on an external Web server</p> <p>Virus throttling:</p> <p>Detects traffic patterns typical of WORM-type viruses and either throttles or entirely prevents the virus from spreading across the routed VLANs or bridged interfaces, without requiring external appliances</p> <p>DHCP protection:</p> <p>Blocks DHCP packets from unauthorized DHCP servers, preventing denial-of-service attacks.</p> <p>Secure management access:</p> <p>Securely encrypts all access methods (CLI, GUI, or MIB) through SSHv2, SSL 3.0, and/or SNMPv3.</p>	
Example	Switch such as HPE OfficeConnect 1920 Switch Series or equivalent can be used.	

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UPS Specifications

Reference: UPS-R:M1.5 Medium UPS <i>All stated requirements are mandatory</i>		Reference to bid document (document name, page, and paragraph number)
Grade	UPS must be considered 'Server Grade'.	
Form Factor	« Rackmount » standard, Width of 48.26 cm (19")	
Topology	The UPS must be Online Topology type, converting the power from AC to DC then back to AC.	
Power Rating	The uninterruptible power supply (UPS) must meet the highest of these two criteria: The UPS or series of uninterruptible power supplies must be able to supply power to the servers, the Ethernet POE switches and all critical devices of the CCTV System in the rack. The UPS must be able to supply at least 1.35kW.	
Power runtime	The uninterruptible power supply (UPS) must be able to supply a minimum of 20 minutes of power at full power capacity of the supported equipment during a power outage.	
Output Waveform	True sine wave output Output voltage distortion with less than or equal to 5% distortion at full load.	
Soft Shutdown	In the event of a power outage, the UPS system is to be configured to initiate a safe shutdown of the servers based on battery capacity and/or time delay.	
Connectivity	UPS system must be able to connect to each server through a network interface in order to initiate the shutdown in case of power outage.	
Example	UPS such as Eaton 9130 Rackmount UPS or equivalent can be used.	

Reference: UPS-R:H7 Huge UPS <i>All stated requirements are mandatory</i>		Reference to bid document (document name, page, and paragraph number)
Grade	UPS must be considered 'Server Grade'.	
Form Factor	« Rackmount » standard, Width of 48.26 cm (19")	
Topology	The UPS must be Online Topology type, converting the power from AC to DC then back to AC.	
Power Rating	The uninterruptible power supply (UPS) must meet the highest of these two criteria: The UPS or series of uninterruptible power supplies must be able to supply power to the servers, the Ethernet POE switches and all critical devices of the CCTV System in the rack. The UPS must be able to supply at least 7kW.	

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Power runtime	The uninterruptible power supply (UPS) must be able to supply a minimum of 20 minutes of power at full power capacity of the supported equipment during a power outage.	
Output Waveform	True sine wave output Output voltage distortion with less than or equal to 5% distortion at full load.	
Soft Shutdown	In the event of a power outage, the UPS system is to be configured to initiate a safe shutdown of the servers based on battery capacity and/or time delay.	
Connectivity	UPS system must be able to connect to each server through a network interface in order to initiate the shutdown in case of power outage.	
Example	UPS such as Eaton 9PX Rackmount UPS or equivalent can be used.	

Reference: UPS-T:WST1.5 Tower Medium UPS for viewing station & IT equipment <i>All stated requirements are mandatory</i>		Reference to bid document (document name, page, and paragraph number)
Grade	UPS must be considered 'Server Grade'.	
Form Factor	Tower format standard	
Topology	The UPS must be Online Topology type, converting the power from AC to DC then back to AC.	
Power Rating	The uninterruptible power supply (UPS) must meet the highest of these two criteria: The UPS or series of uninterruptible power supplies must be able to supply all the equipment it supplies. The UPS must be able to supply at least 1.5 kW.	
Power runtime	The uninterruptible power supply (UPS) must be able to supply a minimum of 10 minutes of power at full power capacity of the supported equipment during a power outage.	
Output Waveform	True sine wave output Output voltage distortion with less than or equal to 5% distortion at full load.	
Soft Shutdown	In the event of a power outage, the UPS system is to be configured to initiate a safe shutdown of the servers based on battery capacity and/or time delay.	
Connectivity	UPS system must be able to connect to each server through a network interface in order to initiate the shutdown in case of power outage.	
Audio noise at one metre	Audio noise generated by the UPS must be less than 45db at one meter	
Example	UPS such as APC Smart-UPS RT 2200VA RM or equivalent can be used.	

