**RFQ 2020-145**

**Specification for CCTV System and Intrusion Alarm System for Tendering Purposes**

1. **CCTV**
2. **8 - channel DVR Specification**

**Quantity required for UNHCR FO Mariupol: *2 DVRs***

8- Channel Digital Video Recorder with pre-installed 3 TB HDD / Add up to 8 cameras / latest recording technology / HDMI Output / Web and Smartphone remote viewing / Transfer incidents to USB flash drive Wider, clearer DVD-quality.

**Video**

Video Inputs 960H 8 Channels BNC

Video Outputs VGA and HDMI Output

Display Resolution Up to 1080p

Display Frame Rat NTSC: 30fps per channel / PAL: 25fps per channel

**Audio**

Audio Input 8 RCA Input

Audio Output 1 RCA Output

**Recording**

Compression Format H.264

Recording Resolution NTSC: 960H (960 x 480) PAL: 960H (960 x 576)

Recording Frame Rate Real Time: NTSC: Global 480fps / 30fps per Channel PAL: Global 400fps / 25fps per Channel

Recording Modes Manual / Schedule / Motion HDD Interface / Memory Type 3TB SATA2 HDD (installed) Hard Drive Support Up to 2TB SATA2 HDD

**Network**

LAN Connection One RJ45 Port

Network Protocol TCP/IP, PPPoE, DHCP, DNS, DDNS, NTP

Dynamic DNS Yes (swanndvr.net, DYNDNS)

Remote Operation IE, MyDVR, CMS, SwannView

**General**

Operating Power DC 12V

Back up method External storage via USB, eSATA or network

Mouse Support Yes

Remote Control Yes (uses 2 x AAA, included)

1. **Night Vision/ Day & Night CCTV Camera**

**Quantity required:**

* **For UNHCR FO Mariupol – 13 (9 external cameras + 4 internal)**

**General Requirements**

* The High-Resolution night vision camera shall include, as a minimum, the following features/functions/specifications.
* High performance, ultra-miniature, high-resolution digital low light CCTV color camera with 0.5 lux low light sensitivity in color mode, and 0.01 lux low light sensitivity in “night” mode.
* The High-Resolution night vision camera shall incorporate a 1/3- inch interline transfer CCTV, digital signal processing (DSP), and a minimum of 480 TV lines of resolution utilizing an effective pixel count of no less than 1920 (H) x 1080 (V) PAL.
* The High-Resolution night vision camera shall provide excellent color performance in low light, down to

0.01 lux @ f3.6 (50IRE). The camera shall incorporate advanced circuitry allowing for automatic changeover to monochrome, providing monochrome performance in extremely low light down to 0.01 lux @ f3.6 (50IRE). For extreme lighting situations, the camera shall support the use of DC and Video iris lenses, selectable by a switch on the unit.

* The High-Resolution Camera shall include a switching 12VDC.
* The High-Resolution Camera shall have a signal to noise ratio of 50 dB with the AGC off.
* The High-Resolution Camera shall incorporate auto white balance to constantly monitor the light and adjust its color. The following three modes must be available:

Auto-White Balance (WB-Auto), Preset White Balance (WB-Push), Manual White Balance (WB-Manual)

* To allow the image to be viewed properly on a standard monitor, the High- Resolution Camera’s default gamma value must be 0.45.
* The High-Resolution Camera shall include a Flicker less mode, allowing the unit to be used in applications with 50Hz fluorescent lighting.
* The High-Resolution Camera shall offer a menu system capable of activating all the features and options available on the camera.

**Specifications**

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| **Sensor** | 1/3" SHARP |
| **Effective Picture Elements (H x V)** | 1920 (H) x 1080 (V) |
| **Horizontal Resolution** | 600 TV Line |
| **Minimum Illumination** | 0.01 lux F3.6 / 0 lux (with IR LED on) |
| **S/N Ratio** | More than 48 dB |
| **Scanning System** | 2:1 interface |
| **Synchronous System** | Internal, negative sync. |
| **Auto Electronic Shutter** | 1/60 s ~ 1/100,000 s |
| **Gamma Characteristic** | 0.45 |
| **IR Distance** | 196 ft (with Ø5 x 72 PCS Infrared LEDs) |
| **IR Status** | Under 10 lux by CDS | |
| **IR Power On** | CDS AUTO control | |
| **Video Output** | 1 Vp-p, 75 Ω | |
| **Auto Gain Control** | Auto | |
| **Power** | 12 V dc | |
| **Lens** | 12 mm manual zoom – with this specification is needed only one external camera, the rest of the external cameras will be standard with unchangeable focus | |
| **Storage Temperature** | -22 ~ 140 °F (-30 ~ +60°C) RH 95 % max | |
| **Operating Temperature** | 14 ~ 122 °F (-10 ~ +50°C) RH 95 % max | |

