

Anexa nr. 22
la Documentația standard
aprobată prin Ordinul Ministrului Finanțelor
nr. 115 din 15.09.2021

Specificații tehnice

[Acest tabel va fi completat de către **ofertant în coloanele 2, 3, 4, 6, 7**]

Numărul procedurii de achiziție: <i>ocds-b3wdp1-MD-1754488277139</i>						
Obiectul achiziției: <i>Camere video studio</i>						

Denumirea bunurilor/ serviciilor	Denumirea modelului bunului/ serviciului	Țara de origine	Produ că torul	Specificarea tehnică deplină solicitată de către autoritatea contractantă	Specificarea tehnică deplină propusă de către ofertant	Standarde de referință
1	2	3	4	5	6	7
Camere video studio						
Lotul nr. 1						
1.1. Camera (set)	HXC-Z90SN	Japonia	Sony	Camera - Imaging Image Sensor - 2/3"-Type CMOS Sensor Resolution - Effective: 8.3 Megapixel (3840 x 2160) Horizontal Resolution (TV Lines) - 2000 TV Lines or More Gain - -6 to 12 dB Sensitivity- f/11 at 2000 lux 89.9% Reflectance (at 3200K, 50 Hz) Signal-to-Noise Ratio - -62 dB Lens Focal Length - 8.2 to 164mm Optical Zoom Ratio - 20x Maximum Aperture - f/1.9 Minimum Aperture - f/16 Minimum Focus Distance - 35.4" / 90.0 cm; Macro: 0.4" / 1.0 cm Filter Size - 82 mm Control Rings – Focus, Zoom, Iris	Camera - Imaging Image Sensor - 2/3"-Type CMOS Sensor Resolution - Effective: 8.3 Megapixel (3840 x 2160) Horizontal Resolution (TV Lines) - 2000 TV Lines or More Gain - -6 to 12 dB Sensitivity- f/11 at 2000 lux 89.9% Reflectance (at 3200K, 50 Hz) Signal-to-Noise Ratio - -62 dB Lens Focal Length - 8.2 to 164mm Optical Zoom Ratio - 20x Maximum Aperture - f/1.9 Minimum Aperture - f/16 Minimum Focus Distance - 35.4" / 90.0 cm; Macro: 0.4" / 1.0 cm Filter Size - 82 mm Control Rings – Focus, Zoom, Iris	RoHS