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Viewing Station Specifications

Reference: VST-D-G2-M42x2:CV/32H Desktop Client Viewing Station - 32 images / dual 42" screen <i>All stated requirements are mandatory</i>		Reference to bid document (document name, page, and paragraph number)
Function	The product is a client system that must allow the user to interact remotely with the CCTV System and to manage the video data.	
Form Factor	The computer is a Desktop type computer	
Processor / RAM memory	The computer must be sized in terms of CPU, RAM and/or GPU type accelerated hardware such that it is able to decompress and simultaneously display 32 video streams H2.64, at 30 frames per second and 1080p HD resolution. For the scenario specified above, this viewing function should take less than 50% of CPU resources.	
Hard Drive Storage Capacity	500 GB Hard Drive Partition OS of 100 GB for the Operating System Partition 400GB for Storage	
Graphic Card	Must have graphic card with at least two (2) independent video outputs, including but not limited to DVI-I and HDMI, able to manage two (2) display monitors with 1920 X 1080 resolution.	
Video Extender	If the distance between the monitor and the computer or server exceeds the recommended limit according to the recommendations of this type of connection, a video extender system must be installed to maintain the quality of the video signal between the computer or server and the monitor.	
Exporting	Must allow exporting and saving the data, images and video directly onto a DVD support and also a USB memory device.	
Operating System	Windows 7 or higher	
Application Software	The client computer must have a VMS client software installed on the OS partition, able to manage remotely the VMS sever through a LAN.	
NTP software	Must have NTP client software installed on the OS partition, able to communicate and synchronize the Device time with the NTP server installed on the CCTV network.	
Communication software to the UPS	If the viewing workstation is power supplied by a UPS, the workstation must have automated power shutdown software installed and activated, like "Powerchute". When the UPS send the order, this software must softly shutdown all the embedded applications and must turn off the device.	
Monitor Size	Must have two (2) x 42" connected LCD or LED monitors.	
Monitor Resolution	Must be configured with a minimum of 1920 X 1080 image resolution on each display.	
Monitor Angle of view	The monitor must have a horizontal and vertical angle of view equal or better than 175 degrees.	

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Monitor Static contrast	The monitor must have a static contrast ratio equal or better than 1000:1	
Keyboard	Wired keyboard Microsoft Compatible USB	
Mouse	Wired mouse Microsoft Compatible USB Three button Right and left hand Optical motion detection	

Reference: VST-D-G2-M32:CV/32H Desktop Client Viewing Station - 32 images / 32" screen <i>All stated requirements are mandatory</i>		Reference to bid document (document name, page, and paragraph number)
Function	The product is a client system that must allow the user to interact remotely with the CCTV System and to manage the video data.	
Form Factor	The computer is a Desktop type computer	
Processor / RAM memory	The computer must be sized in terms of CPU, RAM and/or GPU type accelerated hardware such that it is able to decompress and simultaneously display 32 video streams H2.64, at 30 frames per second and 1080p HD resolution. For the scenario specified above, this viewing function should take less than 50% of CPU resources.	
Hard Drive Storage Capacity	500 GB Hard Drive Partition OS of 100 GB for the Operating System Partition 400GB for Storage	
Graphic Card	Must have graphic card with at least two (2) independent video outputs, including but not limited to DVI-I and HDMI, able to manage two (2) display monitors with 1920 X 1080 resolution.	
Video Extender	If the distance between the monitor and the computer or server exceeds the recommended limit according to the recommendations of this type of connection, a video extender system must be installed to maintain the quality of the video signal between the computer or server and the monitor.	
Exporting	Must allow exporting and saving the data, images and video directly onto a DVD support and also a USB memory device.	
Operating System	Windows 7 or higher	
Application Software	The client computer must have a VMS client software installed on the OS partition, able to manage remotely the VMS sever through a LAN.	

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NTP software	Must have NTP client software installed on the OS partition, able to communicate and synchronize the Device time with the NTP server installed on the CCTV network.	
Communication software to the UPS	If the viewing workstation is power supplied by a UPS, the workstation must have automated power shutdown software installed and activated, like "Powerchute". When the UPS send the order, this software must softly shutdown all the embedded applications and must turn off the device.	
Monitor Size	Must have one 32" connected LCD or LED monitor.	
Monitor Resolution	Must be configured with a minimum of 1920 X 1080 image resolution on each display.	
Monitor Angle of view	The monitor must have a horizontal and vertical angle of view equal or better than 175 degrees.	
Monitor Static contrast	The monitor must have a static contrast ratio equal or better than 1000:1	
Keyboard	Wired keyboard Microsoft Compatible USB	
Mouse	Wired mouse Microsoft Compatible USB Three button Right and left hand Optical motion detection	

