

## **SPECIFICATION FOR THE SUPPLY, INSTALLATION, AND COMMISSIONING OF MEDIA, PODCAST AND LIVESTREAMING STUDIO EQUIPMENT.**

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### **1. Project Overview**

The Quality Council for Trades and Occupations (QCTO), through its Marketing and Communication Unit and its Facilities and Admin Unit, seeks to appoint a suitably qualified and experienced service provider to design, install and commission a fully-fledged media, podcast, and livestreaming studio, including a fully functional podcast room. The project aims to establish a modern, professional audio and visual production environment that supports high-quality content creation aligned with the QCTO's communication and stakeholder engagement objectives.

### **2. Project Objectives**

The appointed service provider will be responsible for the end-to-end delivery of the podcast studio, including the integration of appropriate studio equipment, acoustic solutions, soundproofing, and technical systems. The objective is to ensure the podcast room meets industry standards for sound quality, functionality, and reliability, enabling seamless recording, production, and broadcasting of audio and visual content.

### **3. Project Scope**

The appointed service provider will be required to design, supply, install, and commission a fully-fledged media, podcast, and livestreaming studio, including a fully functional podcast room, on behalf of the QCTO. The scope of work will include, but not be limited to, the following:

### **3.1. Studio Design, Layout and Concept Development**

- 3D renders and interior concept design.
- Acoustic treatment layouts.
- Lighting and camera positioning schematics.
- Technical routing diagrams.
- Approval workflow before installation.

### **3.2. Soundproofing and Acoustic Installation**

- Design and installation of eco-friendly acoustic panels and room dividers for the media and podcast studio, providing effective soundproofing and improved acoustic performance.
- Branded Backdrop wall panel.

### **3.3. Live Streaming Cameras (Permanent Installation)**

- Two 4K PTZ or mirrorless cameras.
- Fixed mounting with HDMI/SDI routing.
- Integration with video switcher and livestream push software.
- RTMP configuration for QCTO channels.
- Scene templates and branded overlays.

#### **3.3.1. Network Attached Storage**

- 24TB usable capacity
- 2x Gigabit Interface
- 2x 10Gbps Interface
- NAS-grade hard drives
- Raid level 6 or higher

#### **3.3.2. Streaming Encoder**

**Description:** Streaming unit for sending the live feed to multiple social media destinations at the same time. Specification:

- 2x 1Gbps interface
- 4K graphics support
- Simultaneous Streaming support for YouTube, Twitch, Facebook, Instagram, X, and more

- Can store stream key profiles
- Enterprise grade for extended streaming sessions on a daily basis
- Dual power redundancy

### **3.3.3. Content Ecosystem Architect**

**Description:** Offering AI integration, automation, remote production capability, analytics, and long-term scalability. Hardware supply and Installation:

- Studio build
- 6 months editing support offerings:
- AI-assisted production workflows
- Remote guest capability
- Automated live streaming to multi-platform
- Analytics dashboards
- Content repurposing automation
- 12 months technical & strategic support
- QCTO Staff capability transfer program
- Quarterly optimisation review

### **3.3.4. AI-Powered Capabilities will include:**

- AI auto-captioning
- AI transcription archive
- AI highlight clip generator
- Social media auto-format exports (Reels, Shorts, LinkedIn)
- Internal content knowledge base
- Position it as: **“Future-Ready Intelligent Studio Infrastructure”**

### **3.3.5 Technical Architecture**

- Blackmagic ATEM Mini Extreme ISO (records isolated feeds)
- Networked NDI routing
- Hybrid physical + cloud streaming failover
- Redundant power & surge protection
- Structured rack-mounted system

