Public Works and Government Services Canada | Travaux publics et Services gouvernementaux Canada

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**Gatineau, Québec K1A 0S5**
**Bid Fax: (819) 997-9776**

# SOLICITATION AMENDMENT
# MODIFICATION DE L'INVITATION

The referenced document is hereby revised; unless otherwise indicated, all other terms and conditions of the Solicitation remain the same.

Ce document est par la présente révisé; sauf indication contraire, les modalités de l'invitation demeurent les mêmes.

**Comments - Commentaires**

**Vendor/Firm Name and Address**
**Raison sociale et adresse du fournisseur/de l'entrepreneur**

**Issuing Office - Bureau de distribution**
Electrical & Electronics Products Division
L'Esplanade Laurier
East Tower, 4th floor,
Ottawa
Ontario
K1A 0S5

| | |
|---|---|
| **Title - Sujet**<br>CCTV upgrade / Atlantic Region | |
| **Solicitation No. - N° de l'invitation**<br>21120-192738/A | **Amendment No. - N° modif.**<br>003 |
| **Client Reference No. - N° de référence du client**<br>3032738 | **Date**<br>2019-06-19 |
| **GETS Reference No. - N° de référence de SEAG**<br>PW-$$HN-467-76889 | |
| **File No. - N° de dossier**<br>hn467.21120-192738 | **CCC No./N° CCC - FMS No./N° VME** |
| **Solicitation Closes - L'invitation prend fin**<br>**at - à 02:00 PM**<br>**on - le 2019-07-04** | **Time Zone**<br>**Fuseau horaire**<br>Eastern Daylight Saving Time EDT |
| **F.O.B. - F.A.B.**<br>**Plant-Usine:** ☐ **Destination:** ☐ **Other-Autre:** ☐ | |
| **Address Enquiries to: - Adresser toutes questions à:**<br>Dubé, Robert | **Buyer Id - Id de l'acheteur**<br>hn467 |
| **Telephone No. - N° de téléphone**<br>(613) 296-1526 ( ) | **FAX No. - N° de FAX**<br>(613) 943-7620 |
| **Destination - of Goods, Services, and Construction:**<br>**Destination - des biens, services et construction:** | |

**Instructions: See Herein**

**Instructions: Voir aux présentes**

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Canada

**AMENDMENT #003**

This amendment solicitation is raised to answer questions from the industry.

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**Please see Amendment #002 for questions and answers #1 to #18.**

**To answer questions 19 to 34 from the industry.**

**QUESTION 19:**
In Appendix F list of new cameras at Springhill Institution show 4 new cameras. The site plan package provided only show 2 (new). Building 3 Level 1 Room 101 key safe, and building 1 level 1 room 108 armoury have been confirmed, please confirm camera locations for Building 20 outside yard north side, and building 20 outside yard south side on site plans.

**ANSWER 19:**
The Building 20 cameras are shown on the Springhill Site plan 2016 drawing , they are the two cameras identified within the green circle label B&W.

**QUESTION 20:**
In Appendix E list of new user stations at Nova Institution line 3 shows Building A Main Admin Room 122 V&C Action Required is Upgrade. Are we upgrading the existing NVUS or current monitor configuration?

**ANSWER 20:**
Room 106 and room 217 requires new NVUSs complete with two monitors each. The V&C room 122 is an existing NVUS with the current configuration of one monitor, the requirement is to upgrade the existing monitor and add one additional. These monitors must be mounted to a contractor supply wall mount bracket.

**QUESTION 21:**
In Appendix F list of new cameras at Dorchester Penitentiary line 17 shows Building 8 Gymnasium Level 1 Main Gym Corridor for a total of 6 cameras in building 8. There only 5 cameras showing on the site plan. Please verify Building 8 Gymnasium Level 1 Main Gym Corridor on B8 site plan.