Reference: VST-D-G4-M42x2:CV/48H Desktop Client Viewing Station - 48 images/ dual 42" screen <i>All stated requirements are mandatory</i>		Reference to bid document (document name, page, and paragraph number)
Function	The product is a client system that must allow the user to interact remotely with the CCTV System and to manage the video data.	
Form Factor	The computer is a Desktop type computer	
Processor / RAM memory	The computer must be sized in terms of CPU, RAM and/or GPU type accelerated hardware such that it is able to decompress and simultaneously display 48 video streams H2.64, at 30 frames per second and 1080p HD resolution. For the scenario specified above, this viewing function should take less than 50% of CPU resources.	
Hard Drive Storage Capacity	500 GB Hard Drive Partition OS of 100 GB for the Operating System Partition 400GB for Storage	
Graphic Card	Must have graphic card(s) with at least four (4) independent video outputs, including but not limited to DVI-I and HDMI, able to manage four (4) display monitors with 1920 X 1080 resolution.	

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Video Extender	If the distance between the monitor and the computer or server exceeds the recommended limit according to the recommendations of this type of connection, a video extender system must be installed to maintain the quality of the video signal between the computer or server and the monitor.	
Exporting	Must allow exporting and saving the data, images and video directly onto a DVD support and also a USB memory device.	
Operating System	Windows 7 or higher	
Application Software	The client computer must have a VMS client software installed on the OS partition, able to manage remotely the VMS sever through a LAN.	
NTP software	Must have NTP client software installed on the OS partition, able to communicate and synchronize the Device time with the NTP server installed on the CCTV network.	
Communication software to the UPS	If the viewing workstation is power supplied by a UPS, the workstation must have automated power shutdown software installed and activated, like "Powerchute". When the UPS send the order, this software must softly shutdown all the embedded applications and must turn off the device.	
Monitor Size	Must have two (2) x 42" connected LCD or LED monitors.	
Monitor Resolution	Must be configured with a minimum of 1920 X 1080 image resolution on each display.	
Monitor Angle of view	The monitor must have a horizontal and vertical angle of view equal or better than 175 degrees.	
Monitor Static contrast	The monitor must have a static contrast ratio equal or better than 1000:1	
Keyboard	Wired keyboard Microsoft Compatible USB	
Mouse	Wired mouse Microsoft Compatible USB Three button Right and left hand Optical motion detection	

Reference: VST-D-G2-M27x2:CV/32H Desktop Client Viewing Station - 32 images / dual 27" screen <i>All stated requirements are mandatory</i>		Reference to bid document (document name, page, and paragraph number)
Function	The product is a client system that must allow the user to interact remotely with the CCTV System and to manage the video data.	

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Form Factor	The computer is a Desktop type computer	
Processor / RAM memory	The computer must be sized in terms of CPU, RAM and/or GPU type accelerated hardware such that it is able to decompress and simultaneously display 32 video streams H2.64, at 30 frames per second and 1080p HD resolution. For the scenario specified above, this viewing function should take less than 50% of CPU resources.	
Hard Drive Storage Capacity	500 GB Hard Drive Partition OS of 100 GB for the Operating System Partition 400GB for Storage	
Graphic Card	Must have graphic card with at least two (2) independent video outputs, including but not limited to DVI-I and HDMI, able to manage two (2) display monitors with 1920 X 1080 resolution.	
Video Extender	If the distance between the monitor and the computer or server exceeds the recommended limit according to the recommendations of this type of connection, a video extender system must be installed to maintain the quality of the video signal between the computer or server and the monitor.	
Exporting	Must allow exporting and saving the data, images and video directly onto a DVD support and also a USB memory device.	
Operating System	Windows 7 or higher	
Application Software	The client computer must have a VMS client software installed on the OS partition, able to manage remotely the VMS sever through a LAN.	
NTP software	Must have NTP client software installed on the OS partition, able to communicate and synchronize the Device time with the NTP server installed on the CCTV network.	
Communication software to the UPS	If the viewing workstation is power supplied by a UPS, the workstation must have automated power shutdown software installed and activated, like "Powerchute". When the UPS send the order, this software must softly shutdown all the embedded applications and must turn off the device.	
Monitor Size	Must have two (2) x 27" connected LCD or LED monitors.	
Monitor Resolution	Must be configured with a minimum of 1920 X 1080 image resolution on each display.	
Monitor Angle of view	The monitor must have a horizontal and vertical angle of view equal or better than 175 degrees.	
Monitor Static contrast	The monitor must have a static contrast ratio equal or better than 1000:1	
Keyboard	Wired keyboard Microsoft Compatible USB	
Mouse	Wired mouse Microsoft Compatible USB Three button	

