



RETURN BIDS TO:
RETOURNER LES SOUMISSIONS À:
Travaux publics et Services gouvernementaux
Canada
Place Bonaventure, portail Sud-Est
800, rue de La Gauchetière Ouest
7^{ème} étage
Montréal
Québec
H5A 1L6
FAX pour soumissions: (514) 496-3822

REQUEST FOR PROPOSAL
DEMANDE DE PROPOSITION

Proposal To: Public Works and Government Services Canada

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

Proposition aux: Travaux Publics et Services Gouvernementaux Canada

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

Comments - Commentaires

Title - Sujet Système de sécurité	
Solicitation No. - N° de l'invitation 9F030-160143/A	Date 2016-10-27
Client Reference No. - N° de référence du client 9F030-16-0143	
GETS Reference No. - N° de référence de SEAG PW-\$MTA-739-14095	
File No. - N° de dossier MTA-6-39084 (739)	CCC No./N° CCC - FMS No./N° VME
Solicitation Closes - L'invitation prend fin at - à 02:00 PM on - le 2016-12-12	
Time Zone Fuseau horaire Heure Normale du l'Est HNE	
F.O.B. - F.A.B. Plant-Usine: <input type="checkbox"/> Destination: <input checked="" type="checkbox"/> Other-Autre: <input type="checkbox"/>	
Address Enquiries to: - Adresser toutes questions à: Carpentier, Patricia	Buyer Id - Id de l'acheteur mta739
Telephone No. - N° de téléphone (514) 496-3505 ()	FAX No. - N° de FAX (514) 496-3822
Destination - of Goods, Services, and Construction: Destination - des biens, services et construction: AGENCE SPATIALE CANADIENNE 6767 ROUTE DE L AEROPORT 9F030 - SÉCURITÉ ET INSTALLATIONS ST HUBERT Québec J3Y8Y9 Canada	

Instructions: See Herein

Instructions: Voir aux présentes

Vendor/Firm Name and Address

Raison sociale et adresse du fournisseur/de l'entrepreneur

Issuing Office - Bureau de distribution

Travaux publics et Services gouvernementaux Canada
Place Bonaventure, portail Sud-Est
800, rue de La Gauchetière Ouest
7^{ème} étage
Montréal
Québec
H5A 1L6

Delivery Required - Livraison exigée	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 Requirement

The Requirement is detailed under Article 6.2 of the resulting contract clauses.

1.2 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.

1.3 Trade Agreements

This requirement is not subject to any trade agreement.

1.4 Canadian Content

The requirement is subject to a preference for Canadian goods and/or services.

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>) 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 (04-04-2016) 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

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 five (5) calendar days before the bid closing date. Enquiries received after that time may not be answered.

Bidders should reference as accurately as possible the numbered item of the bid solicitation to which the enquiry relates. Care should be taken by Bidders to explain each question in sufficient detail in order to enable Canada to provide an accurate answer. Technical enquiries that are of a proprietary nature must be clearly marked "proprietary" at each relevant item. Items identified as "proprietary" will be treated as such except where Canada determines that the enquiry is not of a proprietary nature. Canada may edit the 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 province of Quebec.

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 Mandatory Site Visit

It is mandatory that the Bidder or a representative of the Bidder visit the work site. Arrangements have been made for the site visit to be held at 6767 Route de l'aéroport, St-Hubert, on Thursday November 24, 2016. The site visit will begin at 10:00 AM EST.

Bidders must communicate with the Contracting Authority no later than November 22, 2016 2:00 PM EST to confirm attendance and provide the name(s) of the person(s) who will attend. Bidders will be required to sign an attendance sheet. Bidders should confirm in their bid that they have attended the site visit. Bidders who do not attend the mandatory site visit or do not send a representative will not be given an alternative appointment and their bid will be declared non-responsive. Any clarifications or changes to the bid solicitation resulting from the site visit will be included as an amendment to the bid solicitation

Specific documents describing the actual site and systems (equipment list and floor plans) will be distributed during the site visit.

The use of cameras or other video recording devices **may be** permitted.

For the visit, the Bidder shall have in his possession an identity card to be presented at the reception (main rotunda). It is recommended to bring the tender documents in order to take notes.

2.6 Maximum funding

The maximum funding available for the Contract resulting from the bid solicitation is \$ 800,000.00 (Applicable Taxes extra). Bids valued in excess of this amount will be considered non-responsive. This disclosure does not commit Canada to pay the maximum funding available.

The maximum funding only applies to the purchase and delivery of the security system, the installation and the set up.

PART 3 - BID PREPARATION INSTRUCTIONS

3.1 Bid Preparation Instructions

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

- Section I: Technical Bid (2 hard copies) and 2 soft copies on CD, DVD or USB key.
- Section II: Financial Bid (1 hard copy)
- Section III: Certifications (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.

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

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

- (a) use 8.5 x 11 inch (216 mm x 279 mm) paper;
- (b) use a numbering system that corresponds to the bid solicitation.

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

In their technical bid, Bidders should explain and demonstrate how they propose to meet the requirements and how they will carry out the Work.

Section II: Financial Bid

Bidders must submit their financial bid in accordance with the Basis of Payment. The total amount of Applicable Taxes must be shown separately.

3.1.1 Electronic Payment of Invoices – Bid

If you are willing to accept payment of invoices by Electronic Payment Instruments, complete Annex “C” Electronic Payment Instruments, to identify which ones are accepted.

If Annex “C” Electronic Payment Instruments is not completed, it will be considered as if Electronic Payment Instruments are not being accepted for payment of invoices.

Acceptance of Electronic Payment Instruments will not be considered as an evaluation criterion.

3.1.2 Exchange Rate Fluctuation

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

Section III: Certifications

Bidders must submit the certifications and additional information required under Part 5.

PART 4 - EVALUATION PROCEDURES AND BASIS OF SELECTION

4.1 Evaluation Procedures

- (a) Bids will be assessed in accordance with the entire requirement of the bid solicitation including the technical and financial evaluation criteria.
- (b) An evaluation team composed of representatives of Canada will evaluate the bids.
- (c) The evaluation team will determine first if there are two or more bids with a valid Canadian Content certification. In that event, the evaluation process will be limited to the bids with the certification; otherwise, all bids will be evaluated. If some of the bids with a valid certification are declared non-responsive, or are withdrawn, and less than two responsive bids with a valid certification remain, the evaluation will continue among those bids with a valid certification. If all bids with a valid certification are subsequently declared non-responsive, or are withdrawn, then all the other bids received will be evaluated.

4.1.1 Technical Evaluation

4.1.1.1 Mandatory Technical Criteria

See Annex D – Mandatory Technical Criteria

4.1.1.2 Point Rated Technical Criteria

See Annex D – Point Rated Technical Criteria

4.1.2 Financial Evaluation

4.1.2.1 Evaluation of Price - Bid

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

4.1.2.2 EVALUATION EXAMPLE

Table 1

Total of all the lines (each articles). .

Table 2

For each line in Table 2, do the following calculation:

$(\text{Column A} \times 10) + (\text{Column B} \times 10) + (\text{Column C} \times 10) + (\text{Column D} \times 10) + (\text{Column E} \times 10)$

All the lines total will be added for financial evaluation purpose.

Table 3

For each line in Table 3, do the following calculation:

$(\text{Column F} \times 10) + (\text{Column G} \times 10) + (\text{Column H} \times 10) + (\text{Column I} \times 10) + (\text{Column J} \times 10)$

All the lines total will be added for financial evaluation purpose.

Evaluation total = Total of Table 1 + Table 2 + Table 3

4.2 Basis of Selection - Highest Combined Rating of Technical Merit and Price

1. To be declared responsive, a bid must:
 - a. comply with all the requirements of the bid solicitation; and
 - b. meet all mandatory criteria; and
 - c. obtain the required minimum of 70% of points overall for the technical evaluation criteria which are subject to point rating; and
 - d. obtain the required minimum of 70% of points overall for the technical evaluation criteria of the demonstration which are subject to point rating.

The total rating scale has 192 points.

2. Bids not meeting (choose "(a) or (b) or (c) or (d) will be declared non-responsive.
3. The selection will be based on the highest responsive combined rating of technical merit (point rated technical criteria and demonstration) and price. The ratio will be 70 % for the technical merit (30% point rated technical criteria and 40% for the demonstration) and 30 % for the price.

4. To establish the technical merit score, the overall technical score for each responsive bid will be determined as follows: total number of points obtained / maximum number of points available multiplied by the ratio of 30 % for the point rated technical criteria and 40% for the demonstration.
5. To establish the pricing score, each responsive bid will be prorated against the lowest evaluated price and the ratio of 30 %.
6. For each responsive bid, the technical merit score and the pricing score will be added to determine its combined rating.
7. Neither the responsive bid obtaining the highest technical score nor the one with the lowest evaluated price will necessarily be accepted. The responsive bid with the highest combined rating of technical merit and price will be recommended for award of a contract.

Here is an evaluation example (for information only):

Basis of Selection - Highest Combined Rating of Technical Merit (30% point rated technical criteria and 40% for the demonstration) and Price (30%).

		Bidder #1	Bidder #2	Bidder #3
	Point rated technical criteria	90 / 100	80 / 100	70 / 100
	Demonstration	80 / 100	80 / 100	70 / 100
	Overall technical score	170 / 200	160 / 200	140 / 200
	Evaluated price of the bid	130 000.00\$	105 000.00\$	92 000.00\$
Calculations	Point rated technical criteria score	$90/100*30 = 27$	$80/100*30 = 24$	$70/100*30 = 21$
	Demonstration score	$80/100*40 = 32$	$80/100*40 = 32$	$70/100*40 = 28$
	Price score	$92/130*30 = 21.23$	$92/105*30 = 26.28$	$92/92*30 = 30$
	Combined score	80.23	82.28	79
	Overall evaluation	2 nd	1 st	3 rd

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Buyer ID - Id de l'acheteur
mta739
CCC No./N° CCC - FMS No./N° VME

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. Unless specified otherwise, 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 Integrity Provisions - Declaration of Convicted Offences

In accordance with the *Ineligibility and Suspension Policy* (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>), the Bidder must provide with its bid the required documentation, as applicable, to be given further consideration in the procurement process.

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 provided will render the bid non-responsive.