**ANSWER 21:**
There are six cameras indicated on the B6 CCTV-Level 1 drawing that was provided following the bidder meeting by email. The cameras are in room 126, corridor 125, quantity 3 in room 133 and 1 camera at the door outside room 106.

**QUESTION 22:**
In Appendix E list of new user station at Dorchester Penitentiary Minimum and Medium new user stations line 1 shows a requirement for a NVUS install in Building B58 230. The site plans provided show a new NVUS in building F58, 230. Please clarify.

**ANSWER 22:**
Appendix E Line 1 can be corrected to Building F58 room 230. B58 is incorrect.

**QUESTION 23:**
At the Nova Institution building Q bed unit we are adding 2 new exterior cameras, please confirm cabling path to nearest CCTV network, or identify TR room for new network equipment to be installed.

- Building Q bed unit. Front Left
- Building Q 14 bed unit. Front Right area

**ANSWER 23:**
As shown on the Nova site 2015 underground duct drawing there is an existing conduit from building Q to Building B, the CER in building G 004 would be the closest connection to the CCTV network. Note there is not an existing ESS fibre connection from Building Q to Building B CER, the contractor must install a new fibre meeting ESS specification for the above network connection.

**QUESTION 24:**
As per Appendix F Nova Institution new cameras at line 13 it shows existing camera 42, removal. The Nova site plan provided shows “replace with PTZ and relocate in corner” Please clarify.

**ANSWER 24:**
Camera 42 must be removed and replaced with a PTZ camera identified as per Appendix F Nova Institution new cameras line 10.

**QUESTION 25:**
It has been noted during our internal reviews that the model of cameras currently deployed at each institution have been discontinued. The manufacturer recommended replacement models, which meet the specifications outlined in the STR, are not supported by the software extension in Genetec Omnicast 4.8, SR8, which is currently deployed at each institution. These devices may be able to communicate through a generic extension, however this would not be the intent of the software. Is it CSC’s intention to upgrade their software to support current hardware?

**ANSWER 25:**
As per answer 17, the contractor must provide a system upgrade at all sites from Omnicast 4.8 to the latest version of Security Center. The PIDS and FAAS Alarm integration must be Starcom over IP.

**QUESTION 26:**
Regarding the storage requirement, what is the actual storage remaining in the existing Pivot 3 units, to calculate 240hrs of storage, we need to know where the directories reside as you can only have 100 cameras per archiver if the Directory resides on the machine.

It is noted in Amendment #002 that:

Atlantic – 22.4TB
Dorchester – 19.3TB
NIFW – 7.94TB
Springhill – 20.4TB

With this, we understand that the total hard disk space being used but we do not see anywhere to what is the actual hard drive space on site?