	HXCU-Z90N	Japonia	Sony	<p>Focus Control – Autofocus, Manual Focus Camera</p> <p>Lens Mount - B4 Mount</p> <p>Shutter Type - Electronic Rolling Shutter</p> <p>Shutter Speed - 1/2000 to 1/100 Second</p> <p>Built-In ND Filter - Mechanical Filter Wheel with Clear, 2-Stop (1/4), 4-Stop (1/16), 6-Stop (1/64) ND Filters</p> <p>Broadcast System Compatibility - NTSC, PAL</p> <p>Interfaces</p> <p>CCU I/O - 1x Neutrik</p> <p>Video I/O - 1x BNC (12G-SDI) Input/Output, 1x BNC (HD-SDI) Output</p> <p>Audio I/O - 2x XLR 3-Pin Mic/Line Input, 1x 1/8" / 3.5 mm TRRS Headphone/Mic Headphone Output, 1x XLR 5-Pin Intercom Input/Output</p> <p>Lens Control - 1x 12-Pin</p> <p>Other I/O - 1x 20-Pin Viewfinder Output, 1x BNC (Genlock) Control, 1x Hirose 8-Pin (RS-422) Control</p> <p>Recording</p> <p>External Recording Modes - SDI/BNC / Optical Fiber</p> <p>HD (1920 x 1080p) at 50/59.94/60.00 fps</p> <p>HD (1920 x 1080i) at 50/59.94 fps</p> <p>HD (1920 x 1080PsF) at 23.98/24.00/25/29.97 fps</p> <p>Variable Frame Rates - Up to 60 fps</p> <p>Gamma Curve - HDR-HLG, Rec2020, Sony S-Log 3</p> <p>EVF</p> <p>Display Type – OLED, Size - 7.4"</p> <p>Resolution - 960 x 540</p> <p>Camera Control Unit</p> <p>Input/Output</p> <p>Fiber Cable Supported - Single Mode LC, CCFN</p> <p>Camera Connector - 1 x Neutrik Optical Fiber</p> <p>Power Supply - Maximum Distance: 300 m</p> <p>Maximum Distance - 10 km</p>	<p>Focus Control – Autofocus, Manual Focus Camera</p> <p>Lens Mount - B4 Mount</p> <p>Shutter Type - Electronic Rolling Shutter</p> <p>Shutter Speed - 1/2000 to 1/100 Second</p> <p>Built-In ND Filter - Mechanical Filter Wheel with Clear, 2-Stop (1/4), 4-Stop (1/16), 6-Stop (1/64) ND Filters</p> <p>Broadcast System Compatibility - NTSC, PAL</p> <p>Interfaces</p> <p>CCU I/O - 1x Neutrik</p> <p>Video I/O - 1x BNC (12G-SDI) Input/Output, 1x BNC (HD-SDI) Output</p> <p>Audio I/O - 2x XLR 3-Pin Mic/Line Input, 1x 1/8" / 3.5 mm TRRS Headphone/Mic Headphone Output, 1x XLR 5-Pin Intercom Input/Output</p> <p>Lens Control - 1x 12-Pin</p> <p>Other I/O - 1x 20-Pin Viewfinder Output, 1x BNC (Genlock) Control, 1x Hirose 8-Pin (RS-422) Control</p> <p>Recording</p> <p>External Recording Modes - SDI/BNC / Optical Fiber</p> <p>HD (1920 x 1080p) at 50/59.94/60.00 fps</p> <p>HD (1920 x 1080i) at 50/59.94 fps</p> <p>HD (1920 x 1080PsF) at 23.98/24.00/25/29.97 fps</p> <p>Variable Frame Rates - Up to 60 fps</p> <p>Gamma Curve - HDR-HLG, Rec2020, Sony S-Log 3</p> <p>EVF</p> <p>Display Type – OLED, Size - 7.4"</p> <p>Resolution - 960 x 540</p> <p>Camera Control Unit</p> <p>Input/Output</p> <p>Fiber Cable Supported - Single Mode LC, CCFN</p> <p>Camera Connector - 1 x Neutrik Optical Fiber</p> <p>Power Supply - Maximum Distance: 300 m</p>	RoHS
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	SS-41-IASD	Japonia	Canon	Digital Focus Servo, Digital Zoom Servo and other accessories	Full-Servo Kit compatible with camera lens	
	FPM-77	Japonia	Canon		Digital Focus Servo, Digital Zoom Servo and other accessories	RoHS
	8-Pin to 20-Pin Adapter Cable	Japonia	Canon			RoHS
	6-Pin Male to 20-Pin Female Adapter Cable	Japonia	Canon	Hybrid Type Optical Fiber Cable min 150m Warranty: 3 years.	Hybrid Type Optical Fiber Cable min 150m Warranty: 3 years.	RoHS
	CCFN-150	Japonia	Sony			RoHS
1.2. Camera remote control panel	RCP-3500	Japonia	Sony	Master setup unit, multi camera remote control panel for system cameras (horizontal type) (compatible with camera position 1) Flexible, scalable system configuration The multi camera remote control panel can be configured for use with large and small-scale camera control systems. A multi camera remote control panel can flexibly control up to 96 units of system camera. Customizable Switches Functions and Menu can be mapped to the assignable keys via the Menu Control page, allowing quick and easy access. There will be a maximum of 21 keys in any of F1 to F11 and 1 to 10 on the panel. This is available via SW Customize menu with the categorized items. LCD touchpanel The large LCD touchpanel features a 7-inch WVGA (800x480) panel with improved visibility. High speed LAN connection The multi camera remote control panel supports connectivity via 1000Base-T Ethernet LAN in	Master setup unit, multi camera remote control panel for system cameras (horizontal type) (compatible with camera position 1) Flexible, scalable system configuration The multi camera remote control panel can be configured for use with large and small-scale camera control systems. A multi camera remote control panel can flexibly control up to 96 units of system camera. Customizable Switches Functions and Menu can be mapped to the assignable keys via the Menu Control page, allowing quick and easy access. There will be a maximum of 21 keys in any of F1 to F11 and 1 to 10 on the panel. This is available via SW Customize menu with the categorized items. LCD touchpanel The large LCD touchpanel features a 7-inch WVGA (800x480) panel with improved visibility. High speed LAN connection The multi camera remote control panel supports connectivity via 1000Base-T Ethernet	RoHS