### 3.4. Studio Furnitures

- **Seater Couch X 1**
  - Width (Length): 180 cm – 250 cm (approx. 72–96 inches).
  - Depth: 90 cm – 100 cm.
  - Height: 75 cm – 95 cm.
  - Seat Height: 30 cm – 47 cm.
  - Weight Capacity: ~300 kg.
  - Legs: Metal or wooden legs, usually 10-15 cm high
  - Fabric: 100% Polyester Fabric.
- **Studio Table X 2**
  - Custom-Made wooden square-shaped Pine Desk with Black Metal Legs.
- **Coffee Table X 2**
  - height of 16–18 inches (40–46 cm), a length that is 1/2 to 2/3 of the sofa's width (roughly 42–54 inches or 106–137 cm), and a width of 18–24 inches (45–61 cm).
- **Studio Chairs X 4**
  - Adjustability: (height, width, depth, pivot) for proper mic alignment; seat depth of 18–20 inches.
  - Ergonomics: Lumbar support is essential to maintain proper posture and diaphragm opening.

### 3.5. Briefing Room Furniture

- **Office chairs X 4**
  - High-performance task chair that ensures complete comfort. Ergonomics and comfort include full adjustability, sliding seat, flexible lumbar support.
- **Briefing room table X 1**
  - Custom-Made L-shaped Pine Desk with Black Metal Legs.
- **Studio Storage Cabinets X 1**
  - Dimensions: 1800h x 900w x 450d – Spacious enough to store all your essentials.
  - Shelves: Comes with four adjustable shelves.
  - Material: Wooden
  - Lockable: Secure lock system.

- **Partitioning**
  - Partitioning of a **5 m × 6.5 m** space to accommodate all requirements.

### **3.6. Smart TV (65inch) X 2**

- **Display & Resolution:** 65-inch panel, 4K UHD (3840×2160/3840 cross 2160 3840×2160) resolution.
- **Technology:** LED, QLED, or Mini-LED with Quantum Dot colour.
- **Refresh Rate:** 50Hz/60Hz standard, with 100Hz/120Hz/144Hz options for gaming.
- **Smart Features:** Tizen, Android TV, or webOS platforms with streaming apps (Netflix, YouTube, Prime Video).
- **Video Processing:** HDR10, HDR10+, Dolby Vision, and AI-powered 4K upscaling.
- **Connectivity:** 3x-4x HDMI (HDMI 2.1 featured on high-end models), 2x USB, Wi-Fi, Bluetooth 5.0.
- **Audio:** Generally, 20W 2CH speakers, Dolby Atmos, Object Tracking Sound (OTS Lite).
- **One TV be mounted as the backdrop screen in the podcast room.**

### **3.7. DSTV Decoder and Dish Installation**

- Ultra Explorer DSTV Decoder x 1.
- New Dish and Installation X 1.
- Link the decoder to the Media Room TV.
- Cabling, trunking, smart LNB 4 port
- Provide a remote, test and signoff.