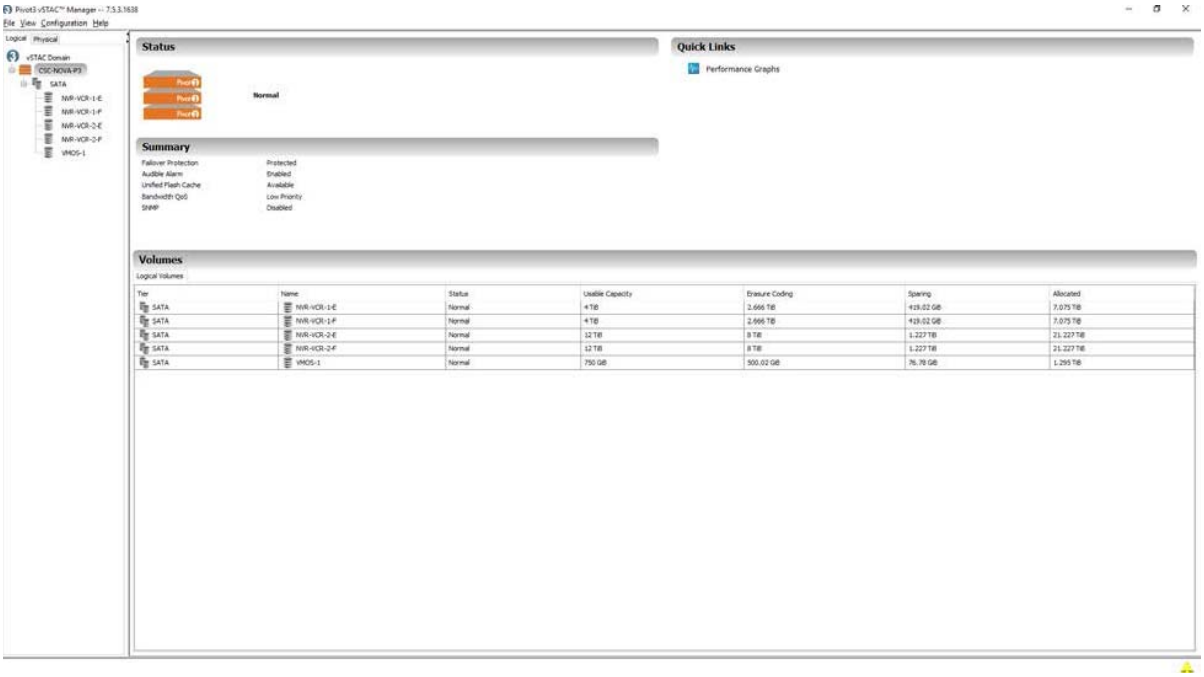
Can the total USABLE hard drive space be provided for each site as well as the Pivot 3 Configuration (RAID6x) be provided?

We need to know per machine what is available to adhere to the Genetec guidelines for cameras per archiver along with what machines are running the Directory Service to ensure we do not exceed the maximum recommended amount of cameras per Archiver/Directory as per Genetec's recommendations.

*Example:*
Pivot 3 – Appliance #1 – 24TB RAW – 12.5TB usable (Directory #1)
Pivot 3 – Appliance #2 – 24TB RAW – 12.5TB usable (Directory #2)
Pivot 3 – Appliance #3 – 24TB RAW – 12.5TB usable (allocated for Failover as per ES/STD-0229 – Section 7.13?)

The total usable HDD space is ~25TB, less the OS partition for each Appliance.

**ANSWER 26:**
Refer to drawing P3-Logical below for details on total useable drive space and allocated hard drive space. The directory resides on Logical volumes NVR-VCR 1-E and NVR-VCR 1-F having 4TB for storage each. All Institutions are or will be allocated the same storage as pre drawing P3-Logical. Note the VMOS is allocated 1.295 TB. The three Pivot 3 appliances have 24 TB of raw storage.




**QUESTION 27:**
Drawing "DPWI Complex CCTV-WI May 10, 2019.pdf" shows a requirement for a new CCTV Tower, and 2 string fiber. Please confirm who will provide the CCTV Tower? If Contractor is to provide, please provide specification of CCTV Tower.

**ANSWER 27:**
Drawing DPWI Complex CCTV-WI May 10, 2019.pdf has been updated and replace with DPWI Complex CCTV-WI June 4, 2019.pdf. Which has remove the camera and tower required from the previous drawing.

**QUESTION 28:**
Can you please confirm if any other CCTV towers/poles will be required as part of this project?

**ANSWER 28:**
There are no CCTV camera towers or poles required within this RFP.

**QUESTION 29:**
Regarding Asbestos Assessment and abatement.

After reviewing the asbestos reports, it seems that most asbestos containing materials: are Pipe elbows, fittings, and straight run pipe insulation (corrugated-type – air cell) in hatches.