5.2.1 Integrity Provisions – Required Documentation

In accordance with the *Ineligibility and Suspension Policy* (<http://www.tpsgc-pwgsc.gc.ca/ci-if/politique-policy-eng.html>), the Bidder must provide the required documentation, as applicable, to be given further consideration in the procurement process.

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" list available at the bottom of the page of the [Employment and Social Development Canada \(ESDC\) - Labour's](http://www.esdc.gc.ca/en/jobs/workplace/human_rights/employment_equity/federal_contractor_program.page?&_ga=1.229006812.1158694905.1413548969) website (http://www.esdc.gc.ca/en/jobs/workplace/human_rights/employment_equity/federal_contractor_program.page?&_ga=1.229006812.1158694905.1413548969).

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 Additional Certifications Precedent to Contract Award

5.2.3.1 Canadian Content Certification

This procurement is conditionally limited to Canadian goods and Canadian services.

Subject to the evaluation procedures contained in the bid solicitation, bidders acknowledge that only bids with a certification that the goods and services offered are Canadian goods and Canadian services, as defined in clause [A3050T](#), may be considered.

Failure to provide this certification completed with the bid will result in the goods and services offered being treated as non-Canadian goods and non-Canadian services.

The Bidder certifies that:

() a minimum of 80 percent of the total bid price consist of Canadian goods and Canadian services as defined in paragraph 5 of clause [A3050T](#).

For more information on how to determine the Canadian content for a mix of goods, a mix of services or a mix of goods and services, consult Annex 3.6.(9), Example 2, of the [Supply Manual](#).

5.2.3.1.1 SACC Manual clause [A3050T](#) (27-11-2014) Canadian Content Definition

PART 6 - RESULTING CONTRACT CLAUSES

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

6.1 Security Requirements

There is no security requirement applicable to the Contract.

6.2 Requirement

The Contractor must provide the items and perform the Work in accordance with the Statement of Work at Annex A and the Contractor's technical bid entitled _____, dated _____.

6.2.1 Optional Goods and/or Services

The Contractor grants to Canada the irrevocable option to acquire the goods, services or both described at **Annex A (Point 23. Options)** of the Contract under the same conditions and at the prices and/or rates stated in the Contract. The option may only be exercised by the Contracting Authority and will be evidenced, for administrative purposes only, through a contract amendment.

The Contracting Authority may exercise the option at any time two years following the end of the Work by sending a written notice to the Contractor.

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6.3 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.

6.3.1 General Conditions

2010A (04-04-2016), General Conditions - Goods (Medium Complexity), apply to and form part of the Contract.

6.4 Term of Contract

6.4.1 Period of the Contract

The period of the Contract is from April 1, 2017 to March 31, 2022.

6.4.2 Delivery Points

Delivery of the requirement will be made to delivery point(s) specified at Annex "A" of the Contract.

6.5 Authorities

6.5.1 Contracting Authority

The Contracting Authority for the Contract is:

Name: Patricia Carpentier
Title: Procurement Specialist
Public Works and Government Services Canada
Acquisitions Branch

Telephone: 514-496-3505
Facsimile: 514-496-3822
E-mail address: patricia.carpentier@tpsgc-pwgsc.gc.ca

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

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6.5.2 Technical Authority

The Technical Authority for the Contract is:

(will be specify at contract award)

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.

6.5.3 Contractor's Representative

Name: _____

Title: _____

Organization: _____

Address: _____

Telephone: _____

Facsimile: _____

E-mail: _____

6.6 Payment

6.6.1 Basis of Payment - Firm Price, Firm Unit Price(s) or Firm Lot Price(s)

In consideration of the Contractor satisfactorily completing all of its obligations under the Contract, the Contractor will be paid a firm price for a cost of \$ _____. 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.

6.6.2 Basis of Payment - Limitation of Expenditure

For the Work described in Annex A – Requirement:

The Contractor will be reimbursed for the costs reasonably and properly incurred in the performance of the Work as determined in accordance with the Basis of Payment in Annex B , to a limitation of expenditure of \$ _____. Customs duties are included and Applicable Taxes are extra.

6.6.2.1 Limitation of Expenditure

1. Canada's total liability to the Contractor under the Contract must not exceed \$ _____. Customs duties are included and Applicable Taxes are extra.
2. No increase in the total liability of Canada or in the price of the Work resulting from any design changes, modifications or interpretations of the Work, will be authorized or paid to the Contractor unless these design changes, modifications or interpretations have been approved, in writing, by the Contracting Authority before their incorporation into the Work. The Contractor must not perform any work or provide any service that would result in Canada's total liability being exceeded before obtaining the written approval of the Contracting Authority. The Contractor must notify the Contracting Authority in writing as to the adequacy of this sum:
 - a. when it is 75 percent committed, or
 - b. four (4) months before the contract expiry date, or
 - c. as soon as the Contractor considers that the contract funds provided are inadequate for the completion of the Work, whichever comes first.
3. 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.

6.6.3 Limitation of Price

SACC Manual clause [C6000C](#) (16-05-2011) Limitation of Price

6.6.4 Multiple Payments

SACC Manual clause [H1001C](#) (12-05-2008) Multiple Payments

6.6.5 SACC Manual Clauses

SACC Manual clause [A9117C](#) (30-11-2007) T1204 - Direct Request by Customer Department
SACC Manual clause [C2000C](#) (30-11-2007) Taxes - Foreign-based Contractor

6.6.6 Electronic Payment of Invoices – Contract

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

- a. Direct Deposit (Domestic and International)

6.7 Invoicing Instructions

1. The Contractor must submit invoices in accordance with the section entitled "Invoice Submission" of the general conditions. Invoices cannot be submitted until all work identified in the invoice is completed.
2. Invoices must be distributed as follows:
 - a. The original and one (1) copy must be forwarded to the address shown on page 1 of the Contract for certification and payment.
One (1) copy must be forwarded to the Contracting Authority identified under the section entitled "Authorities" of the Contract.

6.8 Certifications and Additional Information

6.8.1 Compliance

Unless specified otherwise, the continuous compliance with the certifications provided by the Contractor in its bid or precedent to contract award, and the ongoing cooperation in providing additional information are conditions of the Contract and failure to comply will constitute the Contractor in default. Certifications are subject to verification by Canada during the entire period of the Contract.

6.8.2 SACC Manual Clauses

SACC *Manual* clause [A3060C](#) (12-05-2008) Canadian Content Certification

6.9 Applicable Laws

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

6.10 Priority of Documents

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

- (a) the Articles of Agreement;
- (b) the general conditions 2010A (04-04-2016), General conditions – Goods (Medium Complexity);
- (c) Annex A, Requirement;
- (d) Annex B, Basis of Payment;
- (e) Annex C, Electronic Payment Instrument;
- (f) Annex D, Mandatory Technical Criteria;
- (g) the Contractor's bid dated _____.

6.11 SACC Manual Clauses

SACC *Manual* clause [G1005C](#) (28-01-2016) Insurance - No Specific Requirement
SACC *Manual* clause [A9068C](#) (11-01-2010) Government Site Regulations

ANNEX A - REQUIREMENT

1. General

1.1 Objective

The Canadian Space Agency (CSA) is replacing its Security system and the Contractor must supply, install, commission, integrate, warrant, and support a new Integrated Security System for the John H. Chapman Space Centre in St-Hubert, Québec.

The Integrated Security System (ISS) must be the most current released product on the bid closing date and in order to avoid problems related to system compatibility, the ISS must be based on a unique platform for the following components:

- Access control,
- Closed-circuit television (CCTV) system,
- Intrusion alarm.

The system must also provide and integrate an intercom system.

2. Scope of work

The Contractor must supply, install, commission, and warrant all equipment and all related components necessary to complete the contract. The system must provide full-featured access control capabilities for the CSA. It must utilize intelligent remote controllers for setting up the users' access status and other parameters to control building access. In addition, the system must have the capability to probe a large number (as specified in this document) of alarm inputs, and report the alarm conditions to designated workstations in graphics format.

The scope of work must involve the following technologies and systems: a fully integrated security system capable of access control, intrusion alarm monitoring and control, CCTV and network digital video management and recording system, security intercom, associated power supply, network communications, door and management reporting, servers, workstations and printers. Each of these major components must be integrated to operate as a fully functional, complete turnkey systems solution.

The contractor is responsible to remove the existing equipment to be replaced. All components that are removed must be given back to the CSA in good working order, sorted by category, with an electronic and paper list.

This section describes the existing system and lists the equipment to be replaced in this contract.

2.1 Access Control Units

Access Control Units (ACUs) , i.e. door controllers, must support at least four (4) card readers.

ACUs are distributed throughout the facility, typically in security equipment rooms, and must communicate with the Security Application Server via the ACU Communications Network.

The ACUs must be capable of operating in a standalone fashion for access control (no online communication with the Security Application Server required).

2.2 Security Application Server

The Security Application Server must support distributed system control and monitoring for operators and/or administrators at multiple workstations (including the Security Application Server).

The Security Application Server and the workstations must communicate via an industry standard LAN, such as Ethernet.

Administrative tasks must be handled by more than one designated workstations.

Alarms and events must be routed to enunciate and/or display at any combination of these workstations.

The system must have modular expansion capabilities so that additional ACUs may be added to the network without software upgrades or further field hardware revisions.

The Security Application Server should be capable of communicating with the ACUs via TCP/IP, RS-232, multi-dropped RS-485, or dial-up or hard-wired modem communications.

The Security Application Server must contain the operating software, security application software, and system database. It must be based on standard off-the-shelf micro-computer technology. The Security Application Server must be sized with sufficient processing, memory and facilities to meet the requirements of the project.

Each Security Application Server must be equipped with two (2) monitors for simultaneous access/alarm management and video display and control. Such units must be 23" colour monitors maximum.

2.3 Access control system

The Access Control System must be capable of continuous operation and full supervision (alarm, status, monitoring and trouble) of alarm points and system components.

The system must provide for time programmable and real-time shunting of all alarm points and energizing and de-energizing of relay outputs.

The system software must support the importing of graphics used for floor plans in .jpg or .bmp format.

The system must support an unlimited number of system users, groups of users and passwords.

The system must be based on Microsoft Windows security.

The system must support the restriction of the capabilities of specific users or groups of users to only a group of defined functions.

The system must also allow the administrator to limit what users or groups may access specific cards and input or output records.

The system must integrate on the same platform a closed circuit television system (CCTV) that interfaces with the Network Video Recorders (NVRs).