### **3.8. Door Studio signage (Recording in Progress)**

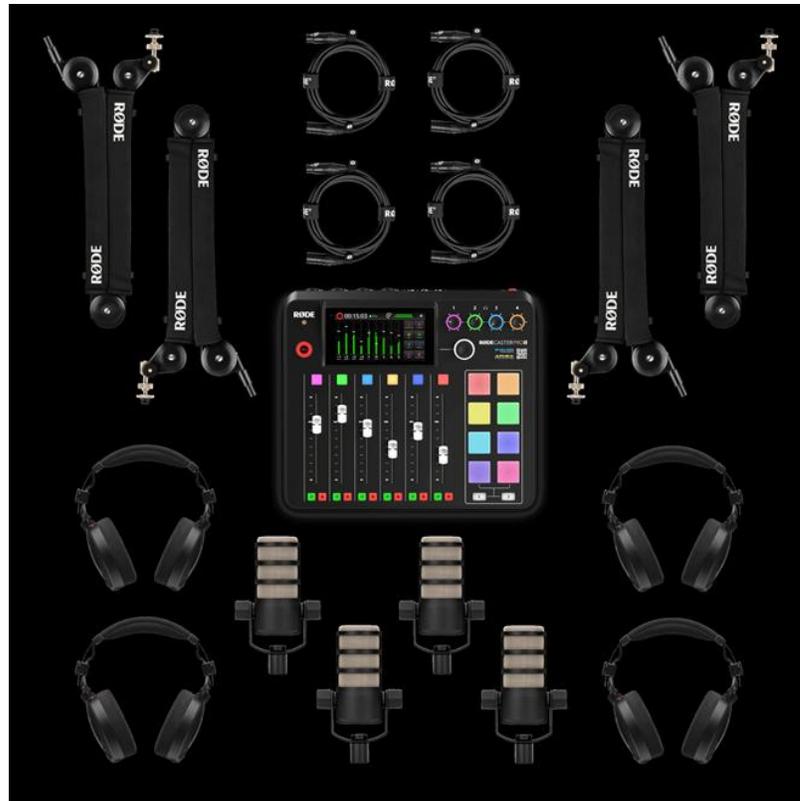
- Custom-designed door signage to reflect Studio room mounted on the door.
- Custom-designed hanging door sign indicating (Recording in Progress).
- Material: Aluminum.
- Size: 20.3cm x 6.6cm.

### 3.9. Podcast Studio Equipment

The media room and podcast studio are recommended to occupy a **5 m × 6.5 m** space to optimize acoustic performance and ensure efficient equipment layout.

#### 3.9.1. Ultimate Podcast Kit

- **RØDECaster Pro II:** integrated audio production studio that combines revolutionary features with superior sound quality, endless customisability and unmatched ease of use.
- **RØDECover 2:** Protective cover for the RØDECaster Pro II made from high-grade clear polycarbonate that is extremely durable, ensuring both internal and external components are protected.
- **4x PodMic:** broadcast-quality dynamic microphone with rich, detailed sound optimised for podcasting and other speech applications.
- **4x NTH-100:** professional over-ear headphones with exceptionally detailed, clear and accurate sonic performance and superior comfort.
- **4x PSA1+:** premium professional studio boom arm with an innovative parallelogram spring design for precise mic placement and ultra-smooth and silent movement.
- **4x XLR-3:** premium XLR cable with professional-grade Canare cabling and Neutrik connectors for ultra-clean signal transfer with extremely low noise.



### 3.9.2. Professional Studio Monitor (Monitor Speakers x2)

- 100 watt, 8" active studio monitor / Self-powered. Amps matched to drivers; no external amp hassles.
- Custom bi-amped, class A/B amplifiers / Provide high headroom and low distortion.
- Heavy-duty enclosure / Durable.
- Front-firing port / Allows placement flexibility (i.e. near walls) without interference from a rear-firing port.
- Dedicated low and high frequency level adjustment controls / Allows you to optimize the monitor's response to better match the room acoustics and the user's personal preferences.
- 8" glass aramid composite woofer / Rigid and lightweight driver for optimal sound quality.
- 1" textile soft dome tweeter / Smooth high frequency response with excellent HF extension to 34.5 kHz.

- Bass extension to 35 Hz / Excellent low frequency response for such a compact monitor.
- Universal connectivity with XLR, 1/4" TRS, and RCA inputs / Interfaces with just about any mixer and/or audio interface.
- Volume control / Allows you to fine-tune your overall monitoring level.
- System-optimized auto-limiter / Prevents unexpected peaks from damaging the speakers and provides consistency and clarity at high volumes.
- Foam isolation pads on bottom / Protects the surface the monitors are sitting on and provides isolation for improved clarity.



### **3.9.3. Desktop Computer for Editing X 1**

- Apple iMac All-in-One Desktop Computer with M4 chip with 10-core CPU and 10-core GPU: Built for Apple Intelligence, 24-inch Retina Display, 24GB Unified Memory, 512GB SSD Storage.