Please confirm we will only be required to complete abatement where our work is being performed (if asbestos is found) and the successful Security Contractor is not required to perform asbestos abatement as per all findings reported in:

- ASBESTOS ASSESSMENT ATLANTIC INSTITUTION
- ASBESTOS ASSESSMENT DORCHESTER PENITENTIARY
- ASBESTOS ASSESSMENT SPRINGHILL INSTITUTION

**ANSWER 29:**
The bidder and or security contractor are responsible to provide the level of abatement required to complete the scope of work identified in the STR. The level of abatement that is required to install conduits and mounting equipment within the asbestos materials identified in the Asbestos Assessment Reports, are the responsibility of the bidder. The abatement level for drilling asbestos material such as ceiling or floor tiles, wall sheeting and or plaster etc. is the responsibility of the bidder and or security contractors. The bidder or security contractor are not responsible to provide abatement in areas or materials outside the scope of work identified in the STR.

**QUESTION 30:**
Answer #17 from Amendment #002 added the scope of upgrading the existing Omnicast system to the latest of Security Center. Can we get the Genetec System ID's for the four sites?

**ANSWER 30:**
The Genetec Id are as follow:

Atlantic 289-710-524-871490831
Dorchester 060-194-984-309604388
Nova 899-691-081-519516124
Springhill 022-953-656-829276504

**QUESTION 31:**
Can we get confirmation that the existing servers, archivers, and NVUSs meet the minimum hardware requirements for the latest version of Genetec Security Center?

**ANSWER 31:**
For the RFP the bidders are advised that the existing servers and NVUS meet the minimum hardware requirements for Genetec Security Center.

**QUESTION 32:**
Can we get the specifications required for the PTZ's that we are to supply at the 4 different institutions? There does not appear to be any Electronic Engineering Standard for Outdoor Pan/Tilt/Zoom cameras.

**ANSWER 32:**
See attached (ES/STD-223) Electronic Engineering Standard for Pan/Tilt/Zoon network colour Dome Camera.

**QUESTION 33:**
Please clarify the meaning of “warranty” identified within the STR section 5.1. The term “warranty” generally covers manufactured electronics and does not cover labour which is generally considered “service”. Is the intent of this requirement to supersede warranty provisions of the General Conditions 2010 and section 7.15 of the RFP?

**ANSWER 33:**
First, please note that SACC 2030 General Conditions - Higher Complexity – Goods apply to this solicitation and not SACC 2010. Also other Supplemental General Conditions are applicable as well.

We also recommend that you refer to SACC 2030 Section 01 – Interpretation for the definition of "Work" as follows:

*"Work" means all the activities, services, goods, equipment, matters and things required to be done, delivered or performed by the Contractor under the Contract.*

As per the STR section 5.1, the warranty period is three years including the equipment and labour.

**QUESTION 34:**
Would you please provide the Architectural drawings associated with each of the Institutions as the current site drawings do not provide sufficient detail?

For example, the height of the ceiling and the distance between floors is required to accurately calculate the length of conduit required as well as make a decision on the type of conduit that would be best for each situation.

**ANSWER 34:**
No Architectural drawings will be provided, bidders were advised during the site visit meetings that no scaled architectural drawings would be provided. The site drawings that were provided are scaled drawings and cable lengths can be calculated using the scaled drawings combined with the information obtained during the site visits (regarding ceiling height and distance between floors). Conduit types to be used must comply with ES/SPEC-006 section 3.3.1.

**ALL OTHER TERMS AND CONDITIONS OF THE BID SOLICITATION REMAIN UNCHANGED**

**CORRECTIONAL SERVICES CANADA**
**TECHNICAL SERVICES BRANCH**
**ELECTRONIC SECURITY SYSTEMS**

ES/STD-0223
Revision 4
July 2015

# ELECTRONIC ENGINEERING STANDARD

# PAN/TILT/ZOOM NETWORK COLOUR DOME CAMERA

# FOR USE IN FEDERAL CORRECTIONAL INSTITUTIONS

## AUTHORITY

Acquisition of a camera for the identified purposes that is not in compliance with this standard must be approved by the Design Authority.