Operate an integrated active mapping application.

The Access Control System must be capable of remotely unlocking a door equipped with an intercom station and CCTV camera so that Security Control Centre staff can open the door following visual and audio verification that the caller is authorized to enter.

Where heightened and more stringent security is required, the system must offer one of the following additional facilities to be available:

- A reader may be designated as a "dual custody" reader whereby two (2) valid cards must be presented by two (2) different authorized individuals before access is granted at the entry point.

- A keypad/reader combination may be used in tandem whereby a cardholder presents a valid card and/or enters a personal identification number (PIN) to gain access. Only one (1) reader port must be used when both a reader and a keypad are in place.

The system must also provide the ability to insert a digital photograph on each cardholder record. The photographs will be printed on access cards and displayed on screens while observing on-line transactions.

The system must provide the ability to designate cardholders with a temporary status and restrict the card to a defined date range and/or a maximum number of uses. When the date range ends or when the number of uses reaches zero, the system must render the card inactive and deny further entry.

If a card is lost or stolen or if a cardholder's access is revoked for any reason, the system must allow a card to be cancelled and rendered invalid within seconds.

Each time zone and schedule must be configurable within a seven (7) day week.

The system must automatically invoke a holiday schedule when the system clock matches any date defined as a holiday. A holiday schedule must override all other time zones and schedules. Access must be predicated on the times and authorizations of the holiday schedule for the stated holiday date. At the start of the next non-holiday calendar date the system must invoke the regular time zone settings and access conditions.

The system must allow creating multiple door groups of which each cardholder may be assigned to multiple door groups.

The system must be able to create and manage a minimum of 255 schedules.

Each schedule must have at least five programmable time intervals for each day, including vacation days.

All other system functions must be capable of being applied to each schedule. These include:

- Access level
- Alarm input points
- Alarm output points
- Card reader function
- Alarm masking
- Any other function that requires a schedule

The system must segregate door into separate entities with independent time zones and access levels as a means for providing greater security and control.

The system must provide a separate accessibility feature such that an access control relay can be connected to a door operator with separate door timer settings. The accessibility feature is for individuals who may require an extended time period to enter the access point.

The system must provide a pre-alert that advises when a door remains open at the half interval of the door held open time.

The system must control a door where a reader and keypad are used conjointly with the following access modes: Card or Keypad - Only 1 of the two is used to gain entry; Card Only - Only the reader is used to gain entry; or Card and Keypad - The reader and keypad are used to gain entry
The system must provide a programmable facility to automatically unlock and relock specified doors during an assigned time zone to allow access without the use of a card.

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The system must provide a safety mechanism called 'First Person In' to prevent assigned doors programmed for auto unlock from unlocking at the start of a designated time zone until a valid card is first presented by an authorized cardholder.

The system must allow doors to be 'anti-pass back' enabled. Local anti-passback is restricted to monitoring and enforcing IN/OUT conditions at doors connected to the same access control unit.

Executive (Stealth) Mode - excludes designated cardholders from anti-pass back enforcement
The Delayed Egress Controlled Doors must be fully integrated and rendered functional by the Security Contractor.

The Access Control System must record and report on all authorized and unauthorized access attempts. The Access Control System must be capable of standalone operation for access control, (no online communication with the Security Application Server required).

The Access Control System must be capable of online storage of photos, records and data for a minimum of one year with the capability of archiving photos, records and data to off-line storage media (such as USB keys or other media) for long-term storage.

Access must be governed by controlled entry points (doors) using an assigned card, that an individual referred to as a cardholder presents to a sensing device referred to as a reader.

The system must be capable of supporting the following card reader formats:

- Proximity (125 kHz);
- Mifare Contactless Smart Card;
- FIPS-201, FIPS201-PIV and TWIC;
- Biometrics;
- Contactless Smart Card and iClass;
- Personal Identification Number (PIN)

2.4 User Interface

The software must provide multiple language interfaces: English and French.

The system must provide context sensitive help and must be presented in the same language as the user interface on the client module – English or French. The online help must be context sensitive whereby, when the operator presses a designated key, the relevant help screen opens for the current software interface screen. The system must also include a hard copy of the software installation guide.

The software user interface must be based on Windows® conventions and standards. The main screen must have pull down menus as well as quick buttons for direct access to frequently used functions.

The operator must be able to run the system software in a minimized state and still receive notification of alarm events.

The system must provide a Graphical User Interface (GUI) based on Microsoft Windows.

The GUI must provide an intuitive environment for the operational staff to manage functions, including monitoring and controlling system devices such as alarm sensors and door locks, with an easy point-and-click method.

The GUI must provide the familiar look-and-feel of current desktop environments by allowing the operator to view the system and its operations in a graphical format.

A tool bar consisting of a collection of action-related icons must be implemented to allow for easy system control. The point-and-click process must provide the operator with an effective means of responding to system alarms and other activities.

An operator must be able to view the transactions for each individual cardholder for auditing, investigating activity, or locating a cardholder.

The system must use the following operating system: Windows 7 - Professional, Enterprise or Ultimate versions.

The system must be compatible with Microsoft Internet Explorer 11.

2.5 Database Management

The system must record all operator input data, all operator tasks, all site(s) activity, and all alarm events to a dedicated internal database.

The database must be ODBC (Open Database Connectivity) compliant.

The system-wide database information must be stored on a hard drive within the Security Application Server.

The system database storage capacity must be limited only by the hard disk capacity or the limitation of the operating system.

The system must store cardholder images in the database and said images must be preserved/updated to the database during backup operations.

The system must have the provision to automatically upload to the ACUs added, edited, or deleted database information that pertains to time zones, cardholders, operators, or access levels without operator intervention.

The system must provide the facility to automatically back up the database on a user-defined schedule. During the backup of the database file, there must be no interruption to the system and the ongoing collection of data.

Any workstation on the LAN (Local Area Network) must be capable of performing data entry, alarm handling and processing, and system management functions.

2.6 Operator Workstations

There are 3 operator workstations which are to be replaced and each of them must include:

- One desktop computer;
- Two 23" colour monitors;
- One keyboard and mouse, and;
- Operate on Windows 7.

One operator workstation/card production workstation is located in the Security Service Office (1E-101.D). Operate a fully integrated photo badge module allowing for a complete ID badging operation. The card production workstations must include:

- One colour camera with Bluetooth transfer capability;
- One Bluetooth signature capture pad;
- One high resolution, direct to card, dual side card printer;

- Associated software for card design and production.

One administrator Workstation is located in the Security Service Office (1E-101.E).

One monitoring Workstation is located in the Security Control Centre (Room 1E-104). A network colour printer must be provided, installed and configured for report and other documents printing.

2.7 Card Readers

The Access Card Reader must read access control data from 13.56 MHz contactless smart cards. The contactless smart card reader must be optimally designed for use in access control applications that require reading 13.56 MHz contactless smart cards.

The building (interior) card reader must be of the mini-mullion type and the access to parking card reader (exterior) must be a long range reader (minimum 25 cm).

The contractor must replace 227 mini-mullion card readers, 3 long range readers as well as replace 15 card readers by 15 keypads/card readers, install 2 new keypads/card readers and remove 1 keypad.

2.8 Keypads

The current design typically has keypads installed in addition to card readers. The contractor must use an integrated card reader/keypad device instead of two separate devices.

Table 1 below lists all doors/points of entry with the number of card readers or keypads/card readers to be replaced / installed. The card readers on the exterior doors must be replaced with keypad/card readers on the exterior side. Doors with a door operator are identified as "D.O." and the operator must be integrated.

Table 1 - Doors Equipped Card Readers

Equipment - Card readers, keypads/readers				
Door Number	reader	Keypad / reader	Description	Door Type
0A-100.3		1	Main Entrance - Large Rotunda Inner Door	Double Door
0A-100.4	1	1	Revolving Doors from Main Entrance to Main Hallway	Revolving Door
0A-100.5	2		Double Doors between Main Entrance and Main Hallway	Double Door (D.O.)
0A-200.0	1	1	Revolving Doors on 2nd Floor near Large Rotunda	Revolving Door
0A-200.1	2		Double Doors beside 0A-200.0 revolving doors	Double Door (D.O.)
0A-300.0	1	1	Double Doors main entrance to pavilion 3 from main hallway	Double Door (D.O.)
0A-300.1	2		Revolving door on 3 rd Floor from large rotunda to main hallway	Revolving Door
1A-100	2		Single door into Pavilion 1 leading to the Training center/CC	Single Door (D.O.)
1A-200.0	2		Double Doors near elevator	Double Door (D.O.)
1A-300.0	2		Double Doors entrance to pavilion 1 from lobby through stairs and elevators	Double Door (D.O.)
1B-100	2		Large Room	Single Door (D.O.)

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Equipment - Card readers, keypads/readers				
Door Number	reader	Keypad / reader	Description	Door Type
1B-300	2		Single Door entrance from corridor	Single Door
1D-100.2	1	1	Former Day Care Entrance	Single Door
1E-100.0	2		Hallway Doors	Double Door
1E-101.0	1	1	Single Door entrance to the Security Service by the nursery	Single Door
1E-102	2		Single Door entrance to the Security Service lobby	Single Door (D.O)
1E-101.1	1	1	Single Door entrance to Security Service	Single Door
1E-103	1	1	Single Door to the Protected area	Single Door
1N.0	2		Pavilion 1 Stairwell access door	Single Door
1N.2	2		Single Stairwell door in Pavilion 1, level 2	Single Door
1N.3	2		Single Stairwell door in pavilion 1, level 3	Single Door
2A-100	2		Corridor Single Door	Single Door (D.O)
2A-100.1	2		Corridor Single Door	Single Door
2A-200	2		Single door into office spaces in Pavilion 2 from main hallway	Single Door (D.O)
2A-300.0	2		Single door access to Pavilion 2 from main hallway	Single Door
2A-300.2	2		Double door access to pavilion 2 from main hallway	Double Door (D.O)
2B-100.0	2		Door between main corridor and Door 2B-100.1	Single Door
2B-100.2	2		Rolling Door	Overhead Door
2B-200.0	2		Double Door main entrance to Pavilion 2 on 2nd floor	Double Door (D.O)
2B-201	2		Single Door into large room	Single Door
2B-202	2		Single Door into large room	Single Door
2B-204.A1	2		Single Door into large room adjacent to stairwell	Single Door
2B-204.B1	2		Single Door into large room	Single Door
2B-204.C	2		Single Door into large room	Single Door
2B-205	2		Single Door into large room	Single Door
2B-205.A1	2		Single Door into servers room	Single Door
2B-208	2		Single Door	Single Door (D.O)
2C-100.0	2		Corridor Door	Single Door
2C-100.1 *	1	1	Single Door Exit Pavilion 2	Single Door
2C-103.2	1	1	Rolling Door	Rolling Door
2C-104	2		Single Door into RIF	Single Door
2C-104.4*	1	1	Single Door Exit of RIF	Single Door
Garage Doors 4,5,6	1		Rolling Doors	Overhead Doors
2C-200.0	2		Single door into large room in Pavilion 2 along main hallway	Single Door (D.O)
2C-300	2		Single Door into office spaces in Pavilion 2 from main hallway	Single Door (D.O)
2D-100.0	2		Rolling Door for Shipping and Receiving / High Bays	Overhead Door
2D-100.1		1	Rolling Door #2 from the outside	Overhead Door