### **3.9.4. Rode Lavalier Lapel Microphone X 2**

- The Lavalier's low self-noise, user friendly omni-directional polar pattern and minimal appearance make it an ideal solution for film, television, video, theatre, house of worship and anywhere where a high-quality microphone needs to be heard but not seen.



### 3.9.5. Headset earpiece microphones X 2

- The HS2 is an ergonomic, lightweight, low-profile headset microphone that delivers crisp, clear audio for hands-free presentations, including on stage, vlogging, broadcast and performance use.



### 3.9.6. Directional Boom Microphone X 1

- Microphone Boom Arm, 3-Section Extendable Handheld Mic Boom Pole with 1/4" and 3/8" Screw, 3.6ft to 9ft Adjustable Length Carbon Fiber Boom Sticks MA01.



### 3.9.7. Canon EOS R50 + RF-S 18-150mm Mirrorless Camera Kit. X 2

- Lens Mount: Canon RF
- Sensor Resolution: Effective: 24.2 Megapixel
- Sensor Type: 22.3 x 14.9 mm (APS-C) CMOS
- Crop Factor: 1.6x

- Image Stabilization: None
- Built-In ND Filter: None
- Capture Type: Stills & Video
- Internal Recording Modes: H.264/H.265/MPEG-4
- UHD 4K (3840 x 2160) at 23.98/25/29.97 fps
- 1920 x 1080 at 23.98/25/29.97/50/59.94/100/120 fps
- Broadcast Output: NTSC/PAL
- Built-In Microphone Type: Stereo



### 3.9.8. Camera Trip: Aluminium 3-Section Kit with Ball Head AS. X 2

- Material: Aluminium, Magnesium, Plastic
- Leg Segments: Three
- Locking System: Flip Lock
- Centre Column: Rapid
- Extended Height w/o Column: 181.5cm
- Lowest Usable Height: 10cm
- Maximum Usable Height: 151.5cm
- Maximum Load Capacity: 15kg
- Compatible for Canon EOS r50 camera
- Weight: 3.14kg



### 3.9.9. Professional Video Lighting System

- **Godox LED 500 2 Light Kit**
  - Colour Temperature Range: 3300-5600K.
  - Dimming Range at 3400-5500K: 25-100%.
  - Wireless Adjustments via Remote (Not Included).
  - On-Board Control with LCD Panel.
  - Maximum Power: 32W.
  - Built-In Colour Filter Slot.
  - Yoke with Tightening Knob.
  - AC Adapter for Wired Power.
  - Can Run on 2 Optional L-Series Batteries.



#### **4. Project Management Requirements**

- Studio Design, Layout & Concept Development.
- Project plan, timelines and warranties.
- Conduct user training for QCTO staff (Minimum 2 days).
- Provide an as-built technical report after installation.

#### **5. Commissioning & Acceptance Testing**

Acoustic test, livestream test, lighting calibration.

#### **6. Post-production support**

Provide six (6) months of comprehensive post-production support services to the QCTO:

- Editing
- Packaging
- Assembling scenes, refining audio, adding music/sound effects, and conducting final colour correction.