Recommended corrections, additions or deletions should be addressed to the Design Authority at the following address:

Director, Electronic Security Systems
Correctional Service of Canada
340 Laurier Avenue West,
Ottawa, Ontario
K1A 0P9

Approved by:

Director,
Electronic Security Systems

## TABLE OF REVISIONS

| Revision | Paragraph | Comment |
|---|---|---|
| 0 | N/A | Original |
| 1 | Paragraph 7.12<br>Paragraph 7.21 | Optical zoom increased to 30x<br>Added electronic image stabilization |
| 2 | All | Reformat and indoor/outdoor standard merge |
| 3 | Definitions | Removed |
| | 2.1 | Added reference IEC EN 61000-4-3, Radiated RF immunity |
| | 3.2.2.3 | Changed humidity to non-condensing 20%-90% |
| | 3.3.1 | Interference now uses IEC EN 61000-4-3, Radiated RF immunity |
| 4 | 2.1/3.3.1 | Change IEC EN 61000-4-3, Radiated RF immunity to IEC EN 55024, Immunity characteristics |
| | 3.2.1.11 | Removed smoked dome |
| | 5.2.1 | Added operate from external 24VAC power source |

## TABLE OF CONTENTS

## TABLE OF ABBREVIATIONS

| Abbreviation | Expansion |
|---|---|
| AGC | Automatic Gain Control |
| CSC | Correctional Service Canada |
| IEC | International Electrotechnical Commission |
| IEEE | Institute of Electrical and Electronics Engineers |
| MJPEG | Motion Joint Photographic Experts Group |
| MTBF | Mean Time Between Failures |
| ONVIF | Open Network Video Interface Forum |
| PoE | Power over Ethernet |
| PTZ | Pan Tilt Zoom |
| TCP/IP | Transmission Control Protocol/Internet Protocol |

# 1 INTRODUCTION

## 1.1 Overview

.1 This standard defines the requirements of Correctional Service Canada (CSC) for a pan, tilt, zoom (PTZ), network capable, dome camera for use at federal correctional institutions. PTZ cameras are deployed to allow detailed examination of areas typically covered by fixed cameras or areas without regular evidentiary coverage.

## 1.2 Purpose

.1 The cameras are deployed primarily for observation use. Given they may be pointed anywhere, they are not assumed to be evidentiary coverage.
.2 These cameras are for deployment for all outdoor PTZ camera locations.
.3 These cameras are for deployment for all indoor PTZ camera locations.

# 2 REFERENCES

## 2.1 Specifications, Standards, and Statements of Work

.1 Access to non-government specifications is the responsibility of the contractor.

- IEC EN55024 – International Electrotechnical Commission Information technology equipment – Immunity characteristics – Limits and methods of measurement
- IEC EN60529 – International Electrotechnical Commission Degrees of protection provided by enclosures (IP Code)
- IEC EN60950-1 – International Electrotechnical Commission Information technology equipment – Safety
- IEC EN62262 – International Electrotechnical Commission Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts
- IEEE 802.3at – IEEE Standard for Information technology – Telecommunications and information exchange between systems – Local and metropolitan area networks – Specific requirements Part 3: Carrier Sense Multiple Access with Collision Detection (CSMA/CD) Access Method and Physical Layer Specifications Amendment 3: Data Terminal Equipment (DTE) Power via the Media Dependent Interface (MDI) Enhancements
- IEEE 802.3u – IEEE Standards for Local and Metropolitan Area Networks: Supplement to Carrier Sense Multiple Access with Collision Detection (CSMA/CD) Access Method and Physical Layer Specifications Media Access Control (MAC) Parameters, Physical Layer, Medium Attachment Units, and Repeater for 100 Mb/s Operation, Type 100BASE-T

# 3 PHYSICAL

## 3.1 Dimensions

.1 The camera case and dome must:

.1 measure a base diameter less than 250mm;
.2 measure from base to top of dome of less than 400mm excluding any mount;
.3 weigh less than 5kg excluding mounting hardware;