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	Right and left hand Optical motion detection	
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Video management system Specifications

General Video management system Specifications <i>All stated requirements are mandatory</i>		Reference to bid document (document name, page, and paragraph number)
General Architecture	<p>The VMS software used to control and manage the cameras must offer a client-server model. The server application can be in a remote location and must be able to provide camera control (live viewing, PTZ controls) and video archiving functions.</p> <p>The client application must be able to connect remotely 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>The product must be able to group cameras in logical group. It must be possible to select one or more groups within the programmed hierarchy and go directly to that camera group's views.</p> <p>It must be possible to use a traditional CCTV keyboard and connect it to the control center PC to allow full virtual matrix control without the need for PC keyboard and mouse control.</p> <p>The product must support multiple streams from the same camera at different resolution.</p>	
Open standards	<p>The product must support "Open Standards" architecture to interoperate with a variety of cameras, encoder, and IT infrastructure.</p> <p>The product must be "ONVIF profile S" compliant.</p> <p>The product must have a Software Development Kit (SDK) available.</p> <p>The product must support commercial off the shelf (COTS) client workstations, servers, and customer selected archiving system.</p> <p>The product must be compatible with open architecture industry leading camera manufacturers including but not limited to: Sony, Axis, Panasonic and Bosch.</p> <p>The product must have a list of compatible camera models approved and certified by the VMS manufacturer.</p> <p>The product must be able to support an application programming interface (API) for integration of third party software such as video analytics or license plate recognition.</p>	
Languages	Support at least the two official languages: English and French.	
Retention period	The product must be able to setup an unlimited video retention time.	
Software compatibility	The software used to control and manage the cameras must be compatible with the server and the Operating System that hosts the software.	

Reference: VMS-M:F/LRM Large scale site Video Management Server Software <i>All stated requirements are mandatory</i>		Reference to bid document (document name, page, and paragraph number)
Function	The Video Management Software is hosted by the Video Management Server and must be able to manage the video surveillance devices connected to the CCTV network, including but not limited to Cameras, Servers, Digital Input/Output devices (I/O).	
Architecture	<p>The VMS software used to control and manage the cameras must offer a client-server model, centrally managed and distributed sites.</p> <p>The VMS software must be able to support multiple servers System.</p>	

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Scalability / future expansion	<p>The product must be upgradeable without migration to another platform.</p> <p>The server application must be scalable, i.e. the same application must be able to support unlimited cameras, without additional application upgrades or purchases.</p>	
Video Archiving and Retrieval	<p>The product must support management, distribution and storage of video surveillance data in a centralized and also distributed network environment.</p> <p>Must have the capability of recording video at 15 FPS at least and have an adjustable frame rate.</p> <p>The product must support multiple recording modes and formats, such as: Always recording, on motion recording, pre and post motion recording, and scheduled recording. These modes must be available for all compatible cameras.</p> <p>The product must support video recording in multiple standard compression formats including but not limited to H.264, configured at the camera level.</p> <p>The product must be able to record audio that is synchronized with the video.</p> <p>The product supports internal and external storage devices, including but not limited to servers, NAS / SAN solutions.</p> <p>The product must provide advanced search functions, including but not limited to time-line search, event search, and motion search.</p>	
Dynamic Video Stream Setting	<p>In order to display a large number of tiles on the Video Monitor at the same time, the VMS must be able to dynamically select the video stream resolution and frame rate based on the size of the tile on the monitor. It is only required to switch between two different streams.</p>	
Interconnection	<p>The product must be able to connect multiple independent Remote Systems in order to view on live and playback, videos from the cameras hosted by these systems.</p> <p>The viewing procedure of the remote cameras must be transparent to the user and the same as for the local cameras.</p>	
Federation	<p>The VMS software must be able to connect and federate other compatible VMS as a parent or as a child VMS System.</p> <p>As a parent or child VMS System, the Software must allow a federation function to centralize the Remote Management of these sites, including but not limited to:</p> <p>Remote Live Monitoring, Remote Playback, Remote PTZ control, Remote Alarm management, Remote Reporting.</p>	
Availability	<p>The product must provide a high level of availability for the recording function with particularly the existence of a Video Recording Failover System to ensure in case of failure, continuous recording of all cameras at all times on the failover server without loss of data.</p> <p>The product must provide a high level of availability for the viewing function with particularly the existence of a Video Management Failover System to ensure automatically a continuous access to all live data at all times from the Video Management Failover System and prevent from video streaming interruption or service interruption in general.</p>	
Audit log	<p>The VMS must allow the management, the visualization and the printing of an audit log which includes, but not limited to the following:</p> <p>The VMS must log user actions types The VMS must log who did the action and when The VMS must log User logon/logoff action The VMS must log Camera setting modification The VMS must log PTZ move The VMS must log Video export The VMS must log Alarms and events The VMS must log Disk above a threshold The VMS must log Camera not working The VMS must have a user interface to display and search the log</p>	