				<p>addition to a single connection by CCA 8-pin cable</p> <p>Status indication</p> <p>By the Status key, the connected camera/CCU/BPU's alert status can be indicated on the LCD panel if it occurs. Some of the setting status can be also indicated.</p> <p>Warranty: 3 years.</p>	<p>LAN in addition to a single connection by CCA 8-pin cable</p> <p>Status indication</p> <p>By the Status key, the connected camera/CCU/BPU's alert status can be indicated on the LCD panel if it occurs. Some of the setting status can be also indicated.</p> <p>Warranty: 3 years.</p>	
1.3. Installation	Installation	Instalar e	Instala re	<p>Installation and commissioning of the camera system.</p> <p>Materials and passive/active elements necessary for the interconnection of equipment and its commissioning.</p> <p>Assembly work, as well as installation, adjustment, testing operations;</p> <p>The system will be delivered turnkey.</p> <p>Hardware warranty minimum 3 years.</p>	<p>Installation and commissioning of the camera system.</p> <p>Materials and passive/active elements necessary for the interconnection of equipment and its commissioning.</p> <p>Assembly work, as well as installation, adjustment, testing operations;</p> <p>The system will be delivered turnkey.</p> <p>Hardware warranty 3 years.</p>	
Lotul nr. 2						
2.1. Live production switcher				<p>Connections</p> <p>Total Video Inputs - 20</p> <p>Total Video Outputs - 12</p> <p>2 M/E rows</p> <p>SDI Rates - 1.5G, 3G</p> <p>Total Audio Inputs - 2 x balanced 1/4 inch Jack, 1 x 5 pin XLR Talkback.</p> <p>Total Audio Outputs - 1 x 5 pin XLR Talkback.</p> <p>SDI Audio Inputs - 8 Ch embedded audio on all SDI inputs.</p> <p>SDI Audio Outputs - 16 Ch embedded audio on all SDI outputs.</p> <p>Reference Input - Tri-Sync or Black Burst.</p> <p>Video Input Re-Sync - 20 inputs.</p> <p>Frame Rate and Format Converters - 20 inputs.</p> <p>SDI Aux Outputs - Any of the 12 SDI outputs.</p> <p>SDI Preview Outputs - Any of the 12 SDI outputs.</p> <p>SDI Program Outputs - Any of the 12 SDI outputs.</p> <p>Webcam Output - 1 x USB-C supporting 720p or 1080p at PGM frame rate.</p>		