## 3.2 Environment

.1 The camera case and dome must:

.1 meet or exceed IEC EN60529 IP66 dust and water resistance when mounted;
.2 if deployed within 5 metres of inmates, meet or exceed IEC EN62262 IK10 impact resistance;
.3 if surface mount, have threaded openings for conduits;
.4 if pendant mount, have all cables enter through the attachment pipe;
.5 if pendant mount, have no other openings in the enclosure excluding the dome assembly;
.6 have a threaded plug to seal all unused openings;
.7 have set-screws to secure all conduit and plugs from inside the dome;
.8 have tamper resistant heads on all externally accessible screws;
.9 have a permanently affixed label on the interior of the unit which identifies the manufacturer, the model or assembly number, the serial number and the power requirement;
.10 have a permanently affixed label on the exterior of the unit which identifies the manufacturer, the model or assembly number, the serial number and the power requirement;

.2 The camera must:

.1 be capable of continuous operation;
.2 start and operate from -40°C to 50°C;
.3 start and operate from 20% to 90% non-condensing humidity;

## 3.3 Interference

.1 The camera must be certified compliant to IEC EN 55024, Immunity characteristics.

## 3.4 Reliability

.1 The camera must have an MTBF of at least 25,000 hours.

## 3.5 Safety

.1 The camera must meet IEC 60950-1 or the CSA equivalent.

# 4 OPERATIONAL

## 4.1 Camera

.1 The camera must retain its configuration over a power cycle.

.2 The image sensor must:

- .1 include automatic or remote back focus;
- .2 have a minimum of 480,000 pixels (horizontal x vertical);
- .3 have day (colour) and night (black and white) modes;
- .4 automatic removable infrared cut filter for day/night transition;
- .5 1.0 lux or less minimum illumination for day mode;
- .6 0.1 lux or less minimum illumination for night mode;
- .7 include Automatic Gain Control (AGC);
- .8 include extended dynamic range processing;

## 4.2 Lens

.1 The camera lens must:

- .1 have a horizontal field of view optical zoom range including 3.5° to 50°;
- .2 be integral to the camera assembly;

## 4.3 PTZ

.1 The PTZ must:

- .1 have a pan range of 360° continuous (endless);
- .2 have a minimum tilt range of 180°;
- .3 include automatic image inversion at 90° tilt;
- .4 have a minimum pan and tilt speed of 0.1°/sec or slower;
- .5 have a maximum pan and tilt speed of 100°/sec or faster;

## 4.4 Video

.1 The video encoding must:

- .1 support H.264 configurable I-frame frequency of at least 3 per second;
- .2 support H.264 constant bit rate transmission mode;
- .3 support H.264 frame rate transmission mode;
- .4 support at least 3 levels of H.264 image quality;
- .5 support at least 3 levels of MJPEG image quality;

.2 The video output must:

- .1 include an on-screen, programmable character generation overlay capability with a minimum of 8 visible characters;
- .2 support at least two simultaneous H.264 video streams at 30 frames per second with at least 480,000 pixel resolution;
- .3 support at least two simultaneous video streams, one H.264 and one MJPEG at 15 frames per second with at least 480,000 pixel resolution;

# 5 INTERFACE

## 5.1 Ports

.1 The camera must:

.1 interface over IPV4 TCP/IP;
.2 be able to operate on 100Base-TX (IEEE 802.3u);
.3 connect using an RJ-45 connector;
.4 be ONVIF compliant;

## 5.2 Power

.1 The camera must be a Type 1 or Type 2 powered device operating from Power over Ethernet (PoE) compliant with IEEE 802.3at Class 0, 1, 2, 3, or 4, or operating from an external 24VAC power source.

## 5.3 Video Management System Compatibility

.1 The camera model must be identified as “Certified” or “Supported by Design” in the Genetec Omnicast Supported Hardware camera list.