



**RETURN BIDS TO:**

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**Bid Receiving - PWGSC / Réception des soumissions  
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**11 Laurier St. / 11, rue Laurier**  
**Place du Portage, Phase III**  
**Core 0B2 / Noyau 0B2**  
**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  
11 Laurier St./11, rue Laurier  
7B3, Place du Portage, Phase III  
Gatineau, Québec K1A 0S5

<b>Title - Sujet</b> CCTV Equipment	
<b>Solicitation No. - N° de l'invitation</b> 21120-170532/A	<b>Amendment No. - N° modif.</b> 003
<b>Client Reference No. - N° de référence du client</b> 21120-170532	<b>Date</b> 2017-05-23
<b>GETS Reference No. - N° de référence de SEAG</b> PW-\$\$HN-465-72726	
<b>File No. - N° de dossier</b> hn465.21120-170532	<b>CCC No./N° CCC - FMS No./N° VME</b>
<b>Solicitation Closes - L'invitation prend fin</b> <b>at - à 02:00 PM</b> <b>on - le 2017-06-20</b>	<b>Time Zone</b> <b>Fuseau horaire</b> Eastern Daylight Saving Time EDT
<b>F.O.B. - F.A.B.</b> <b>Plant-Usine:</b> <input type="checkbox"/> <b>Destination:</b> <input checked="" type="checkbox"/> <b>Other-Autre:</b> <input type="checkbox"/>	
<b>Address Enquiries to: - Adresser toutes questions à:</b> Nadeau, Alexandra	<b>Buyer Id - Id de l'acheteur</b> hn465
<b>Telephone No. - N° de téléphone</b> (819) 420-2859 ( )	<b>FAX No. - N° de FAX</b> (819) 953-4944
<b>Destination - of Goods, Services, and Construction:</b> <b>Destination - des biens, services et construction:</b>	

**Instructions: See Herein**

**Instructions: Voir aux présentes**

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

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This amendment 003 is being raised to address questions submitted by potential bidders and to extend the closing date.

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1. Questions and Answers, All questions appear in their original format and language. The T.A's response appears in ***BOLD AND ITALIC***.

Q1a) During the site visits we came across a number of sites where the Pivot 3 storage solution is deployed and Genetec VMS is in operation. The STR however requires "new" video management software at each of the sites and integrating the Pivot 3 where Pivot 3 is installed.

Please clarify if we are to expand the Genetec VMS where it is available on site or if we have to supply a new stand alone Genetec solution?

***A1a) Expand, unless a new solution is required to allow for PTZ viewing of 360 cameras (if applicable)***

Q1b) If we have to expand the existing Genetec solution, please provide the current edition and version of software.

***A1b)***

- ***Bowden – Genetec Omnicast 4.8***
- ***Saskpen – Genetec Omnicast 4.8.2309.3***
- ***WCHL – Security Desk***
- ***SMI – Genetec Omnicast 4.8***
- ***Osborne – Genetec Omnicast 4.8***
- ***Drumheller – Genetec Omnicast 4.8.2609***
- ***Oskana – Genetec Omnicast 4.8***

Q1c) Are we to include software upgrades to the latest Genetec version to accommodate the new IP cameras? Can you confirm if all the sites with Genetec has a current Software Maintenance Agreement in place, if not can you provide the system ID's so we can check this with Genetec?

***A1c) We are not aware of a software management agreement in place.***

Q2) At OOHL, do we add 360 degree infra red lighting for the PTZ camera indicated with IR? What lighting distance is required? Can you provide a specification on what IR lighting you want?

***A2) We indicated a fixed IR camera (pointed at the gate) for this location plus a regular PTZ***

Q3) At OOHL can you please confirm that all out door cameras require fibre cable runs?

**A3) *Fibre runs are not required to new digital cameras (gate and maintenance area), all others will require fibre/network cable.***

Q4) At OOHL please confirm if a fibre connection exists between Block 3 and Block 9?

**A4) *Not to my knowledge, fibre goes from Block 9 to Block 8. There should be a conduit path from Block 8 to Block 3 as there are door alarms present that feed back to block 8.***

Q5) To ensure that we maintain the required video storage on each of the existing Pivot 3 storage units, we need to know what the current video retention is to determine if the added cameras will require expansion.

Please provide the "current video retention" for each Pivot 3 site?