				<p>Total Multi Views - 2 x 3G-SDI</p> <p>Control Panel Connection - Ethernet. Direct connection between panel and chassis, or via network.</p> <p>Ethernet - Supports 10/100/1000 BASE-T.</p> <p>Computer Interface - 1 x USB-C supports USB 2.0</p> <p>HD Video Standards - 720p50, 720p59.94, 720p60, 1080i50, 1080i59.94, 1080i60, 1080p23.98, 1080p24, 1080p25, 1080p29.97, 1080p30, 1080p50, 1080p59.94, 1080p60</p> <p>Upstream Keyers - 8</p> <p>Downstream Keyers - 2</p> <p>Advanced Chroma Keyers - 8</p> <p>SuperSource - 1</p> <p>Linear/Luma Keyers - 11</p> <p>Transition Keyer (Stinger/DVE) - 2 Stinger, 2 DVE.</p> <p>Total Number of Layers - 15</p> <p>Pattern Generators - 11</p> <p>Color Generators - 2</p> <p>Multi View Monitoring - 2 x multi views each configurable to 16, 13, 10, 7 or 4 up views. Includes monitoring of Program, Preview, Inputs, Media Players, M/Es, DSKs, SuperSource, Clean Feed with optional labels and audio meters.</p> <p>Media Players - 2</p> <p>Channels - Fill and key for each media player.</p> <p>Media Pool Still Image Capacity - 40</p> <p>Media Pool Clip Capacity - 2 x up to 1080p60.</p> <p>Media Player Clip Length in 1080 HD - 400 frames.</p> <p>Media Pool Still Image Format - PNG, TGA, BMP, GIF, JPEG and TIFF.</p> <p>Media Pool Video File Format - TGA Sequence.</p> <p>Media Pool Audio File Format - WAV, MP3 and AIFF.</p>		
2.2. Control Panel				<p>Product Specifics</p> <p>Number of Mix Effects Rows - 2</p> <p>Direct Cross Points - 20</p>		

				Shifted Cross Points - 40 Crosspoint Button Type - Tri-Color LED Crosspoint Label - 6 rows 24 character LCD On-Air indicator - 8 DSK Transition Selectors - 4 x Auto, Cut, Tie/Preview Preview Transition - 2 LCD Menu Displays - 2 Menu Control - 2 x 20 buttons Dedicated Macro Buttons - 2 x 20 Transport Control Buttons - 8 Destination Bus - 2 Source Select Bus - 2 Fader Bar - 2 3 Axis Joystick - 1 Numeric Keypad – 1 Compatible with Live production switcher in position 2.1		
2.3. Intercom System				Intercom System Industry Standard 19" 1U rack design, for easy integration Supports 8-Way Intercom Additional external earphone and microphone interface Bi-colour tally light indicator Selectable channel talk, broadcast to all or mute. Half-Duplex design for ITC-100SL to eliminate the environmental noise Enables communication between the camera crew Communication distance up to 200 meters Supplied complete with Gooseneck Microphone and Light Include in set; 1 x Base Unit 8 x Belt Pack 8 x Carry Case		

				8 x Dual Side Headset with microphone 4 x Tally LED Indicator 1 x XLR Gooseneck Microphone 1 x XLR Gooseneck Light 1 x 12V 1A Power Supply Unit		
2.4. Video Recorder				Key Features Records up to 4K DCI at 30 fps Plays Back up to 3840 x 2160 at 30 fps 1 x 6G-SDI Input, 1 x HDMI 2.0 Input 1 x HDMI 2.0 and 2 x 6G-SDI Outputs Records ProRes, DNxHD, and H.264 Records in H.264 SDI 4:2:2 10-Bit Front-Panel Buttons, Jog Wheel, LCD Timecode and Reference Input/Output 1/2 Rack-Mountable Form Factor USB-C, 1G Ethernet, RS-422 Connectivity Video Inputs - 1 x BNC, 6G-SDI, 1 x HDMI 2.0 Type A Video Output - 1 x BNC, 6G-SDI Loop-Out, 2 x BNC, 6G-SDI, 1 x HDMI Type A, 2.0, 1 x USB Type-C (Webcam or External Recording of SD, HD, 2K DCI), 1 x BNC, 3G-SDI (Monitor Out) Timecode - In: 1 x BNC, Out: 1 x BNC Reference - Tri-Sync or Black Burst Audio Input - Embedded Audio Only, 16 Channels Ethernet - 1 x RJ45 for Remote Operation Media Interface - 2 x SD Slots, Media Type: UHS I and UHS II, Format: ExFAT or HFS+ Supported Codecs ProRes, DNxHD, H.264 Power Supply AC - 100 to 240 VAC, 50/60 Hz DC - 12 VDC; 1 x 4-Pin XLR		
2.5. Stabilizer System				Stabilizing Arm for Camera & Gimbals Payload: min. 3.6 kg – max. 12 kg Height: Mounted: 100 cm, folded: 60 cm		

