



## Annex-A RFQ 2408-24

### Technical Specification (TS) (Re-bid)

Title	Service Procurement, Equipment Acquisition, and Weather Studio media Installation for ANAM Burkina Faso
Background information	Burkina Faso National Meteorological Agency, through the World Meteorological Organization (WMO) is looking to fund a new weather studio set for public weather service corresponding to the international standard. Henceforth, this request for quotation is for the supply of completely new operational weather studio equipment, including the shipment to Ouagadougou, installation on site and training.
Requirements	<p><b>Video</b></p> <ol style="list-style-type: none"> <li>1) UHD 4K 3G-SDI/HDMI Camera</li> <li>2) HD and 4K live production switchers</li> </ol> <p>Video Inputs:</p> <ul style="list-style-type: none"> <li>• Minimum of 8 HDMI inputs for various cameras and video sources.</li> <li>• At least 4 SDI inputs for professional-grade video equipment.</li> </ul> <p>Video Outputs:</p> <ul style="list-style-type: none"> <li>• At least 4 HDMI outputs for program, preview, and multiview monitoring.</li> <li>• SDI outputs for high-quality broadcasting.</li> <li>• Resolution and Refresh Rate:             <ul style="list-style-type: none"> <li>• Support for Full HD (1080p) and 4K resolutions.</li> <li>• Standard refresh rates including 30 fps and 60 fps, with support for higher rates.</li> </ul> </li> </ul> <p>Audio Support:</p> <ul style="list-style-type: none"> <li>• Integrated audio mixer with numerous channels, often more than 12.</li> <li>• XLR/TRS inputs for external microphones and audio sources.</li> </ul> <p>Transitions and Effects:</p> <ul style="list-style-type: none"> <li>• Advanced chroma key support for high-quality overlays.</li> <li>• Comprehensive range of transition effects such as fades, wipes, and cuts.</li> <li>• Picture-in-Picture (PiP) and other composition effects for dynamic presentations.</li> </ul> <p>Control Interface:</p> <ul style="list-style-type: none"> <li>• Physical control panel with tactile buttons, sliders, and optional touchscreen interfaces.</li> <li>• Software control compatibility with Windows and macOS.</li> </ul>