**A5)**

- ***Bowden – 30 days (7 required)***
- ***Saskpen – Approximately 27 days (7 required)***
- ***WCHL – Approximately 90 days (7 required)***
- ***SMI – Approximately 25 days (7 required)***
- ***Osborne – 30 days (30 days required, currently mjpeg, upgrade to H264)***
- ***Drumheller – 30 days (7 required)***
- ***Oskana - 25 days (30 required – current format is mjpeg, upgrade to H264) single appliance***

Q6: Please confirm if the fixed camera specification on page 13, Item 4.6 of the STR regarding:

'1080p resolution @ 60fps; high low light sensitivity allowing color video at less than .01lux'

can be modified to:

'1080p resolution @ 30fps; high low light sensitivity allowing color video at less than .02 lux'

to enable a wider variety of options and more cost effective pricing?

**A6) *Negative – CSC specification and standard ES/STD-0232 requires minimum less than .01lux for night capability***

Q7) At Bowden Institution please confirm if there is existing fibre between Bldg 116 and 34?

**A7) *It is our understanding that there is, please bid as such. If it is revealed that there is none during the installation phase, a task authorization can be submitted to perform the additional work.***

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Q8) At Bowden Institution please confirm if a 360 deg camera in room 1137 would be acceptable or if we should keep this a PTZ?

**A8) *Keep it a PTZ***

Q9) At Hobbema please confirm network/rack location in building E.

**A9) *Pe Sakastew – Rack location is in building M – room M126***

Q10) At Drumheller, please provide specification for the thermal cameras at the fence line and building A01

**A10) *CSC thermal camera specifications and standards are attached, these are considered the minimum specs, better is acceptable.***

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1) The solicitation has been extended until **2:00pm EDT June 20<sup>th</sup> 2017.**

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**ALL REMAINING TERMS AND CONDITIONS ARE UNCHANGED**

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**Correctional Service Canada  
Technical Services Branch  
Electronics Systems**

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**ES/STD-0255  
Revision 0  
22 April, 2008**

**ELECTRONICS ENGINEERING  
STANDARDS**

**INTEGRATED OUTDOOR COLOUR/THERMAL CAMERA  
(With Pan/Tilt/Zoom)  
CLOSED CIRCUIT TELEVISION**

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Prepared by:

  
Manager,  
Electronics Systems Research

Approved by:

  
Director,  
Engineering Services  
30 May 08

Electronics Systems  
Electronic Engineering Standards

ES/STD-0255  
Revision 0  
22 April, 2008

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## 1.0 SCOPE

This standard defines the requirements of Correctional Service Canada (CSC) for an Integrated Colour/Thermal Closed Circuit Television (CCTV) camera for outdoor use at federal correctional institutions.

## 2.0 GENERAL

The outdoor camera, with integral pan/tilt/zoom, is used in security surveillance and assessment applications. The enclosure is mounted on roof tops and/or on building walls being subjected to high winds, various lighting and extreme weather conditions. Enclosure stability and effective operation during adverse lighting and weather conditions are essential. With the enclosure being located in "difficult to reach" locations, high reliability and ease of maintenance are also essential.

## 3.0 ENVIRONMENTAL REQUIREMENTS

The enclosure and subassemblies shall meet all operational requirements in the following operating range:

- 3.1 Temperature: -40° C to +50° C;
- 3.2 Humidity: 0 to 100%, condensing; and
- 3.3 Precipitation: rain, snow, hail to 2.5 cm diameters; and
- 3.4 Wind: 100 km/hour.

## 4.0 POWER REQUIREMENTS

The camera and pan/tilt module shall use power within the following limits:

- 4.1 Voltage: 24 VAC; or  
12 – 24 VDC; or  
117 VAC.
- 4.2 Frequency: 60 Hz ±1.5%; and
- 4.3 Power: power consumption shall not exceed 30 watts.