				<p>Suspension rope length: 152,5 cm</p> <p>Suspension line material: 3mm nylon</p> <p>Top bar: leigh: 560 mm, rotation 180 degrees</p> <p>Waist hip strap length: min. 81 cm – max. 125 cm</p> <p>Tilt range: 40 degrees up/down</p> <p>Side to side movement: 180 degrees</p> <p>Arm construction: Aluminum, Carbon Steel, Stainless Steel, EPDM Rubber</p> <p>Arm payload: 5-20 kg</p> <p>Arm load capacity: Blue Spring: 4.99 to 11.79 kg, Red Spring: 11.79 to 19.96 kg</p> <p>Quick Release Camera Hook load capacity up to 25 kg</p> <p>Include: Two Axis Spring Arm, Professional Support for Camera & Gimbals, Bag Packing, Quick Release Camera Hook for Support System, 4 x Ball Studs</p> <p>Warranty: 3 years.</p>		
Lotul nr. 3						
3.1. Portable Switcher				<p>Uncompressed capture for live streaming, comply with UVC & UAC</p> <p>Portable All-In-One design with 15.6 inch FHD LCD display for multiview</p> <p>6 channel inputs: 4×SDI 1080i and 2×HDMI/ DVI-I/ VGA/ USB</p> <p>1×USB type-C out, 3×SDI PGM/ AUX out</p> <p>2×HDMI PGM & 1×HDMI multiview out</p> <p>Multiformat input auto-detected and PGM/AUX output format selectable</p> <p>T-Bar/ AUTO/ CUT transitions and MIX/ FADE/ WIPE effects</p> <p>Luma Key/ Chroma Key/ Recordder/</p> <p>Audio mixer: TRS audio & SDI, HDMI, USB embedded audio</p> <p>Record SD card, H.264, record for PGM up to 1080p60</p>		
3.2. Hybrid Cable (Video				Hybrid Cable		

+ Audio)				twisting: 1x video (V06L/28AF, stranded) + 2x digital audio + tracers taping: fleece outer jacket: PVC overall diameter: max. 12.1 mm audio cable cond. construction: stranded tinned copper, 7x 0.20 mm (AWG 24/7) cond. cross section: 0,22 mm ² core arrangement: 2 cores twisted to a pair shielding: stranded tinned copper drain wire + AL/PVC foil outer jacket: PVC, grey, brown, Ø 4.0 mm conductor resistance: < 85 Ω/km capacitance: 47 pF/m characteristic impedance: 110 Ω video cable inner conductor: stranded bare copper, 7x 0.20 mm insulation: foam-skin PE, Ø 2.8 mm shielding: AL/PET/AL double-layer foil + tinned copper braid (92% coverage) outer jacket: PVC, green, red, Ø 4.5 mm characteristic impedance: 75 Ω ± 3% mechanical & thermal characteristics permissible working temperature: -25°C / +70°C min. bending radius: fixed installed: 60 mm, mobile use: 120 mm	
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Semnata: _____ Numele, Prenumele: Popa Rodica În calitate de: Administrator

Ofertantul: "INNOVATOR REGIONAL" LLC Adresa: MD-2075 or. Chişinău, str. N.M. Spătarul 19/2, ap. 10

**Coloanele 2, 3, 4, 6, 7 se completează fără nici o abatere de la formular. Completarea defectuoasă a formularului atrage respingerea ofertei.*