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Video surveillance events	<p>The VMS must allow the definition and management of "Video Surveillance Events" using a VMS rules management, configurable through a user-friendly graphical interface.</p> <p>The VMS must be able to trigger through its management rules, one or more actions from one or more triggered events, by following a combinational logic.</p> <p>The list of "Video Surveillance Events" handled by the VMS includes, but not limited to digital I/O, motion detection, video analytics, time of day etc.</p> <p>The VMS must also be able to handle third party events</p> <p>Events must trigger alarm actions.</p> <p>The alarm management function must be accessible based on a role-based user management.</p> <p>The product provides user options to log text descriptions of Event Triggers, Actions, and Alarms.</p> <p>Alarms must be associated with user defined actions.</p> <p>The VMS must be able to provide independent live viewing windows for the alarms / events management, including but not limited to alarm acknowledgement, alarm disabling, alarm forwarding, etc.</p>	
Diagnostic events	<p>The VMS software must allow "Diagnostic Events" configuration through a friendly integrated Graphic User Interface.</p> <p>The "Diagnostic Events" handled by the VMS must be based on the CCTV device and function health monitoring where events include, but not limited to, "Disk or server failure", "camera failure", "recording failure", "Disk space full", etc...</p> <p>Diagnostic Events must be able to trigger alarm actions.</p> <p>The alarm management function must provide an overview of all components controlled by the VMS.</p> <p>The alarm management function must be accessible based on a role-based user management.</p> <p>The product provides user options to log text descriptions of Event Triggers, Actions, and Alarms.</p> <p>Alarms must be associated with user defined actions.</p> <p>The VMS must be able to provide independent live viewing windows for the alarms / events management, including but not limited to alarm acknowledgement, alarm disabling, alarm forwarding, etc.</p> <p>Alarms must be sent if needed to users through email, SNMP and text message.</p>	
Video transmission Type	The product must support multicast and unicast transmission.	
Configuration Function or Tool	<p>The VMS configuration tool must be managed using a Graphic User Interface (GUI)</p> <p>The camera settings including but not limited to frame rate, resolution and compression must be configurable by the VMS.</p> <p>The camera settings including motion detection must be configurable by the VMS.</p> <p>The VMS must provide a hardware discovery tool.</p>	
Configuration reporting	<p>The VMS software must allow the user to generate a Configuration Report file which includes but is not limited to:</p> <ul style="list-style-type: none"> - The name of the equipment, - The model name of the equipment, - The IP and MAC addresses of the equipment, - The settings of the equipment (video settings, storage capacity, etc...), - If possible, a picture of the camera if applicable. <p>This configuration Report must be exportable by the VMS software in a popular electronic file format like pdf, and it must be written in a readable and understandable format.</p>	
Security	<p>The product must provide a role based authorization mechanism that includes, but not limited to the following features:</p> <p>Must have User ID and Password protection for each client connection to the server application.</p> <p>Must be able to have automatic password expiry function.</p> <p>Must be able to have encryption of stored Passwords.</p>	

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	<p>The proposed solution must support role-based access control (RBAC) management or group-based access control (GBAC) management where privileged users can define roles or groups and can assign users to roles or groups.</p> <p>Must have at least one administrator role with full access rights and also multiple user and group profiles with restricted rights.</p> <p>Must be able to define hierarchy and inheritance mechanisms on user/group rights.</p> <p>The proposed solution must allow the assignment of granular restriction to users, groups or roles. The granularity of these restriction must include but is not limited to:</p> <p>Restricted access by device (cameras, microphones, I/O devices...)</p> <p>Restricted access to live view for specific cameras</p> <p>Restricted access to playback for specific cameras</p> <p>Restricted access to PTZ</p> <p>Restricted access to export</p> <p>Restricted access to the VMS setup</p> <p>Restricted access on enabling/disabling recording and listening of audio.</p> <p>The contractor gives warranty that the VMS has no existing back door or non-modifiable default password that gives permanent access to third party to any of the infrastructure or components implemented unless explicitly authorized by the CBSA authority.</p>	
PTZ Controls	<p>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.</p> <p>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.</p> <p>Must be able to store and manage unlimited pre-set positions for each camera.</p>	
Example	Video management system such as Genetec Ominicast, Genetec Security Center or equivalent can be used.	