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Equipment - Card readers, keypads/readers				
Door Number	reader	Keypad / reader	Description	Door Type
2D-100.1 /.2	1		Rolling Door #1 and #2 from the inside	Overhead Door
2D-100.3	2		Single Door into Shipping and Receiving adjacent to rolling doors	Single Door
2D-101.E	2		Single Door for room adjacent to the counter	Single Door
2D-102.0	3		Inner Shipping and Receiving Door – Couriers	Single Door
2D-105.1*	1	remov e	Rolling Door Compactor	Overhead Door
2D-200	2		Single door into large room in Pavilion 2 along main hallway	Single Door (D.O)
2E-101	2		Double Doors from Hallway into 2E-101	Double Door
2E-102.0	2		Corridor Door	Single Door
2F-100	2		Corridor Doors leading to doors 2F-102.0	Double Door
2G-100.0	2		Corridor Double Doors	Double Door (D.O)
2G-100.1	2		Corridor Double Doors	Double Door
2G-103.2	2		Single Door after Door 2G-102.1	Single Door
2G-108.0	2		Single Door from corridor into large windowed room	Single Door
2G-108.2	2		Double Doors between 2G-108.A and 2G-108	Double Doors
2G-109	2		Doubles doors from Hallway into 2G-109	Double Doors
2G-109.H	2		Single Door into 2G-109 to a small office	Single Door
2G-110	2		Single Door from corridor into large room	Single Door
2N-104.1	2		Single Door beside revolving door from small rotunda	Single Door (D.O)
2N-104.2	1	1	Revolving Door between small rotunda and main hallway	Revolving Doors
2NS-100.0	2		Double Doors main entrance to Pavilion 2 from main hallway	Double Doors
2NS-100.2	2		Double Doors in centre of Pavilion 2 corridor intersection - opposite 2NS-100.3	Double Door
2NS-100.3	2		Double Doors in centre of Pavilion 2 corridor intersection - opposite 2NS-100.2	Double Doors
2NS-200.A	2		Single Door from Pavilion 2 hallway into larger room	Single Door (D.O)
2NS-200.3	2		Single Door from Pavilion 2 hallway into large windowed room	Single Door
2S.1	2		Single Door access to stairwell 2S in pavilion 3	Single Door
2S-205	2		Single Door from corridor	Single Door
2S-205.A	2		Single Door into servers room	Single room
2S-206	2		Single Door from corridor	Single Door (D.O)
2S-207	2		Single Door into large room	Single Door (D.O)
2S-301	2		Single Door into office spaces from corridor 2S-300	Single Door
2S-304	2		Single Door from corridor 2S-300	Single Door
2S-305	2		Single Door from room 2S-304 into room 2S-305	Single Door
2S-305.A	2		Single Door from room 2S-305	Single Door
3A-100.0	2		Double Doors main entrance to Pavilion 3 from main hallway	Double Doors (D.O)

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Equipment - Card readers, keypads/readers				
Door Number	reader	Keypad / reader	Description	Door Type
3A-100.2	2		Double Doors in NW corner of Pavilion 3	Double Doors
3A-101.0	2		Single Door inside main entrance to Pavilion 3	Single Door
3A-103	2		Double Doors into large room	Double Doors
3A-106	2		Double Doors into large room	Doubles Doors
3A-200	2		Double Doors main entrance to Pavilion 3, level 2	Double Doors (D.O)
3A-300.0	2		Double doors main entrance to pavilion 3 from main hallway	Double Doors (D.O)
3A-300.2	2		Double doors main entrance to pavilion 3 from main hallway	Double Doors (D.O)
3B-100.0	2		Double Doors main entrance to Pavilion 3 from main hallway	Double Doors (D.O)
3B-100.2	2		Double Doors in corridor opposite 3B-100.0	Double Doors
3B-103	2		Single Door into large room adjacent to stairwell	Single Door
3B-103.1	2		Single Door into room from the corridor	Single Door
3B-104	2		Double Doors into room from the corridor	Double Doors
3B-105	2		Single Door into room from the corridor	Single Door
3B-200	2		Doubles Doors	Double Doors (D.O)
3N-100.0	1	1	Revolving Doors from Main Hallway to cafeteria	Revolving Doors
3N-100.2	2		Single Door from Main Hallway to cafeteria	Single Door (D.O)
3N-100.3	1	1	Revolving Doors from Main Hallway to cafeteria	Revolving Doors
3S.2	2		Single door access to stairwell in pavilion 3	Single Door
3S.3	2		Single door access to stairwell in pavilion 3	Single Door
3S.4	2		Single door access to stairwell in pavilion 3	Single Door
4A-100.0	2		Double Doors main entrance to Pavilion 4 from main hallway	Double Doors (D.O)
4A-100.1	2		Inner Double Doors from main entrance	Double Doors (D.O)
4A-100.3	2		Double Doors from Pavilion 4 to corridor to Pavilions 8 and 2	Double Doors (D.O)
4A-200	2		Double doors main entrance to Pavilion 4 from main hallway	Double Doors (D.O)
4A-300.0	2		Double doors main entrance to pavilion 4 from main hallway	Double Doors (D.O)
4B-104.B1	1	1	Single Door access to stairwell for the outside (See section 5.6)	Single Door
4B-104.B2		1	Single Door from the outside to the gymnasium	Single Door
4B-200.0	2		Double door main entrance to Pavilion 4 from main hallway	Double Doors (D.O)
4B-300	2		Double doors main entrance to pavilion 4 from main hallway	Double Doors (D.O)
4S.2	2		Single door access to stairwell in pavilion 4	Single Door
4S.3	2		Single door access to stairwell in pavilion 4	Single Door
4S.4	2		Single door access to stairwell in pavilion 4	Single Door
6A-100.0	2		Single Door into Pavilion 6 from main hallway beside 6B-	Single Door

Equipment - Card readers, keypads/readers				
Door Number	reader	Keypad / reader	Description	Door Type
			100	
6B-100	2		Double Doors into mechanical spaces in pavilion 6	Double Doors (D.O)
6B-105.A1	2		Double Doors in pavilion 6 between areas B and C	Double Doors
6C-103	2		Single Door in pavilion 6 leading to large room	Single Door (D.O)
6C-104	2		Single Door in pavilion 6 leading to large room	Single Door (D.O)
7B-118	2		Double doors access to cafeteria terrace	Double doors
7B-119	2		Double doors access to cafeteria terrace	Double doors (D.O)
8A-100	2		Single Door main entrance to pavilion 8	Single Door (D.O)
ANTENNE	2		Antenna building access gate (long range reader)	Gate
L-100 ESF	2		Single door into outside building (ESF)	Single Door
L-100 garage door	1		Rolling Door	Rolling Door
SITE ENTRÉE VÉH.	1		Guard Booth at Parking Lot entrance (long range reader)	Gate
Twinglock	4		Twinglocks in the main entrance Boon Edam	Twinglock
Total	230	17		
* 2C-100.1			Add a card reader/keypad outside	
*2C-104.4			Add a card reader/keypad outside	
*2D-105.1			Remove Keypad	

2.9 Smart Card Access Cards

The contractor must provide 2 500 contactless smart cards. The 13.56 MHz contactless smart card access cards must provide mutual authentication between card and reader, encrypted data transfer and a minimum of 64-bit diversified keys for read/write capability. The contactless cards must meet ISO standards for thickness for use with direct image and thermal transfer printers and be available in 2k bit (256 byte), 16k bit (2K Byte) or 32k bit (4K Byte) memory configurations.

2.10 CCTV Cameras

The integrated CCTV system must be compatible with the existing colour cameras and monitors and be capable of producing the highest definition resolution which is available.

The CCTV system must include a system master control station at the Security Control Centre with networking equipment, control console equipment and mass storage.

CCTV system and recording equipment must be capable of producing an image with sufficient detail of facial features to allow the individual to be recognized (providing the appropriate camera is installed).

The CCTV System must employ video analytics or similar technology to assist the Security Control Centre staff in effectively monitoring the facility by drawing their attention to unusual movements.

The CCTV system must support manual Pan, Tilt and Zoom (PTZ) operation, scheduled pre-set points, auto scanning, or following a pre-set tour.

The CCTV application must allow the operator to control cameras with various commands such as pan, tilt, zoom, and pre-set positions.

The operator must have the ability to view a live video feed with camera selection and view mode options or retrieve historical video from past alarm events.

The operator must have the option to view multiple CCTV screens on a monitor simultaneously for enhanced monitoring capabilities.

The CCTV system must be capable of online storage of CCTV footage for a minimum of 30 days with the capability of archiving footage, records and data to off-line storage media for long-term storage.

Recorded images must include a small Information block containing CCTV Camera number, brief location description, camera azimuth bearing, date and time.

CCTV recording must be activated under the following conditions:

- Manual control by an operator
- Video analytics detects a scene of interest (e.g., motion detection)
- The access control system generates an alarm
- An intercom station is used
- The intrusion detection system generates an alarm
- A user-defined schedule

2.11 CCTV / Network Video Management and Integration

The CCTV/Network Video Management must be based on the same platform as the Security system and comprised of Network Video Recorders, Digital Video Management software and fully integrated to the Integrated Security System (ISS).