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## 5.0 MECHANICAL REQUIREMENTS

The integrated camera shall not exceed:

- |     |                   |                                               |
|-----|-------------------|-----------------------------------------------|
| 5.1 | Weight:           | 7.5 kg;                                       |
| 5.2 | Pan (Horizontal): | 0 - 360° (continuous) at 0.1°/sec to 90°/sec; |
| 5.3 | Tilt (Vertical):  | -75° - +75° at 0.1°/sec to 90°/sec; and       |
| 5.4 | Duty Cycle:       | continuous.                                   |

## 6.0 DESIGN REQUIREMENTS

- |     |                                                                                                                                                                                                   |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6.1 | The video signal must be transferred from the moving camera mount to the main equipment body via a non-contact system. Mechanical slip rings are not acceptable for video transfer.               |
| 6.2 | All equipment shall be designed to high quality standard and have a life expectancy of at least five years.                                                                                       |
| 6.3 | Enclosure shall have a label permanently affixed to the interior of the unit which identifies the manufacturer, the model or assembly number, the serial number and the mains power requirement.  |
| 6.4 | The colour camera shall utilize an interline transfer Charge-Coupled Device (CCD) pick up device.                                                                                                 |
| 6.5 | The thermal camera shall utilize an uncooled Vanadium Oxide Microbolometer.                                                                                                                       |
| 6.6 | The electronic circuits shall use solid state devices with Digital Signal Processing (DSP) equipment.                                                                                             |
| 6.7 | The thermal and visual camera images shall be presented to the operator as an overlaid display, with the operator having the ability to control the density of the overlaid thermal camera image. |

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## 7.0 TECHNICAL REQUIREMENTS

The colour/thermal camera shall meet the following minimum specifications:

The thermal camera shall meet the following minimum requirements:

- a. Uncooled vanadium oxide imaging array
- b. 320 x 240 pixels
- c. 7 – 14  $\mu\text{m}$  bandwidth
- d.  $\leq 100\text{mK}$  sensitivity
- e. NTSC video format
- f. 24° x 18° field of view (approximate, dependent on lens)
- g. selectable infrared polarity
- h. interchangeable lens



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The visual cameras shall meet the following minimum requirements:

- a. CCD imaging array
- b. 640 x 480 pixels
- c. 350 – 740 nm bandwidth
- d.  $\leq 0.1$  lux sensitivity
- e. NTSC video format
- f. 2.0° to 40° field of view (FOV)
- g. 25x optical zoom

#### 8.0 FUNCTIONAL REQUIREMENTS

- 8.1 The camera shall be tamper proof and use secure screws to allow access to the enclosure for maintenance purposes.
- 8.2 Air intakes used for ventilation shall be properly filtered to prevent dust, water or insects from entering the enclosure.
- 8.3 All assemblies shall provide 10,000 hours or more Mean Time Between Failure (MTBF) and be built for high reliability.
- 8.4 All assemblies within the enclosure must be accessible for ease of maintenance.

#### 9.0 INTERFERENCE

Performance of the camera and the video quality shall not be affected by the use of standard electronic equipment at the institution. Distance limits of standard electronic equipment are as follows:

- 9.1 CB transceivers at 1 metre or more;
- 9.2 VHF and UHF transceivers at 1 metre or more;
- 9.3 Other radio frequency transmitting, receiving and distribution equipment at 5 metres or more; and
- 9.4 Personal computer and/or computer work stations at 5 metres or more.

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10.0 **SAFETY**

The camera shall be CSA approved.

- END OF TEXT -

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**Correctional Service Canada  
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Electronics Systems**

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**ELECTRONICS ENGINEERING  
STANDARDS**

**INTEGRATED OUTDOOR COLOUR/THERMAL CAMERA  
(With Pan/Tilt/Zoom & InfraRed Light Source)  
CLOSED CIRCUIT TELEVISION**

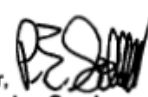
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Prepared by:



Manager,  
Electronics Systems Research

Approved by:



Director,  
Engineering Services

30 May 08

Electronics Systems  
Electronic Engineering Standards

**ES/STD-0256**  
Revision 0  
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## 1.0 SCOPE

This standard defines the requirements of Correctional Service Canada (CSC) for an Integrated Colour/Thermal Closed Circuit Television (CCTV) camera with InfraRed light source for outdoor use at federal correctional institutions.

## 2.0 GENERAL

The outdoor camera, with integral pan/tilt/zoom, is used in security surveillance and assessment applications. The enclosure is mounted on roof tops and/or on building walls being subjected to high winds, various lighting and extreme weather conditions. Enclosure stability and effective operation during adverse lighting and weather conditions are essential. With the enclosure being located in "difficult to reach" locations, high reliability and ease of maintenance are also essential.