Reference: VMS-C Video Management Client Software <i>All stated requirements are mandatory</i>		Reference to bid document (document name, page, and paragraph number)
Function	The software is hosted by the Viewing Workstation and must be able to inter connect and interact with the Video Management Server Software in order to let users to control and manage all the VMS functions, including but not limited to, video live viewing, video playback, CCTV System configuration, etc.	
Live Viewer	<p>The live viewer client application must display live video images from cameras connected to the server located in a remote location.</p> <p>The live viewer must have these features:</p> <p>Must provide help options to locate a function or feature.</p> <p>Must be able to display live video at 30 FPS at least and must have an adjustable live display frame rate.</p> <p>Must be able to display live video at different resolutions.</p> <p>Provides configurable live audio functions, including but not limited to audio ON/OFF, audio synchronized with video and adjustable audio volume.</p> <p>The operator must be able to choose playback layouts including 2x2, 4x4 and various customs layouts.</p> <p>The VMS must be able to add bookmark with notes in order to tag live events.</p> <p>Must be able to show different views on multiple monitors (up to 3)</p>	
Play Back	<p>The product must provide multiple playback functions, including but not limited to play, pause, fast forward, rewind, and variable play speed functions.</p> <p>The product must provide synchronized playback from multiple cameras.</p> <p>The archive player must have multiple layouts to playback videos from multiple cameras e.g. It must be possible to play 2, 4, or 16 videos synchronously.</p>	

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	<p>Live viewer software must have synchronous play back mode.</p> <p>It must be possible to disable audio during playback.</p> <p>The product must be able to export video in a non-proprietary format (such as AVI or ASF) readable on computers without the need to install additional software /codecs.</p> <p>The VMS must be able to export video in an original format with watermarking and timestamp.</p> <p>The VMS must also be able to export multiple video at the same time.</p>	
Video transmission Type	The product must support multicast and unicast transmission.	
Security	<p>The product must provide a role based authorization mechanism that includes, but not limited to the following features:</p> <p>Must have User ID and Password protection for each client connection to the server application.</p> <p>Must be able to have automatic password expiry function.</p> <p>Must be able to have encryption of stored Passwords.</p> <p>The proposed solution must support role-based access control (RBAC) management or group-based access control (GBAC) management where privileged users can define roles or groups and can assign users to roles or groups.</p> <p>Must have at least one administrator role with full access rights and also multiple user and group profiles with restricted rights.</p> <p>Must be able to define hierarchy and inheritance mechanisms on user/group rights.</p> <p>The proposed solution must allow the assignment of granular restriction to users, groups or roles. The granularity of these restriction must include but is not limited to:</p> <p>Restricted access by device (cameras, microphones, I/O devices...)</p> <p>Restricted access to live view for specific cameras</p> <p>Restricted access to playback for specific cameras</p> <p>Restricted access to PTZ</p> <p>Restricted access to export</p> <p>Restricted access to the VMS setup</p> <p>Restricted access on enabling/disabling recording and listening of audio.</p> <p>The contractor gives warranty that the VMS has no existing back door or non-modifiable default password that gives permanent access to third party to any of the infrastructure or components implemented unless explicitly authorized by the CBSA authority.</p>	
Example	Video management system such as Milestone XProtect Smart client, Genetec Security Desk client or equivalent can be used.	

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ANNEX "B" - BASIS OF PAYMENT

CLOSED CIRCUIT TELEVISION (CCTV) SYSTEM AT THE JEAN LESAGE INTERNATIONAL AIRPORT

All prices must be firm in Canadian dollars, Delivered Duty Paid to the Jean Lesage International Airport at 500 Principale Street, Quebec (Quebec) G2G 2T9, Goods and Services Tax or the Harmonized Sales Tax extra, transportation costs to destination and all applicable Custom Duties and Excise Taxes included.

PART 1 – CONTRACTOR PROPOSED SOLUTION

1. DESIGN OF THE SYSTEM

Firm Lot Price for the design

DESIGN - FIRM LOT PRICE \$ _____

2. DELIVERY OF EQUIPMENT

Firm Lot Price for all related equipment, excluding spare parts.

EQUIPMENT - FIRM LOT PRICE \$ _____

2.1 ADDITIONAL CONDUIT WORK

Bidders are requested to provide a cost per foot basis for additional conduit (*cost of material only*).

COST PER FOOT \$ _____

Note: Cost of labour to be calculated separately as per the firm hourly rate in part 3.2 below.