The Network Video Recorder must Offer to the operator of the NVR the following remote software screen division sets (depending on the model): display the first four videos (1-4) in the video display area; display the next four videos (5-8) in the video display area; display the next four videos (9-12) in the video display area; display the next four videos (13-16) in the video display area; and up to the 29th to 32nd cameras. The NVR must also allow the operator to display sixteen (16) videos in the video display area.

Alarm-related video recording must include pre-alarm (up to two minutes) and post-alarm (up to five minutes) images.

Such video must be archived and linked to the particular alarm event for forensic investigation purposes.

2.12 Network Video Recorder (NVR)

The NVR must include a User Management Console, which allows the user to create, edit, and delete user accounts. Each account can be assigned different privileges that limit the usage of the system. Privileges must include, but are not be limited to, the following functions: search, setup, pan/tilt, backup, shutdown, relay out, pan/tilt advance, hidden cameras/audio, user ranking, auto log-off.

Table 2 below lists all CCTV cameras currently installed at the Space Centre. The integrated security system must integrate all the existing cameras listed below.

Table 2 - CCTV Cameras

Equipment - Cameras				
Cam #	Description (E)	Description (F)	Type	Door
8	Cafeteria's receiving dock	Reception - Cafeteria	Exterior	7B-101.2
10	Exit	Sortie	Exterior	2C-100.1
13	Exit	Sortie	Exterior	3N.2
21	Cafeteria Dumpster	Déchet Cafeteria	Exterior	7B-108.1
22	Antenna - RADAR East	Antenne RADAR Est	Exterior	
34	Exterior Façade	Façade Extérieure	Exterior	
35	Cafeteria Terrasse	Terrasse Cafeteria	Exterior	
36	Pavilion 4 Exterior	Pavillon 4	Exterior	
37	RADAR Antenna West	Antenne Radar Ouest	Exterior	
39	Shipping and Receiving	Expédition et réception	Exterior	
50	Pavilion 8	Pavillon 8	Exterior	
51	Pavilion 9	Pavillon 9	Exterior	
52	Gymnasium	Gymnase	Exterior	4B-104.B1
53	Conf Centre Emergency Exit	Sortie de secours Centre des conférences	Exterior	5A-100.0
59	Main Entrance Barrier	Entrée principale barrière	Exterior	
60	Maintenance Garage	Garage entretien	Exterior	2C-100.3
64	Parabolic Antenna	Antenne Parabolique	Exterior	
65	Loading Dock	Débarcadère Cuisine	Exterior	
68	Road Entrance	Route d'accès	Exterior	
75	Access door – Water tours	Porte d'accès tous d'eau	Exterior	
85	Road Exit	Route de sortie	Exterior	
86	Radome	Radome	Exterior	
87	L-100 ESF	L-100 ESF	Exterior	
88	Entrance to ESF	Entrée de l'ESF	Exterior	
1	Vestibule	Vestibule	Interior	0A-100.1
2	1D-100.2	1D-100.2	Interior	1D-100.2
3	Exit	Sortie	Interior	2C-100.1
4	Emergency Exit Pavilion 4	Sortie d'urgence - Pav 4	Interior	4S.1
5	Control	Contrôle	Interior	1E-100.0
6	Reception Desk	Comptoir de Réception	Interior	
7	Revolving Door	Porte tournante	Interior	0A-200.0
11	Main Entrance	Entrée principale	Interior	0A-100.1
14	Reception	Réception	Interior	1A-100
15	Corridor	Corridor	Interior	5A-112
16	Shipping and receiving	Réception Expédition	Interior	2D-102.0
17	Emergency Exit	Sortie d'urgence	Interior	2S-100.4
18	Reception / Archives	Réception - Archives	Interior	
19	Library	Bibliothèque	Interior	2N-103
20	Revolving Door	Porte tournante	Interior	0A-300.0
23	Server Room	Salles des serveurs	Interior	2B-205.A1
24	Corridor - Mechanical Room	Corridor - Salle Mécanique	Interior	2S-303
25	UPS Room - Mechanical	Salle d'Alimentation Sans Coupure (ASC)	Interior	3B-302
26	Server Room	Salles des serveurs	Interior	2S-305.A
27	Server Room	Salles des serveurs	Interior	2S-305
28	Server Room	Salles des serveurs	Interior	2S-205.A
29	Pavilion 2 - 4 East	Pavillon 2 - 4 est	Interior	2S-100.9

Equipment - Cameras				
Cam #	Description (E)	Description (F)	Type	Door
30	Pavilion 2 - 3 East	Pavillon 2 est	Interior	2S-100.0
31	Gymnasium Exit	Sortie de gymnase	Interior	4B-104
32	Cafeteria	Cafétéria	Interior	7N-100
33	Gallery - South	Gallerie sud	Interior	2NS-200
38	Crypto PC	Crypto PC	Interior	2B-305.A
40	Reception	Réception	Interior	2D-101.0
42	Corridor	Corridor	Interior	1D-100.0
43	Emergency Exit	Sortie d'urgence	Interior	3N.2
44	Pavilion 9 East	Pavillon 9 est	Interior	2S-100.3
45	Small Rotonda	Petite Rotonde	Interior	2N-104
46	Revolving Door	Porte tournante	Interior	0A-100.0
47	Gallery – North	Gallerie nord	Interior	2NS-200
49	Main Entrance - Swing Gates	Entrée principale - Portillons	Interior	
54	Pavilion 3 – East	Pavillon 3 est	Interior	2S-100.8
55	Shipping and Receiving	Expédition et réception	Interior	2D-102.1
56	Emergency Exit 4N.2	Escalier Urgence 4N.2	Interior	4N.2
57	Stairs Pavilion 2	Escalier Pavilion 2	Interior	2N.0
58	Emergency – RADARSAT	Urgence – RADARSAT	Interior	2NS-200.5
62	Small Rotonda Lobby	Hall de Petite Rotonde	Interior	
69	File Room	Salle des dossiers	Interior	
70	Woodworking shop corridor	Corridor menuiserie	Interior	2C-100
71	RIF	RIF	Interior	2C-104
73	Protected area 1	Aire protégée 1	Interior	1B-310
74	Protected area 2	Aire protégée 2	Interior	1B-310
9	PTZ Pavilion 2	PTZ Pavilion 2	PTZ	
41	PTZ Pavilion 3	PTZ Pavilion 3	PTZ	
48	PTZ Pavilion 1	PTZ Pavilion 1	PTZ	
61	PTZ Pavilion 4	PTZ Pavilion 4	PTZ	
Total:	74			

2.13 Door Controllers/Access Control Units

The Access Control System must employ door controllers with redundancy to prevent the failure of one controller from disabling numerous doors.

Access control units must be capable of retaining in memory the last events that occurred during the off line mode. If ACU communication with the database is disrupted, when communication is restored, those transactions must be transmitted to the computer with the database.

The control unit enclosure must be a single locking box CEMA/NEMA of a type with dimensions sufficient to adequately house the equipment it contains and in the location it will be housed. The existing box can be reutilized.

Table 3 below identifies the locations of the door controllers which the CSA is seeking to replace. All door controllers (Access Control Units (ACUs)) are located in ten equipment rooms in the facility.

Table 3 - Door Controllers

Equipment - Door Controllers		
Room	Quantity	Description
1E-104.B	8	Security Equipment Room (Adjacent to Security Control Centre)
2S-101/102	17	Security Equipment Room
3N-205	3	Security Equipment Room
3N-305	3	Security Equipment Room
4N-205	3	Security Equipment Room
4N-304	1	Security Equipment Room
Total:	35	

2.14 Intrusion alarm system

The system must provide forced entry detection at specified door locations. A forced entry must be generated immediately whenever the door is opened without authorization. Authorization must be determined by card, request to exit transaction at the door, or by a command from the host system.

System occurrences deemed as violations must be articulated as alarm events at the computer. The system software must allow assigning user-defined names for any reader port or input point to distinguish its location for the benefit of the operator. The system must further provide the following alarm notification/processing:

- An alarm notification pop-up window must come to the foreground so long as the access control client program is running.
- An audible warning sound.

The alarm system must be integrated with the CCTV system in a way to allow the operator to view still images captured by the associated cameras during the alarm event.

The system must allow the operator to examine information for all alarms currently waiting for processing one at a time without acknowledging them and/or clearing all alarms in the system.

The system must produce alarms for at least the following conditions:

- Forced entry at a system-controlled door
- System-controlled door held open too long
- Monitored alarm point detects a violation
- An ACU is tampered with

2.15 Intercoms

Table 44 below lists locations equipped with intercoms.

Existing Intercom stations through which delivery personnel, CSA staff or public may communicate with the Security Control Centre must be replaced.

The Security Intercom System must be equipped with a master station in 1E-104 (Security Control Centre).

Intercoms must be equipped with a CCTV camera for simultaneous viewing of calling stations.

Exterior intercom stations must be weatherproof.

The intercom system must support hands free operation.

A call on an intercom system must automatically highlight the CCTV camera with a view on the calling station to bring it to the operator's attention.

Table 4 - Doors Equipped with Intercoms

Equipment – Intercoms		
Door	Quantity	Description
0A-100.3-INT	1	Intercom - Alias for Door 0A-100.1 which is an entrance door in the large rotunda
1D-100.2-EXT	1	Intercom - Alias for Door 1D-100.2 which is the former day care door
1E-100.0-INT	1	Intercom - Alias for Door 1E-100.0 which is doors outside the Security Control Centre
1E-104.CONSOLE	1	Intercom Console - Alias for Room 1E-104 Security Control Centre
2C-100.EXT	1	Intercom – Alias for Door 2C-100.0 Outer Pavilion 2 entrance
2C-104.4-EXT	1	Intercom – Alias for Door 2C-104.4 Outer RIF entrance
2D-102.0-EXT	1	Intercom - Alias for Door 2D-102.0 Inner Courier Entrance
2D-102.1-INT	1	Intercom - Alias for Door 2D-102.1 Outer Courier Entrance
2N-104.2-INT	1	Intercom - Alias for Door 2N-104.2 Revolving Door from Small Rotunda
7B-101.2-EXT	1	Intercom - Alias for Door 7B-101.2 Cafeteria Loading Dock
SITE ENTRÉE-EXT	1	Intercom - Alias for SITE ENTRÉE which is the Entrance Gate
Elevators	6	Intercom – Alias for each of the 6 elevators
Total:	17	

2.16 Equipment Rooms

Most of the equipment supporting the existing system is installed in one of the following security equipment room: 1E-104.B, 2S-101, 2S-102, 3N-205, 3N-305, 4N-205, 4N-304, 6C-100, at the antenna and in the L-100 (ESF), these rooms will be highlighted on the floor plans (provided during the site visit).The Security Application Server and CCTV/Network Video Management Server must be located in the Security Equipment Room (Room 1E-104.B) adjacent to the Security Control Centre.