	<p>Broadcasting and Recording Capabilities:</p> <ul style="list-style-type: none"> <li>• Integrated encoding for live streaming on platforms like YouTube, Twitch, and custom RTMP servers.</li> <li>• Ability to record outputs in formats such as H.264 or H.265 on external storage devices.</li> </ul> <p>3) Hyperdeck Mini</p> <ul style="list-style-type: none"> <li>• 1 x 3G-SDI Input.</li> <li>• 1 x HDMI and 1 x 3G-SDI Outputs.</li> <li>• Records ProRes, DNxHD, and H.264.</li> <li>• Records in H.264 SDI 4:2:2 10-Bit.</li> <li>• Front-Panel Buttons, Jog Wheel, LCD.</li> <li>• Timecode and Reference Input/Output.</li> <li>• 1/3 Rack-Mountable Form Factor.</li> <li>• USB-C, 1G Ethernet, RS-422</li> </ul> <p>4) Monitor 24"(min size) (Side, under camera and Programme)</p> <p>5) Monitor 55" (min size) (Control)</p> <p>6) 32 GB SDHC Memory Card up to 90 Mb/s, Class 10</p> <p>7) SDI to HDMI mini converter</p> <p>8) HDMI to SDI Mini converter</p> <p>9) USB presentation clicker</p> <p>10) Web Presenter</p> <p>11) Laptop (Core i5 1135G7 / 2.4 GHz, Win 10 Pro 64-bit, 8 GB RAM, 256 GB SSD, 15.6" IPS 1920 x 1080 (Full HD), Iris Xe Graphics, Wi-Fi 6, Bluetooth)</p> <p><b>SDI Video Inputs</b> (SDI (Serial Digital Interface) Video Inputs refer to the ports or connectors on a device that accept incoming digital video signals transmitted via SDI technology. These inputs allow the device to receive video signals from other SDI-compatible sources such as cameras, video switchers, or video playback devices)</p> <p>Quantity: 1</p> <p><b>SDI Video Outputs</b> (SDI (Serial Digital Interface) Video Output refers to the port or connector on a device that transmits digital video signals in accordance with the SDI standard. This output allows the device to send video signals to other SDI-compatible equipment, such as monitors, recorders, or video switchers)</p> <ul style="list-style-type: none"> <li>• 1 x loop out, 1 x monitor out.</li> <li>• SDI Rates 1.5G, 3G, 6G, 12G</li> </ul> <p><b>HDMI Video Outputs</b> (HDMI (High-Definition Multimedia Interface) Video Outputs refer to the ports or connectors on a device that transmit digital video signals in accordance with the HDMI standard. These outputs allow the device to</p>
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	<p>send video signals to other HDMI-compatible equipment, such as monitors, televisions, projectors, or audio/video receivers)</p> <ul style="list-style-type: none"> <li>• 1 x monitor out</li> </ul> <p><b>Webcam Output</b> (Webcam output refers to the video signal generated by a webcam device)</p> <ul style="list-style-type: none"> <li>• 1 x Type USB-C up to 1080p60</li> </ul> <p><b>Direct Streaming</b> (Direct streaming refers to the capability of a device to transmit live audio or video content directly to an online platform or streaming server without the need for intermediate hardware or software)</p> <ul style="list-style-type: none"> <li>• supports direct live streaming over ethernet using Real Time Messaging Protocol (RTMP).</li> </ul> <p>Real-Time Messaging Protocol (RTMP) is a standard protocol used for streaming audio, video, and data over the internet in real-time.</p> <p><b>Control Panel</b></p> <ul style="list-style-type: none"> <li>• Built in control panel with 2.2-inch color display for video preview, audio meters and status</li> </ul> <p><b>Ethernet</b></p> <ul style="list-style-type: none"> <li>• Ethernet supports 10/100/1000 Base T for live streaming, software control and</li> </ul> <p><b>HD Video Input Standards</b></p> <ul style="list-style-type: none"> <li>• 720p50, 720p59.94, 720p60 1080p23.98, 1080p24, 1080p25, 1080p29.97, 1080p30, 1080p50, 1080p59.94, 1080p60 1080PsF23.98, 1080PsF24, 1080PsF25, 1080PsF29.97, 1080PsF30 1080i50, 1080i59.94, 1080i60.</li> </ul> <p><b>Ultra HD Video Input Standards</b></p> <ul style="list-style-type: none"> <li>• 2160p23.98, 2160p24, 2160p25, 2160p29.97, 2160p30, 2160p50, 2160p59.94, 2160p60</li> </ul> <p><b>Video Input Color Space</b></p> <ul style="list-style-type: none"> <li>• Rec.601, Rec.709, Rec.2020 3G SDI Auto detects SMPTE level A or B on SDI input</li> </ul> <p><b>SDI and HDMI Monitor Out Video Standards</b></p> <ul style="list-style-type: none"> <li>• 1080p50, 1080p59.94, 1080p60</li> </ul> <p><b>Video Streaming Standards</b></p> <ul style="list-style-type: none"> <li>• 720p25, 720p30, 720p50, 720p60 1080p23.98, 1080p24, 1080p25, 1080p29.97, 1080p30, 1080p50, 1080p59.94, 1080p60</li> </ul> <p><b>Compatible Services and Software</b></p>
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	<ul style="list-style-type: none"> <li>• YouTube Live, Facebook Live, Twitter, Twitch, Skype, Microsoft Teams, Open Broadcaster and Wowza Streaming Engine</li> </ul> <p><b>Operating Systems</b></p> <ul style="list-style-type: none"> <li>• Compatibility with Windows 10, 64-bit, linux, Mac 10.15 Catalina, Mac 11.1 Big Sur or later, Chrome OS</li> </ul> <p><b>Power Supply</b></p> <ul style="list-style-type: none"> <li>• 1 x Internal 100 - 240V AC.</li> </ul> <p><b>12V DC Input</b></p> <ul style="list-style-type: none"> <li>• 1 x +12V DC 4-pin XLR.</li> </ul> <p><b>Power Usage : 21 W</b></p> <p><b>Audio</b></p> <ol style="list-style-type: none"> <li>1) Multimedia Monitors <ul style="list-style-type: none"> <li>• Monitor Type &amp; Configuration Active 2-Way</li> <li>• Total Power Output 50 W per Monitor</li> <li>• Tweeter 1 x 0.75" / 19.1 mm Silk Dome</li> <li>• Woofer 1 x 3" / 7.62 cm Polypropylene Cone</li> <li>• Frequency Range 70 Hz to 20 kHz (-10 dB) 80 Hz to 20 kHz (-3 dB)</li> </ul> </li> <li>2) Input and output options of a digital mixer</li> </ol> <p><b>Digital I/O:</b></p> <p>1x RJ45 (Control)  1x RJ45 Ultranet (Control)  1x XLR AES3 Output  1x etherCON AES50/SuperMAC</p> <p><b>MIDI I/O:</b></p> <p>1x MIDI 5-Pin In  1x MIDI 5-Pin Out</p> <p><b>USB:</b></p> <p>1 x USB Type-A (USB 2.0, Audio Playback, External Memory)</p> <ol style="list-style-type: none"> <li>3) High quality Dynamic Stereo Headphones</li> <li>4) Microphone System <ul style="list-style-type: none"> <li>• Dimensions : Approx. 82 x 64 x 24 mm,</li> <li>• Total harmonic distortion: <math>\leq 0.9\%</math></li> <li>• Weight: (incl. batteries) approx. 130 g</li> <li>• Audio output: 3.5 mm jack socket: +17 dBu (mono, balanced)</li> <li>• Signal-to-noise ratio: Line: <math>\geq 110</math> dBA, Phones: approx. 90 dBA</li> <li>• Switching bandwidth: up to 88 MHz</li> <li>• Peak deviation: <math>\pm 48</math> kHz</li> <li>• Nominal deviation: <math>\pm 24</math> kHz</li> <li>• Operating time: Typically, 8 h</li> </ul> </li> </ol>
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	<ul style="list-style-type: none"> <li>• Modulation: Wideband FM</li> <li>• Power supply: 2 AA batteries, 1.5 V</li> </ul> <p><b>GRIP</b></p> <p>1) Double Ball Joint Head with Camera Platform</p> <p><b>FURNITURE</b></p> <p>1) 4U 19" rack sleeve</p> <p><b>LIGHTING</b></p> <p>1) Chroma Key Lighting Bundle</p> <p>2) Stepping Ring Adapter for Chroma Key Setup</p> <p>3) Professional Bi-Color LED Lighting Kit</p> <p><b>INSTALLATION MATERIAL</b></p> <p>1) 15 meter XLR mic cable</p> <p>2) Rack cabling, connectors, power distribution, shelves, security</p> <p>3) panels, fixings, labelling etc.</p> <p>4) PC / Programme / M-View 1 meter monitor cable loom</p> <p>5) Side Monitors 15 meter cable loom (HDMI TO HDMI)</p> <p>6) Cam / Monitor 15-meter cable loom (2 x SDI, 1 x PC&gt;4 x 13A)</p> <p>7) On site mini toolkit and consumables kit (cable ties, tape etc)</p> <p>8) 10 meter 13A &gt; 13A extension cable (local supply connector)</p> <p>9) 8-Port Gigabit Ethernet Switch</p> <p>10) Canare 12G-SDI UHD 4K Single-Channel BNC Cables</p> <p>11) 1 x 4 HDMI Splitter</p> <p>12) Ethernet Patch Cords</p> <p>13) Furman Power distributor / conditioner</p> <p>14) APC 6000VA / 6KVA 230V ,with RailKit, External Battery Pack</p>
Packing	Equipment should be suitably packed for international shipment to Ouagadougou, Burkina Faso
Shipping	DPU final address: Agence Nationale de la Meteorologie (ANAM) 01 BP 576 Ouagadougou 01 Burkina Faso +226 2535 6039
Incoterm	DPU (2020) Ouagadougou