3. INSTALLATION AND ASSOCIATED TRAVEL

3.1 The price must include all costs including travel and living expenses, related to the installation

INSTALLATION - FIRM LOT PRICE \$ _____

TRAVEL COST - FIRM LOT PRICE \$ _____

Breakdown of Travel costs are as follows:

Site	FIRM LOT PRICE BREAKDOWN FOR TRAVEL COST	
JEAN LESAGE INTERNATIONAL AIRPORT QUEBEC (QUEBEC) Estimated Number of Individuals _____ Estimated Number of Days _____	Accommodation	\$ _____
	Air Fare	\$ _____
	Car Rental & Fuel	\$ _____
	Other costs (meals and incidentals):	\$ _____
	(identify what they are)	

3.2 INSTALLATION (FIRM HOURLY RATES)

The following outlined installation related labour rates will apply for emergency repairs, Task Authorizations.

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The bidder must submit a firm hourly rate for installation during and outside normal working hours for each labour category required.

Labour Categories	Hourly Rate During Regular Hours	Hourly Rate Outside Regular Hours
_____	\$ _____	\$ _____
_____	\$ _____	\$ _____
_____	\$ _____	\$ _____
_____	\$ _____	\$ _____

4. SOFTWARE INTEGRATION AND TESTING INCLUDING TRAVEL

4.1 The price must include all software integration costs including travel and living expenses, related to the software integration and testing of the equipment.

Firm Lot Price the software/integration as indicated in the SOW.

SOFTWARE INTEGRATION	FIRM LOT PRICE \$ _____
TESTING COST -	FIRM LOT PRICE \$ _____
TRAVEL COST -	FIRM LOT PRICE \$ _____

Breakdown of Travel costs are as follows:

Site	FIRM LOT PRICE BREAKDOWN FOR TRAVEL COST
JEAN LESAGE INTERNATIONAL AIRPORT QUEBEC (QUEBEC)	Accommodation \$ _____
	Air Fare \$ _____
	Car Rental & Fuel \$ _____
Estimated Number of Individuals _____	Other costs (meals and incidentals): \$ _____
Estimated Number of Days _____	(identify what they are)

4.1.1 SOFTWARE INTEGRATION (FIRM HOURLY RATES)

The following outlined software integration related labour rates will apply for emergency repairs, delays and Task Authorizations.

The bidder must submit a firm hourly rate for software integration during and outside normal working hours for each labour category required.

Labour Categories	Hourly Rate During Regular Hours	Hourly Rate Outside Regular Hours
_____	\$ _____	\$ _____
_____	\$ _____	\$ _____
_____	\$ _____	\$ _____
_____	\$ _____	\$ _____

4.1.2 TESTING OF EQUIPMENT (FIRM HOURLY RATES)

The following outlined testing related labour rates will apply for emergency repairs, delays and Task Authorizations.

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The bidder must submit a firm hourly rate for testing of equipment during and outside normal working hours for each labour category required.

Labour Categories	Hourly Rate During Regular Hours	Hourly Rate Outside Regular Hours
_____	\$ _____	\$ _____
_____	\$ _____	\$ _____
_____	\$ _____	\$ _____
_____	\$ _____	\$ _____

5. ON-SITE TRAINING AND DOCUMENTATION

The price must include all costs including travel and living expenses, related to Training.

On-site Training Firm Lot Price including all costs related to travel and living expenses associated with on-site training as per SOW.

As-built Drawings Firm Lot Price as per SOW.

Operator and Maintenance Manuals Firm Lot Price as per SOW.

ON-SITE TRAINING COST **FIRM LOT PRICE \$** _____

TRAVEL COST **FIRM LOT PRICE \$** _____

Breakdown of Travel costs are as follows:

Site	FIRM LOT PRICE BREAKDOWN FOR TRAVEL COST	
JEAN LESAGE INTERNATIONAL AIRPORT QUEBEC (QUEBEC) Estimated Number of Individuals _____ Estimated Number of Days _____	Accommodation	\$ _____
	Air Fare	\$ _____
	Car Rental & Fuel	\$ _____
	Other costs (meals and incidentals):	\$ _____
	(identify what they are)	

6. AS-BUILT DRAWINGS **FIRM LOT PRICE \$** _____

7. OPERATOR AND MAINTENANCE MANUALS **FIRM LOT PRICE \$** _____

PART 1 TOTAL BID PRICE \$ _____

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PART 2 – OPTION # 1 - SPARE PARTS AND/OR EQUIPMENT RECOMMENDED BY THE CONTRACTOR

8. SPARE PARTS AND/OR TEST EQUIPMENT

The bidder must submit a spare parts and/or test equipment list identifying each recommended spare parts and/or test equipment required. The bidder must also submit a firm unit price for each recommended spare parts required.