## 7. Evaluation Criteria

| Criterion   | Scoring   |
|---|---|
| <p><b>1. Experience in similar projects</b></p> <p>The bidder must demonstrate proven experience in designing, supplying, installing, and commissioning media, podcast, and livestreaming studios, or similar audio-visual production facilities.</p> <p>Bidders must provide:</p> <ul style="list-style-type: none"> <li>• Signed and dated reference letters, on client letterheads, issued within the last five years.</li> <li>• Each letter must clearly state: <ul style="list-style-type: none"> <li>- Nature of the project</li> <li>- Scope of work</li> <li>- Confirmation of successful completion and client satisfaction</li> </ul> </li> <li>• Supporting documentation linked to the reference letters, such as: <ul style="list-style-type: none"> <li>- Completion certificates</li> <li>- Project close-out reports</li> <li>- Commissioning reports</li> <li>- Signed training attendance registers</li> <li>- Letters confirming commissioning and user training</li> </ul> </li> </ul> | <p><b>50 points maximum</b></p> <ul style="list-style-type: none"> <li>• 5 Reference Letters with Evidence: <b>50 points</b></li> <li>• 3-4 Reference Letters with Evidence: <b>30 points</b></li> <li>• 2 Reference Letters with Evidence: <b>20 points</b></li> <li>• Less than 2 Reference Letters: <b>0 points</b></li> </ul> |
| <p><b>2. Project manager CV (At least 5 years of experience in managing Audio Visual related projects).</b></p> <p>Provide a detailed CV that includes:</p> <ul style="list-style-type: none"> <li>• Relevant work history</li> <li>• Specific projects related to audio-visual managed</li> </ul>  | <p><b>10 points maximum</b></p> <ul style="list-style-type: none"> <li>• 5 or more years of experience: <b>10 points</b></li> <li>• 3-4 years of experience: <b>5 Points</b></li> <li>• Less than 3 years of experience: <b>0 points</b></li> </ul>   |

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|--|--|
| <ul style="list-style-type: none"> <li>• Roles and responsibilities held in these projects</li> </ul> <p><b>Minimum NQF Level 6 qualification</b> in Audio-Visual Technology or a related field</p>  |  |
| <p>3. Lead studio designer CV (At least 5 years studio design experience). Provide a detailed CV of a Lead Studio Designer, responsible for studio layout, acoustic planning, and equipment integration.</p> <p>Provide a detailed CV that includes:</p> <ul style="list-style-type: none"> <li>• Relevant studio design experience</li> <li>• Specific studio projects completed</li> <li>• Roles and responsibilities in each project</li> </ul> <p><b>Minimum NQF Level 6 qualification</b> in Studio Design, Sound Engineering or a related field.</p> | <p><b>20 points maximum</b></p> <ul style="list-style-type: none"> <li>• 5 or more years of extensive experience: <b>20 points</b></li> <li>• 3-4 years of experience: <b>10 points</b></li> <li>• 1-2 years of experience: <b>5 points</b></li> <li>• less than 1 year: <b>0 points</b></li> </ul>  |
| <p>4. Project Plan</p> <p>The bidder must submit a comprehensive <b>Project Plan</b> that covers the full scope from design to commissioning.</p> <p>The Project Plan must include:</p> <ul style="list-style-type: none"> <li>• Detailed timelines</li> <li>• Delivery milestones</li> <li>• Installation methodology</li> <li>• Risk management plan</li> <li>• Resource allocation</li> <li>• Training plan for QCTO staff</li> <li>• Warranty and post-production support plan</li> </ul>  | <p><b>20 points maximum</b></p> <ul style="list-style-type: none"> <li>• Comprehensive and detailed plan meeting all requirements: <b>20 points</b></li> <li>• Adequate plan addressing most elements: <b>15 points</b></li> <li>• Partial or unclear plan: <b>10 points</b></li> <li>• Inadequate or missing elements in plan: <b>0 points</b></li> </ul> |
| <p>TOTAL</p>   | <p>100 points</p>  |

A minimum score of 70 points is required in the technical/functionality stage to proceed to the final price and specific goals evaluation stage.

**Additional Notes:**

- A compulsory onsite briefing session is required, and bidders must sign the attendance register under their bidding company's name.
- The appointed service provider shall supply all required equipment, accessories, and components necessary for the commissioning of the podcast and media room.

For project inquiries please contact Mr. Skheto Makgarengi at [Makgarengi.S@qcto.org.za](mailto:Makgarengi.S@qcto.org.za) or Mr. Ramaru Raymond at [Ramaru.R@qcto.org.za](mailto:Ramaru.R@qcto.org.za) or [Motalaote.n@qcto.org.za](mailto:Motalaote.n@qcto.org.za).

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