2.17 Training

The Contractor must provide on-site a minimum of 40 hours bilingual training in 4 -hour modules to the client (security officers) on new software or products that are implemented into the system. Training will typically take place during normal business hours and be offered to multiple groups.

3. Maintenance of the security system

The work covered by this contract includes the maintenance of the new systems and the existing hardware. It consists of a one year contract with the option of four years contract based on the CSA needs and it is divided as follows:

- First year: maintenance of the new systems under warranty and maintenance based on the CSA need for the existing (none replaced) hardware.
- Four, one year options for the maintenance of the security systems and for new installations.

It consists of the three following classes of work:

Class "A" (warrantied works):

These works include responding to service calls on time described herein, on parts and labor 100% warranty on the equipment provided and work performed by the contractor in the last twelve months.

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9F030-16-0143

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File No. - N° du dossier
MTA-6-39084

Buyer ID - Id de l'acheteur
mta739
CCC No./N° CCC - FMS No./N° VME

Class "B" (billable work and services):

These works include responding to service calls on time described in this document, existing equipment not covered by a warranty. The work and services will be billed at hourly rates guaranteed for the year of service. CSA reserves the right to request bills to justify the price of parts before making the payment.

Class "C" (Adding Devices):

The addition of new equipment must be charged according to the submission provided by the contractor and signed by the CSA.

4. Support

During the period covered by the contract, the Contractor must provide a minimum guaranteed on site response time of 4 hours during normal business hours and of 6 hours outside normal business hours, including Saturdays and Sundays and public holidays. If the contractor does business with an on call messenger, he must contact the CSA within 30 minutes.

5. Service call

The CSA will pay the equivalent of one hour for the first hour of on-site work, completed or not. The contractor must not charge more than an hour for that period. Additional time will be charged in minimal increments of 15 minutes of completed work. Transportation time and fees to the CSA will be indicated separately on the invoice.

6. Location

The Contractor must provide installation services on-site at:

- John H. Chapman Space Centre, 6767 Boulevard de l'Aéroport, St-Hubert, Québec

7. Tools

The Contractor must provide all tools; equipment and testing needed to perform the work.

The Contractor must provide all ladders, lifting devices and scaffolding needed to perform the work.

The Contractor must provide transportation of the installation team and small equipment for the duration of the onsite work.

8. Hours of Work

Normal business hours at CSA are from 7:00 a.m. to 6:00 p.m., Monday through Friday. If work is to be done outside of normal business hours to minimize disruptions or conflicts with ongoing CSA activities, arrangements can be made to work during silent hours.

The Contractor must coordinate on-site delivery and installation with the Technical Authority and must provide a minimum of three weeks' notice for the commencement of work on-site.

The Canadian Space Agency will provide access to the site until completion of the contract.

All commissioning tasks must be completed prior to "going live" with the new Integrated Security System. A cutover/migration plan must be submitted before starting the work.

The CSA must not be responsible for any unplanned overtime hours, work done outside of normal business hours, or any additional manpower or expenses required to meet the project schedule due and which can be attributed to inadequate planning by the Contractor.

9. Security

The Contractor must be responsible for security of all personal items as well as supplied equipment and materials until installed into final locations, and accepted by the Technical Authority. The contractor may ask the Technical Authority to make arrangements for on-site storage of items that will facilitate the work if kept on-site overnight.

10. Kick off meeting

Fifteen (15) days after signing the contract, the contractor must participate in the project kick off meeting, where he will submit a draft implementation plan. The CSA and the contractor will agree on a start date and the major milestones.

11. Project Management

The Contractor must:

- Provide the Technical Authority with weekly progress written reports detailing progress to date and the work planned for the week ahead.
- Attend weekly progress review meetings in person as directed by the Technical Authority.
- Immediately update the Technical Authority regarding any issues that require a decision from his part to facilitate the installation.
- Work through the Technical Authority on any issues that would modify this contract.
- Communicate all requirements for site arrangements to the Technical Authority through the Contractor's site contact.

12. Delivery, Storage and Handling

The Contractor must:

- Deliver and store materials in manufacturer's original packaging labeled to illustrate name, brand, type, and grade.
- Store materials in a protected dry location above the ground in accordance with manufacturer's instructions.
- Not open packaging or remove labels until time for installation.
- Remove all packaging from the site and recycle as appropriate.
- Any products or equipment stored on site are the responsibility of the Contractor. The CSA must not be responsible for theft or damage done to any stored products or material.

13. Equipment Supply and Installation

The Contractor must provide all miscellaneous materials such as connectors, fasteners, cable wrap, etc., necessary to complete the work.

The Work must include all materials, equipment, software, labor, devices, tools and other items needed to complete, perfect, integrate, test, warrant and maintain any portion of the equipment in a substantive manner.

The Contractor must install all equipment in accordance with the manufacturer's specifications and instructions.

For equipment for which substitutions are permitted, the Contractor must supply written proof that such substitute equipment meets or exceeds the features, functions, performance and quality of the specified equipment. If, in the opinion of the Technical Authority, the substitute equipment does not meet the specification, the Contractor must furnish the specified equipment at their own expense.

All products must bear the seal of approving agencies as required by the authorities having jurisdiction.

All products of one type must be by the same manufacturer.

Permanent labels, trademarks and nameplates on products are not acceptable in prominent locations, except where required for operating instructions or when located in mechanical or electrical rooms.

14. Workmanship and Quality Assurance

The Contractor must:

- Be solely responsible for quality control of the work.
- Examine the site and identify conditions likely to affect the work and be familiar and conversant with existing conditions.
- Pay all costs associated with the transportation of products (to and from the site) required in the performance of the work.
- Provide and erect common-use construction safety signs related to pedestrian and traffic control, information, instruction, use of equipment, public safety devices, etc. in both official languages or by the use of commonly-understood graphic symbols to the approval of the Technical Authority.
- Install only Products that are new, of high commercial standard and quality and free from any defects. The Contractor must ensure that all products to be installed are new, do not include refurbished equipment and are of current manufacture. Any missing or damaged products must be replaced by the Contractor. The Contractor must ensure that all parts used in performing the maintenance, repair or replacement services as per Warranty arrangements are new.
- The Contractor must carry out all work using qualified, factory-certified technicians. The Contractor must maintain a minimum of two manufacturer-certified technicians for the duration of the contract. In addition, for the duration of the contract, the Contractor must maintain a minimum of one CANASA certified Level 1 and one CANASA certified Level 2 technician.
- Smoking is not permitted in any of the buildings. Contractor employees, associates, representatives and service providers must obey smoking restrictions on each property.

The Contractor must:

- Cut existing surfaces as required to accommodate the new work.

-
- Patch and make good surfaces cut, damaged or disturbed, to the approval of the Technical Authority.
 - Match existing material, colour, finish and texture.
 - Clean surfaces, floors, hardware and fixtures that have been soiled by the work.

15. Shop Drawings

Within 15 days after contract award, The Contractor must provide three sets of Shop Drawings as per the approved project plan. Shop Drawings must be provided in a three-ringed binder and must be divided into sections to provide for easy review. Shop Drawings must include, at a minimum, the following:

- Scale, capacities, electrical performance characteristics of all equipment and materials provided under this Project.
- Equipment lists
- Technical product data sheets
- Training plan
- Spares/redundancy plan
- System interconnection diagrams and power requirements

Where applicable, the Contractor must also provide wiring, single line and schematic design, documentation, drawings and diagrams illustrating interconnections with the work of any other sub-contracted elements.

Shop Drawings must be signed by an authorized representative of the Contractor and must include a transmittal sheet.

Shop Drawings must be reviewed and signed by the Technical Authority before any work affected by the submittal proceeds.

Adjustments made on the shop drawings by the Technical Authority are not intended to change the Contract Price. If adjustments affect the value of the work, such adjustment must be described in writing to the Technical Authority prior to proceeding with the work.

Any adjustments or changes to the shop drawings requirements must have prior approval of the Technical Authority.

16. Work Site Conditions

The Contractor must be responsible for the security and protection of all equipment supplied and installed as part of this work before, during and after installation.

The Contractor must perform final cleaning of all electrical and security components.

The Contractor must examine work areas prior to commencing work, in accordance with CSA site access procedures. The Contractor must remedy conditions detrimental to the proper and timely completion of the work where possible and advise the Technical Authority regarding conditions that are the responsibility of others.

17. Execution

The Contractor must be responsible for the supply and installation of all signal and power cabling required for a complete and functional Integrated Security System. All cabling from electronic devices will be labeled and terminated onto a terminal strip in a security enclosure. The security enclosure with terminal strip is to be supplied by the Contractor and installed by a licensed electrician. All cable must conform to manufacturers' specifications and be installed to meet industry best practices. All electrical work must be coordinated with CSA's electrician.

Cabling must be installed in the existing conduit and cable tray system where they exist. The Contractor must install conduit to new devices when required.

When accessing or connecting to existing services or utilities, the Contractor must execute the work at times as directed by the Technical Authority, local governing authorities with minimum disturbance to work and/or building occupants and pedestrian and vehicular traffic.

The Contractor must submit a written request before performing any action that could affect:

- Structural integrity of any element of the site
- Integrity of weather-exposed or moisture-resistant elements
- Efficiency, maintenance or safety of any operational element
- Visual qualities of sight-exposed elements
- Work of Technical Authority or separate contractor.

In preparation for carrying out the work, the Contractor must:

- Inspect existing conditions, including elements subject to damage or movement during cutting and patching
- After uncovering, inspect conditions affecting performance of work
- Provide supports to assure structural integrity of surrounding
- Provide protection from elements for areas which are to be exposed by uncovering work; maintain excavations free of water

The Contractor must:

- Execute cutting, fitting, and patching to complete the work
- Remove and replace defective and non-conforming work
- If necessary, provide openings in non-structural elements of work for penetrations of mechanical and electrical work
- Execute work by methods to avoid damage to other work, and which will provide proper surfaces to receive patching and finishing
- Cut rigid materials using masonry saw or core drill. Pneumatic or impact tools may not be used on masonry work without prior approval
- Fit work airtight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces
- At penetration of fire rated wall, ceiling, or floor construction, completely seal voids with fire-stopping material to the full thickness of the construction element
- Refinish surfaces to match adjacent finishes; refinish continuous surfaces to nearest intersection.