1. **Duct Cabling**

**Quantity required: quantity to be calculated by the provider based on the size of the office’s compounds and number of items to be connected.**

**Cable specifications**: Standard cable for CCTV SG 69

1. **UPS 1KVA/12V & Wet Battery 200A for DVR & CCTV Camera**

**Quantity required: 2 UPS**

**UPS Specifications**: Standard UPS for DVR

1. **LED 24 Inch for DVR & CCTV Camera Display**

**Quantity required: - 2**

* HDMI x 2
* USB 2.0 x 1
* Digital Audio Optical) x 1
* PC Audio Input (Mini Jack) x 1
* DVI Audio Input x 1(Common Use for PC Audio in)
* Component(Y/Pb/Pr) x 1
* Composite (AV) x 2(1: Common use for Comp Y)
* RF Input x 2(Terrestrial/Cable Input)

**Video**

* 40" Screen size
* 1920 x 1080 Resolution
* 100 Clear Motion Rate (CMR)
* Wide Color Enhancer Plus

**Connectivity**

* 2 HDMI
* 1 USB
* Headphone x 1 ea
* Component In (Y/Pb/Pr) x 1 ea
* Composite In (AV) x 1 (Common Use for Component Y) ea
* RF In (Terrestrial / Cable input) x 1 ea

1. **Intrusion Alarm for UNHCR FO Mariupol**
2. **Security and Fire Control Receiver Lun 7T** of wireless GSM communication line with additional external antenna - 1 his security and fire control receiver, using wireless GSM communication line, is intended for organizing the board (technical) security control of small and middle size objects such as offices, shops, apartments

It may be operated in combination with Lind-9 keyboard or Lind-7 electronic key reader, and also it may work without remote indication and control modules – for the objects of “alarm button” type.

- may be operated in combination with the devices of Lun’-7H complex.

Lun’-7T has the following characteristics:

- 8 configured loops with terminal resistors 4,7 kOm;

- the transfer of information to the board is provided on voice and GPRS channels in GSM network;

- control of the ac network (220 V) availability;

- control of battery discharge;

- activation and deactivation of security system is performed with Touch Memory electronic key (to 15 units) or codes - with Lind-9 keyboard;

- terminal BELL (open collector) for connecting the alarm (load current rating up to 1A);

- additional, remotely controlled AUX terminal (open collector) with load current rating up to 1A;

- enables to perform all the functions of remote control and report on the state by request from the board;

- the possibility of connecting up to 29 devices of Lun’-7H complex.

- has the interface for connecting:

- the module of relay terminals MPB-8;

- telephone communicator TK-7.

1. **SBT – 60 or similar – 7**

Range of detection (in rooms) 90-180 m

Range of detection (external environment) of 30-60 m

Infrared beam 2 beam

Detection system Detection of Interruption of 2 Beams

Radiation source Infrared light-emitting diode

Time of reaction of 50-700 ms

Exit of alarm of the Relay with the switched contact of 0.5 A max. 30 V of an alternating / direct current

Supply voltage is 12-28 V of a direct current

Current of consumption 40 ma 12-28 V of a direct current

Temperature - 25 C ~ + 55 C

Exit of contact of NSD

Unipolar switch

Corner of a horizontal adjustment + - 90 grd

Corner of a vertical adjustment + - 10 grd

1. **Duct cabling**

Quantity required: quantity to be calculated by the provider based on the size of the office’s compounds and number of items to be connected.

1. **Intrusion Alarm maintenance in Sloviansk – installation of new cabling for the intrusion alarm in SO Sloviansk and testing of the system.**

Quantity required: quantity to be calculated by the provider based on the size of the office’s compounds and number of items to be connected.

1. **Additional requirements to the supplier**

The supplier needs to have contract with the manufacturer of the equipment or has certificate as official dealer of the equipment (CCTV DVR, CCTV cameras, spare parts);

The supplier needs to have the equipment certified in accordance with the Ukrainian legislation;

Specify the warranty period of the equipment;

Specify the warranty period of the installation works;

The supplier needs to have own team of technical specialists in Sloviansk and Mariupol who will install, test and put the equipment into operation as well as the maintenance during the warranty period;

The supplier needs to carry out assessment of needed materials and quantity of work