## 3.0 ENVIRONMENTAL REQUIREMENTS

The enclosure and subassemblies shall meet all operational requirements in the following operating range:

- 3.1 Temperature: -40° C to +50° C;
- 3.2 Humidity: 0 to 100%, condensing; and
- 3.3 Precipitation: rain, snow, hail to 2.5 cm diameters; and
- 3.4 Wind: 100 km/hour.

## 4.0 POWER REQUIREMENTS

The camera and pan/tilt module shall use power within the following limits:

- 4.1 Voltage: 117 VAC.
- 4.2 Frequency: 60 Hz  $\pm$ 1.5%; and
- 4.3 Power: power consumption shall not exceed 200 watts.

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## 5.0 MECHANICAL REQUIREMENTS

The integrated camera shall not exceed:

- |     |                   |                                               |
|-----|-------------------|-----------------------------------------------|
| 5.1 | Weight:           | 7.5 kg;                                       |
| 5.2 | Pan (Horizontal): | 0 - 360° (continuous) at 0.1°/sec to 90°/sec; |
| 5.3 | Tilt (Vertical):  | -75° - +75° at 0.1°/sec to 90°/sec; and       |
| 5.4 | Duty Cycle:       | continuous.                                   |

## 6.0 DESIGN REQUIREMENTS

- |     |                                                                                                                                                                                                   |
|-----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6.1 | The video signal must be transferred from the moving camera mount to the main equipment body via a non-contact system. Mechanical slip rings are not acceptable for video transfer.               |
| 6.2 | All equipment shall be designed to high quality standard and have a life expectancy of at least five years.                                                                                       |
| 6.3 | Enclosure shall have a label permanently affixed to the interior of the unit which identifies the manufacturer, the model or assembly number, the serial number and the mains power requirement.  |
| 6.4 | The colour camera shall utilize an interline transfer Charge-Coupled Device (CCD) pick up device.                                                                                                 |
| 6.5 | The thermal camera shall utilize an uncooled Vanadium Oxide Microbolometer.                                                                                                                       |
| 6.6 | The electronic circuits shall use solid state devices with Digital Signal Processing (DSP) equipment.                                                                                             |
| 6.7 | The thermal and visual camera images shall be presented to the operator as an overlaid display, with the operator having the ability to control the density of the overlaid thermal camera image. |

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## 7.0 TECHNICAL REQUIREMENTS

The colour/thermal camera with InfraRed light source shall meet the following minimum specifications:

The thermal camera shall meet the following minimum requirements:

- a. Uncooled vanadium oxide imaging array
- b. 320 x 240 pixels
- c. 7 – 14  $\mu$ m bandwidth
- d.  $\leq$  100mK sensitivity
- e. NTSC video format
- f. 24° x 18° field of view (approximate, dependent on lens)
- g. selectable infrared polarity
- h. interchangeable lens

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The visual cameras shall meet the following minimum requirements:

- a. CCD imaging array
- b. 640 x 480 pixels
- c. 350 – 740 nm bandwidth
- d.  $\leq 0.1$  lux sensitivity
- e. NTSC video format
- f. 2.0° to 40° field of view (FOV)
- g. 25x optical zoom

The InfraRed light source shall meet the following minimum requirements:

- a. adjustable beam width, 1° to 40°
- b. minimum 7.5 million-candle power
- c. minimum 1 lux illumination at 1.0 km

## 8.0 FUNCTIONAL REQUIREMENTS

- 8.1 The camera shall be tamper proof and use secure screws to allow access to the enclosure for maintenance purposes.
- 8.2 Air intakes used for ventilation shall be properly filtered to prevent dust, water or insects from entering the enclosure.
- 8.3 All assemblies shall provide 10,000 hours or more Mean Time Between Failure (MTBF) and be built for high reliability.
- 8.4 All assemblies within the enclosure must be accessible for ease of maintenance.

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## 9.0 INTERFERENCE

Performance of the camera and the video quality shall not be affected by the use of standard electronic equipment at the institution. Distance limits of standard electronic equipment are as follows:

- 9.1 CB transceivers at 1 metre or more;
- 9.2 VHF and UHF transceivers at 1 metre or more;
- 9.3 Other radio frequency transmitting, receiving and distribution equipment at 5 metres or more; and
- 9.4 Personal computer and/or computer work stations at 5 metres or more.