The Contractor must maintain an electronic log of all security components installed at the site. Such log must be in MS-Excel format and must include, at a minimum, the manufacturer, make, model, serial number, IP address (if applicable), installation date and location of all installed components. Such records must be continually updated as any changes are made during post-installation moves/adds/changes or preventative or remedial maintenance and support work.

17.1 Migration Plan

The contractor must develop a plan that will allow the security staff to continue to monitor security at the site while the new system is being rolled out or existing devices are cut over to the new system. The plan must minimize:

- down time
- the length of time two security systems (old and new) must be monitored
- the requirement for extra security staff

18. Health and Safety

The Contractor must submit a written site-specific Health and Safety Plan before starting the work. The Health and Safety Plan must:

- Present results of site-specific safety hazard assessment as delineated during scheduled site surveys
- Present results of health and safety risk or hazard analysis for site tasks and operation
- Comply with the Occupational Health and Safety Regulations
- Comply with the Canada Labour Code, Canada Occupational Safety and Health Regulations

The Technical Authority may stop work on the project if non-compliance with health and safety regulations is not corrected.

19. Documentation

19.1 As-Built Documentation

The Contractor must submit three copies, in French or in English, of as-built documentation (and one CD containing all electronic files) annotated with the changes made during installation of the Work such that a complete set of "as installed" plans, wiring diagrams and documents can be prepared by others.

Such as-built documentation must:

- Be organized in the form of an instruction manual
- Use vinyl, hard-covered 3 "d" ringed binders, loose leaf, 219 mm x 279 mm with spine and face pockets
- Correlate data into related consistent groupings, identifying contents on each spine, when multiple binders are used
- Include a cover identifying the contents of each binder
- Be arranged by systems
- Be tabbed for each section
- Include all drawings as noted in this section below
- Final acceptance of the Project will be predicated on receipt and approval of As- Built Documentation.

- The Contractor must record, as work progresses, all equipment, cabling and conduit locations, including wiring schedules (however limited).
- As-Built Documentation must provide confirmed installation locations, quantities and from-to schedules for all equipment and devices included in the Works. At a minimum, As-Built Documentation must include:
 - - Floor plan drawings indicating exact device installation locations and dimensions
 - Equipment List
 - Equipment Technical Specifications
 - Special tools: provide special tools to the client in quantities as required for timely and professional maintenance and troubleshooting of the products
 - Internal wiring schematics for security devices
 - System configuration data (for all software programming, configuration and settings performed during the works, even if performed by others)

19.2 Operations and Maintenance Manuals

At commissioning, the contractor will provide two (2) hard and two (2) soft (.PDF) copies of Operations and Maintenance (O & M) Manuals one in English and one in French for each system provided under this contract. This includes data for each type of product and features and operating sequences, both automatic and manual.

The operational manual should include all manufacturer recommended equipment maintenance requirements, with a complete description of all maintenance procedures required on all installed equipment including time intervals, hours of usage, required inspection, periodic maintenance, fault diagnosis and repair/replacement of parts/components. This must include instructions for cleaning agents and methods, precautions against detrimental agents and methods, and recommended schedule for cleaning and maintenance.

Installation guide, system documentation, system structure and setup information must be provided to the CSA.

User documentation clearly defines procedures for all processes.

Documentation can be copied and distributed within the CSA without restriction.

All documentation and training material provided (hard and soft copy) must be created using the MS Office Suite of Products.

20. Commissioning Requirements

20.1 General

This section includes general requirements relating to commissioning of the system and to verifying the components, equipment, sub-systems, systems, and integrated systems.

Commissioning is a planned program of tests, procedures and checks carried out systematically on the system. Commissioning is performed after the security devices are completely installed and functional. Should the system, system components, and associated controls be incorrectly installed or malfunction during commissioning, the Contractor must correct deficiencies, re-verify equipment and components within the non-functional system, including related systems as deemed required by the Technical Authority to ensure effective performance.

Furthermore, the contractor must provide two photographs of equipment to be replaced in JPG format of acceptable perspective, size, resolution and lighting to accurately demonstrate the existing site conditions and equipment installation.

20.2 Commissioning Plan

The Contractor must develop and submit to the Technical Authority a commissioning plan that will, as a minimum, address the following.

20.2.1 Card readers

The card reader grants access when a smart card is presented to the reader that is enrolled in the system and is authorized to enter the zone controlled by the card reader at a time the card is presented. A record is created in the system recording the authorized entry.

The card reader denies access when a smart card is presented to the reader that is enrolled in the system and is authorized to enter the zone controlled by the card reader but the card is not authorized to enter at the time the card was presented. A record is created in the system recording that attempted unauthorized entry. If a CCTV camera has the card reader in its field of view, the camera becomes the active window of the video system in response.

The card reader denies access when a smart card is presented to the reader that is enrolled in the system and is not authorized to enter the zone controlled by the card reader. A record is created in the system recording that attempted unauthorized entry. If a CCTV camera has the card reader in its field of view, the camera becomes the active window of the video system in response.

Where anti-passback is enabled, the card reader denies access when the card has not passed through an adjacent zone.

20.2.2 Keypads

The same tests as for card readers must be conducted for keypads, with the addition of a correct PIN and an incorrect PIN, and corresponding system log entries and CCTV response.

20.2.3 Card readers and Keypads

The device continues to function correctly when its primary power source is disconnected, or is disconnected from the security network.

20.2.4 Doors

A Door held open alarm is generated when the door is held open beyond its setting. A forced door alarm is generated when a door is opened without being shunted by a request to exit or a card swipe (this test must be conducted without damaging the equipment). If the door is equipped with a local sounder, that the sounder functions as it should. System logs are generated for all events and the CCTV system responds to the alarms.

20.2.5 PTZ Cameras

The cameras must be capable of moving in all dimensions defined in the specifications. The cameras must zoom in and out in accordance with the specifications. The cameras must automatically focus accurately on the subject in their field of view. The cameras must adjust accurately to light levels. The cameras must follow their programmed track. The cameras must respond correctly to operator inputs. The cameras must respond correctly to alarm inputs from the access control system. The cameras must continue to function when their primary power source is interrupted. The cameras must continue to record video locally if disconnected from the security network.

20.2.6 Fixed Cameras

The cameras must focus accurately on the subject in their field of view. The cameras must adjust correctly to light levels. The cameras must continue to function when their primary power source is interrupted. The cameras must continue to record video locally if disconnected from the security network.

20.2.7 Intercoms

The central station responds to a calling station. Both parties are able to communicate with each other. The audio is of satisfactory quality and volume. If equipped, the CCTV camera feed from the calling station becomes the active window.

20.2.8 Access Control and CCTV Servers

The goals and objectives of commissioning the servers are to evaluate all of the functions defined in the technical specifications, including system functions, alarm enunciation and processing, database management, system management reports, time zones and schedules, and so on. The Security System must also be tested during failures of support systems and particular critical subcomponent failure. This should involve evaluating the effect on entering and exiting controlled rooms during a power outage.

Acceptable results for power outage condition will be that the Security system must maintain secure access to facility and have remote doors function from the security desk. Personnel must be able to exit the controlled doors with power out. Data archiving must continue with a power outage. Camera control must continue during a power outage. For improper access, the system must alarm to the security console in the event of repeated attempted entry to areas with improper access.

20.3 Commissioning Forms

As part of the commissioning plan, commissioning forms must be developed for approval by the Technical Authority. Commissioning forms must be completed for all equipment, systems and integration elements of this project. Each commissioning form should include the product manufacturer's installation instructions and recommended checks.

The Contractor must use checklists for the installation of the security devices. A document describing the checks that have been made and verifying same must be delivered to the Technical Authority before operational commissioning is undertaken.

The Contractor must provide Product Information (PI) forms which compile gathered data on items of equipment produced by the security device manufacturer, including nameplate information, parts list, operating instructions, maintenance guidelines and pertinent technical data and recommended checks that are necessary to prepare for start-up and functional testing and used during operation and maintenance of equipment. This documentation must be submitted to the Technical Authority at the completion of work and prior to Performance Verification (PV).

21. Warranty

The Contractor must furnish a one year written warranty in a form stipulated by the Technical Authority, signed by the Contractor agreeing to repair or replace any of the work which has failed as a result of defects in materials or workmanship during the term of the warranty.

Upon notification of such defects within the warranty period, the Contractor must make necessary repairs or replacement at the convenience of the client. The Contractor must respond to all notifications of such defects within 1 hour and arrive on-site to affect any associated repairs within 4 hours.

Remedial and Preventive Maintenance services during the term of the warranty period must be included in the Works. The warranty must begin upon final acceptance of the work.

If any software or firmware upgrades become available during the warranty period, the Contractor must provide the upgrades at no additional cost to the client.

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22. Existing Equipment

Component	Model	Quantity
Door Contacts	GE Sentrol 2757 + 1076	346
Card Readers	HID Proxpoint Plus 6008B	250
Motion Sensors	Honeywell DT-6360	59
Panic Bars	Allegion Von Duprin CX98 (Chexit) and Allegion Von Duprin EL35	42
Electric Strikes		66
Door Controller	RBH RC-2	126
	RBH IOC-16	35
Input		1342
Output		1127

23. Options

23.1 Additional CCTV Camera

Supply, install and integrate one additional fixed CCTV camera at the following location:
1 Fixed Exterior Camera covering doors 6D-101.0, 6D-101.1 and 6D-102.

23.2 Entrance CCTV Equipment Hardwiring

Supply, install and integrate hard wired communications lines between two CCTV cameras used to monitor the parking lot entrances and the Radome near the main entrance to replace an existing wireless connection.

ANNEX B – BASIS OF PAYMENT

FIXED PORTION

1. SECURITY SYSTEM

Table 1

Articles	Price
Security system (delivery included)	_____ \$
Security system installation + acceptance of work	_____ \$
Optional articles	
Additional CTV Camera	_____ \$
Entrance CCTV Equipment Hardwiring	_____ \$

All indicated rates are firm, applicable taxes extra.

For the optional articles, the Contracting Authority may exercise the option at any time two years following the end of the Work by sending a written notice to the Contractor.