Consignee	UNDP Burkina Faso 34, Avenue du Conseil Economique et Social Immeuble des Nations Unies - Koulouba 01 BP 575 Ouagadougou 01
<b>Delivery Time</b>	The goods shall be delivered no later than <b>15 November 2024</b>
Quality	Items shall comply with local standards
Testing	<p>The Supplier's service must include:</p> <ol style="list-style-type: none"> <li>1) Configuration, Setup, and Testing: This phase involves on-site installation of weather studio equipment at ANAM in Ouagadougou, focusing on establishing connections between various pieces of equipment. The Supplier is responsible for configuring the necessary equipment according to specific requirements. They will ensure all connections are properly established and conduct thorough testing to confirm the functionality of each component.</li> <li>2) Technical Support: The Supplier must be capable of providing technical support to address any issues that may arise during the setup process and throughout the 3-year warranty period. This support may involve troubleshooting technical problems, providing guidance on equipment setup and usage, and assisting with any questions or concerns related to the weather studio equipment.</li> <li>3) Training: The Supplier will conduct a comprehensive training program for at least 3 weather studio personnel. This includes a 3-day on-site training session where users will receive hands-on instruction on how to effectively operate and maintain the installed equipment. Additionally, the supplier may provide online training resources for continuous learning and support.</li> </ol>
Warranty	At least a three-year warranty