## 10.0 SAFETY

The camera shall be CSA approved.

- END OF TEXT -



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**ES/STD-0257  
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**ELECTRONICS ENGINEERING  
STANDARDS**

**INTEGRATED OUTDOOR COLOUR CAMERA  
(With Pan/Tilt/Zoom & InfraRed Light Source)  
CLOSED CIRCUIT TELEVISION**

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Prepared by:



Manager,  
Electronics Systems Research

Approved by:



Director,  
Engineering Services

2 Jun 08

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Electronic Engineering Standards

**ES/STD-0257**  
Revision 0  
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## 1.0 SCOPE

This standard defines the requirements of Correctional Service Canada (CSC) for an Integrated Colour Closed Circuit Television (CCTV) camera with InfraRed light source for outdoor use at federal correctional institutions.

## 2.0 GENERAL

The outdoor camera, with integral pan/tilt/zoom, is used in security surveillance and assessment applications. The enclosure is mounted on roof tops and/or on building walls being subjected to high winds, various lighting and extreme weather conditions. Enclosure stability and effective operation during adverse lighting and weather conditions are essential. With the enclosure being located in "difficult to reach" locations, high reliability and ease of maintenance are also essential.

## 3.0 ENVIRONMENTAL REQUIREMENTS

The enclosure and subassemblies shall meet all operational requirements in the following operating range:

- 3.1 Temperature: -40° C to +50° C;
- 3.2 Humidity: 0 to 100%, condensing; and
- 3.3 Precipitation: rain, snow, hail to 2.5 cm diameters; and
- 3.4 Wind: 100 km/hour.

## 4.0 POWER REQUIREMENTS

The camera and pan/tilt module shall use power within the following limits:

- 4.1 Voltage: 117 VAC.
- 4.2 Frequency: 60 Hz  $\pm$ 1.5%; and
- 4.3 Power: power consumption shall not exceed 200 watts.

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#### 5.0 MECHANICAL REQUIREMENTS

The integrated camera shall not exceed:

- |     |                   |                                               |
|-----|-------------------|-----------------------------------------------|
| 5.1 | Weight:           | 7.5 kg;                                       |
| 5.2 | Pan (Horizontal): | 0 - 360° (continuous) at 0.1°/sec to 90°/sec; |
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| 5.4 | Duty Cycle:       | continuous.                                   |

#### 6.0 DESIGN REQUIREMENTS

- 6.1 The video signal must be transferred from the moving camera mount to the main equipment body via a non-contact system. Mechanical slip rings are not acceptable for video transfer.
- 6.2 All equipment shall be designed to high quality standard and have a life expectancy of at least five years.
- 6.3 Enclosure shall have a label permanently affixed to the interior of the unit which identifies the manufacturer, the model or assembly number, the serial number and the mains power requirement.
- 6.4 The colour camera shall utilize an interline transfer Charge-Coupled Device (CCD) pick up device.
- 6.5 The electronic circuits shall use solid state devices with Digital Signal Processing (DSP) equipment.

#### 7.0 TECHNICAL REQUIREMENTS

The colour camera with InfraRed light source shall meet the following minimum specifications:

The visual camera shall meet the following minimum requirements:

- a. CCD imaging array
- b. 640 x 480 pixels

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- c. 350 – 740 nm bandwidth
  - d.  $\leq 0.1$  lux sensitivity
  - e. NTSC video format
  - f. 2.0° to 40° field of view (FOV)
  - g. 25x optical zoom

The InfraRed light source shall meet the following minimum requirements:

- a. adjustable beam width, 1° to 40°
- b. minimum 7.5 million-candle power
- c. minimum 1 lux illumination at 1.0 km

#### 8.0 FUNCTIONAL REQUIREMENTS

- 8.1 The camera shall be tamper proof and use secure screws to allow access to the enclosure for maintenance purposes.
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- 9.2 VHF and UHF transceivers at 1 metre or more;

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9.3 Other radio frequency transmitting, receiving and distribution equipment at 5 metres or more; and

9.4 Personal computer and/or computer work stations at 5 metres or more.

**10.0 SAFETY**

The camera shall be capable of meeting CSA approval requirements.

- END OF TEXT -