SERVICES AS NEEDED

(For the work described at points 2 and 3 below).

2. SERVICE CALL

- a. Four, one hour service calls (including fixed travel costs) during normal business hours for each year of service.
- b. Four, one hour service calls (including fixed travel costs) outside normal business hours for each year of service.
- c. Four, one hour installation (including fixed travel costs) during normal business hours for each year of service.
- d. Two service calls for cleaning and adjustment of lens and housings for 22 fixed outdoor cameras and 4 PTZ outdoor cameras for each year of service.
- e. One service call for cleaning and adjustment of lens and housings for 37 fixed indoor cameras for each year of service.

Table 2

Submit a price per year:

Service call	Estimated quantity (for evaluation purpose only)	Year of the installation (2017-2018) (A)	2 nd year of service (2018-2019) (B)	3 rd year of service (2019-2020) (C)	4 th year of service (2020-2021) (D)	5 th year of service (2021-2022) (E)
a.	10	_____ \$	_____ \$	_____ \$	_____ \$	_____ \$
b.	10	_____ \$	_____ \$	_____ \$	_____ \$	_____ \$
c.	10	_____ \$	_____ \$	_____ \$	_____ \$	_____ \$
d.	10	_____ \$	_____ \$	_____ \$	_____ \$	_____ \$
e.	10	_____ \$	_____ \$	_____ \$	_____ \$	_____ \$

All indicated rates are firm, applicable taxes extra.

When the article 2 of Table 1 will be completed, the covered years dates of Table 2 will be specified in an amendment to the contract.

3. SERVICE CALL – HOURLY RATE

Table 3

Service call	Estimated quantity (for evaluation purpose only)	Year of the installation (2017-2018) (F)	2 nd year of service (2018-2019) (G)	3 rd year of service (2019-2020) (H)	4 th year of service (2020-2021) (I)	5 th year of service (2021-2022) (J)
Service call during normal working hours, Monday to Friday 8am to 4 pm	10	_____ \$	_____ \$	_____ \$	_____ \$	_____ \$
Service call outside normal working hours, including weekends and holidays	10	_____ \$	_____ \$	_____ \$	_____ \$	_____ \$
Fixed travel costs	10	_____ \$	_____ \$	_____ \$	_____ \$	_____ \$
Installation hourly rates during normal working hours, Monday to Friday 8 am to 4 pm	10	_____ \$	_____ \$	_____ \$	_____ \$	_____ \$

All indicated rates are firm, applicables taxes extra.

When the article 2 of Tab 1 will be completed, the covered years dates of Table 2 will be specified in an amendment to the contract.

Solicitation No. - N° de l'invitation
9F030-160143/A
Client Ref. No. - N° de réf. du client
9F030-16-0143

Amd. No. - N° de la modif.
File No. - N° du dossier
MTA-6-39084

Buyer ID - Id de l'acheteur
mta739
CCC No./N° CCC - FMS No./N° VME

ANNEX C to PART 3 OF THE BID SOLICITATION

ELECTRONIC PAYMENT INSTRUMENTS

The Bidder accepts any of the following Electronic Payment Instrument(s):

() Direct Deposit (Domestic and International);

ANNEX D – MANDATORY TECHNICAL CRITERIA

1. MANDATORY TECHNICAL CRITERIA

1.1 Contractor's experience

The contractor must demonstrate the following:

- 1.1.1 Must have worked on two similar projects in terms of scope (as described in the statement of work), systems installed and services provided. The projects must have been completed successfully and done in the last five (5) years. The Contractor must provide the name of the client organizations and the name, title, telephone number, and fax number of client contacts. Only the first two project references provided will be evaluated. References may be contacted to confirm information provided in the bid.
- 1.1.2 Have experience with Boon Edam Twinglock
- 1.1.3 Have experience with Maxivox's communication system MaxiComm II.

1.2 System's mandatory technical criteria

Contractor is required to respond on a paragraph-by-paragraph basis to the technical requirements which are contained herein. Contractor should use additional information such as a cross reference to technical specifications, cut sheets or other documents that indicate that the bid is compliant with the corresponding requirement.

Item	Description	Bidder's Explanation
1.2.1	In order to avoid problems related to system compatibility, the Integrated Security System must be based on a unique platform for the following components: <ul style="list-style-type: none">• Access control,• Closed-circuit television (CCTV) system,• Intrusion alarm.	
1.2.2	The software user interface must be based on Windows® conventions and standards i.e.; the main screen must have pull down menus as well as quick buttons for direct access to frequently used functions.	
1.2.3	Cameras that have an intrusion alarm or access control system device within their fields of view must be automatically brought to the operator's attention when the alarm or device is in a state of alarm.	
1.2.4	If the system goes off-line, the ACUs must continue to function at 100% operability without resorting to a degraded mode of operation.	
1.2.5	Access Control Units (ACUs) , i.e. door controllers, must support at least four (4) card readers.	

ANNEX E – POINT RATED TECHNICAL CRITERIA

1. POINT RATED TECHNICAL CRITERIA

Contractors are required to respond on a paragraph-by-paragraph basis to the technical requirements which are contained herein. Contractors should use additional information such as a cross reference to technical specifications, cut sheets or other documents that indicate that the bid is compliant with the corresponding requirement.

The Contractor must obtain an overall pass score of 70 percent of the Technical Proposal. The rating is performed on a scale of 150 points.

- (0 Points) Has not demonstrated compliance with the requirements.
- (10 Points) Has fully and clearly demonstrated compliance with the requirements.

Table 1.1 Point Rated Technical Criteria

Item	Description	Score
1.1	The system should provide the operator with the facility to define, view, and print summaries based on system-wide activity recorded by the database.	
1.2	It should be possible for the operator to 'Acknowledge' an alarm, clearing it from the alarm events window or mark an alarm as 'Pending' further investigation. The operator should be provided with the means to create and save comments on the response to an alarm.	
1.3	The system should allow the operator to preview a report on screen before printing or saving the report.	
1.4	The system should provide a simple mechanism to synchronize the Windows Domain users with the Security Application Software users, so that the addition and deletion of users requires no manual re-entry of data.	
1.5	The software should be designed to allow each operator to select a language of his or her preference and at any time change languages without having to exit and re-start the software.	
1.6	In the case of Transaction Reports, the system should allow an operator to schedule automated report generation. The system should automatically send the report to the defined printer.	
1.7	Access control alarms should be configurable to force the operator to enter a note in the system recording what action was taken to clear it.	
1.8	Where PIN codes are used, they should be randomly created by the access control software.	
1.9	As an additional aid to the alarm event, the system should provide an operator with the option to open a floor map to pin-point the location of the door or device that tripped the alarm.	
1.10	Local monitoring stations must present the photo of persons entering an access control point for visual verification by security staff.	
Total		

2. PRODUCT DEMONSTRATION

The contractor must provide a product demonstration of his proposed product solution at submission of the bid. The demonstration must clearly address the elements of Table 2.1. The demonstration must take the form of one of the following:

- (a) a CD or DVD containing a video presentation,
- (b) a USB key containing a video presentation

Point Rated Evaluation Criteria

The Contractor must obtain an overall pass score of 70 percent of the Technical Proposal. The rating is performed on a scale of 42 points.

- (0 Point) Has not demonstrated compliance with the requirements.
- (1 Point) Has fully and clearly demonstrated compliance with the requirements.

Table 2.1 Product demonstration

Items	Description	Note
2.1.1	Display the alarm in an alarm events window that includes the following information for expedient alarm handling: <ul style="list-style-type: none"> • Alarm time; • Alarm type; • Alarm priority; • User-defined description; • Location; • Response instructions; • Alarm contacts; • Response comments. 	/8
2.1.2	The system should provide the means to establish a hierarchy of alarm priority levels to assist operators in determining an alarm's degree of importance. The system should allow user-defined properties to be assigned to each alarm priority: <ul style="list-style-type: none"> • Each alarm priority can be assigned to an access control unit, a door, an auxiliary input, a supervised input or with each device assigned to a specific alarm type or group of alarm types; • Each alarm priority can be assigned a unique description with customized display characteristics; • Each alarm priority can be assigned to a system time zone to regulate when the alarm priority is in effect. When the time zone is not in effect, the alarm is still reported but without its assigned properties; • Each alarm priority can be routed to specific logged on system operators at specific computers; • Each alarm priority can be assigned a sound (WAV) file to audibly announce the alarm priority to assist the operator in distinguishing the level of alarm importance. 	/5
2.1.3	The system should allow the operator to generate, print, and save any of the following report types: <ul style="list-style-type: none"> • Transaction Report; 	

	<ul style="list-style-type: none"> • Card or Card Group History/Trail Report; • System Log Entry Report; • Alarm Listings Report; • Silent Hours Alarm Report; • Alarms and Events Report; • Cumulative Hours Report; • Card In/Out Status Report; • Occupancy Report (list of the occupants name); • Disabled Cardholder Report. 	/10
2.1.4	<p>The system should allow the operator to generate the following system settings reports:</p> <ul style="list-style-type: none"> • Site Setup Report (components list); • Reader Status Report; • Door History Report; • Cardholder List Report; • Cardholder Details Report; • System Users Report; • Time Period Settings Report; 	/7
2.1.5	<p>The system should allow operators to print any report. The system should allow the operator to select which printer to use. The print capability should be integrated with the Windows print features. All reports should be fully formatted with the following features:</p> <ul style="list-style-type: none"> • Report name; • Page numbers; • Time and date; • Site name. 	/7
2.1.6	<p>As an alternative to permanently deleting a card, the system should allow a cardholder record to be designated as 'Archived'. While the archived status is in effect, the record is maintained in the database but the card is invalid and denied entry to all previously authorized access points. The archived status should remain in effect until the cardholder record is re-activated by an operator.</p>	/1
2.1.7	<p>The system should provide a way to view an access level summary for individual cardholders to determine which system regulated doors are and are not accessible to the cardholder.</p>	/1
2.1.8	<p>The system must also provide the ability to insert a digital photograph on each cardholder record. The photographs will be printed on access cards and displayed on screens while observing on-line transactions.</p>	/1
2.1.9	<p>An operator must be able to view the transactions for each individual cardholder for auditing, investigating activity, or locating a cardholder.</p>	/1
2.1.10	<p>The system should allow the display of a live video feed with photo verification enabled simultaneously.</p>	/1
Total		/42