FIRM LOT PRICE \$_____

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ANNEX "C" - TASK AUTHORIZATION FORM PWGSC-TPSGC 572

Please see: <http://publiservice-app.pwgsc.gc.ca/forms/pdf/572.pdf>

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ANNEX "D" – SECURITY REQUIREMENTS CHECK LIST (SRCL)

(SEE ATTACHED SRCL)



Government of Canada
Gouvernement du Canada

RECEIVED

DEC 04 2017

Contract Number / Numéro du contrat
1000339043

Security Classification / Classification de sécurité

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

Security Classification / Classification de sécurité



PART A (continued) / PARTIE A (suite)

8. Will the supplier require access to PROTECTED and/or CLASSIFIED COMSEC information or assets?
Le fournisseur aura-t-il accès à des renseignements ou à des biens COMSEC désignés PROTÉGÉS et/ou CLASSIFIÉS?
If Yes, indicate the level of sensitivity:
Dans l'affirmative, indiquer le niveau de sensibilité : ☒ No ☐ Yes
Non 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 ☐ Yes
Non Oui

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

Document Number / Numéro du document :

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

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

- | | | | |
|---|---|---|--|
| <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 EMPLACEMENTS | | | |

Special comments: Escorted if required.
Commentaires spéciaux :

NOTE: If multiple levels of screening are identified, a Security Classification Guide must be provided.
REMARQUE: Si plusieurs niveaux de contrôle de sécurité sont requis, un guide de classification de la sécurité doit être fourni.

10. b) May unscreened personnel be used for portions of the work?
Du personnel sans autorisation sécuritaire peut-il se voir confier des parties du travail? ☒ No ☐ Yes
Non Oui

If Yes, will unscreened personnel be escorted:
Dans l'affirmative, le personnel en question sera-t-il escorté? ☒ No ☐ Yes
Non Oui

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

INFORMATION / ASSETS / RENSEIGNEMENTS / BIENS

11. a) Will the supplier be required to receive and store PROTECTED and/or CLASSIFIED information or assets on its site or premises?
Le fournisseur sera-t-il tenu de recevoir et d'entreposer sur place des renseignements ou des biens PROTÉGÉS et/ou CLASSIFIÉS? ☒ No ☐ Yes
Non Oui

11. b) Will the supplier be required to safeguard COMSEC information or assets?
Le fournisseur sera-t-il tenu de protéger des renseignements ou des biens COMSEC? ☒ No ☐ Yes
Non Oui

PRODUCTION

11. c) Will the production (manufacture, and/or repair and/or modification) of PROTECTED and/or CLASSIFIED material or equipment occur at the supplier's site or premises?
Les installations du fournisseur serviront-elles à la production (fabrication et/ou réparation et/ou modification) de matériel PROTÉGÉ et/ou CLASSIFIÉ? ☒ No ☐ Yes
Non Oui

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

11. d) Will the supplier be required to use its IT systems to electronically process, produce or store PROTECTED and/or CLASSIFIED information or data?
Le fournisseur sera-t-il tenu d'utiliser ses propres systèmes informatiques pour traiter, produire ou stocker électroniquement des renseignements ou des données PROTÉGÉS et/ou CLASSIFIÉS? ☒ No ☐ Yes
Non Oui

11. e) Will there be an electronic link between the supplier's IT systems and the government department or agency?
Disposera-t-on d'un lien électronique entre le système informatique du fournisseur et celui du ministère ou de l'agence gouvernementale? ☒ No ☐ Yes
Non Oui



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 Secret	COSMIC Top Secret COSMIC Très Secret	Protected Protégé			Confidential Confidentiel	Secret	Top Secret Très Secret
											A	B	C			
Information / Assets Renseignements / Biens	<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"/>
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?
La description du travail visé par la présente LVERS est-elle de nature PROTÉGÉE et/ou CLASSIFIÉE?

☒ No
Non ☐ Yes
Oui

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

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

☒ No
Non ☐ Yes
Oui

If Yes, classify this form by annotating the top and bottom in the area entitled "Security Classification" and indicate with attachments (e.g. SECRET with Attachments).
Dans l'affirmative, classifiez le présent formulaire en indiquant le niveau de sécurité dans la case intitulée « Classification de sécurité » au haut et au bas du formulaire et indiquer qu'il y a des pièces jointes (p. ex. SECRET avec des pièces jointes).