

## ***Section VII. Technical Specifications***

### **Notes for Preparing the Technical Specifications**

A set of precise and clear specifications is a prerequisite for Bidders to respond realistically and competitively to the requirements of the Procuring Entity without qualifying their Bids. In the context of Competitive Bidding, the specifications (e.g. production/delivery schedule, manpower requirements, and after-sales service/parts, descriptions of the lots or items) must be prepared to permit the widest possible competition and, at the same time, present a clear statement of the required standards of workmanship, materials, and performance of the goods and services to be procured. Only if this is done will the objectives of transparency, equity, efficiency, fairness, and economy in procurement be realized, responsiveness of bids be ensured, and the subsequent task of bid evaluation and post-qualification facilitated. The specifications should require that all items, materials and accessories to be included or incorporated in the goods be new, unused, and of the most recent or current models, and that they include or incorporate all recent improvements in design and materials unless otherwise provided in the Contract.

Samples of specifications from previous similar procurements are useful in this respect. The use of metric units is encouraged. Depending on the complexity of the goods and the repetitiveness of the type of procurement, it may be advantageous to standardize the General Technical Specifications and incorporate them in a separate subsection. The General Technical Specifications should cover all classes of workmanship, materials, and equipment commonly involved in manufacturing similar goods. Deletions or addenda should then adapt the General Technical Specifications to the particular procurement.

Care must be taken in drafting specifications to ensure that they are not restrictive. In the specification of standards for equipment, materials, and workmanship, recognized Philippine and international standards should be used as much as possible. Where other particular standards are used, whether national standards or other standards, the specifications should state that equipment, materials, and workmanship that meet other authoritative standards, and which ensure at least a substantially equal quality than the standards mentioned, will also be acceptable. The following clause may be inserted in the Special Conditions of Contract or the Technical Specifications.

### **Sample Clause: Equivalency of Standards and Codes**

Wherever reference is made in the Technical Specifications to specific standards and codes to be met by the goods and materials to be furnished or tested, the provisions of the latest edition or revision of the relevant standards and codes shall apply, unless otherwise expressly stated in the Contract. Where such standards and codes are national or relate to a particular country or region, other authoritative standards that ensure substantial equivalence to the standards and codes specified will be acceptable.

Reference to brand name and catalogue number should be avoided as far as possible; where unavoidable they should always be followed by the words "*or at least equivalent.*" References to brand names cannot be used when the funding source is the GOP.

Where appropriate, drawings, including site plans as required, may be furnished by the Procuring Entity with the Bidding Documents. Similarly, the Supplier may be requested to provide drawings or samples either with its Bid or for prior review by the Procuring Entity during contract execution.

Bidders are also required, as part of the technical specifications, to complete their statement of compliance demonstrating how the items comply with the specification.



# Technical Specifications

Item	Specification	Statement of Compliance
		<p><i>[Bidders must state here either "Comply" or "Not Comply" against each of the individual parameters of each Specification stating the corresponding performance parameter of the equipment offered. Statements of "Comply" or "Not Comply" must be supported by evidence in a Bidders Bid and cross-referenced to that evidence. Evidence shall be in the form of manufacturer's un-amended sales literature, unconditional statements of specification and compliance issued by the manufacturer, samples, independent test data etc., as appropriate. A statement that is not supported by evidence or is subsequently found to be contradicted by the evidence presented will render the Bid under evaluation liable for rejection. A statement either in the Bidder's statement of compliance or the supporting evidence that is found to be false either during Bid evaluation, post-qualification or the execution of the Contract may be regarded as fraudulent and render the Bidder or supplier liable for prosecution subject to the applicable laws and issuances.]</i></p>
1	<p>Supply, Delivery, and Installation of FLP Content All-in-One Production Studio – 14 Studio/Multimedia Rooms (((For All 8 Campuses)) One (1) Studio/College or Satellite Campus across Misamis Oriental and Misamis Occidental Provinces)))</p> <p>I – MAIN EQUIPMENT</p> <p>1. [ 14 UNITS] - Video Switcher, HDMI Live Stream for Broadcast Livestream Studio with Audio Switching Software, 4-Channel Live Stream HDMI Switcher, Control up to Four BMPCC 6K/4K Cameras, Live Tally, Stream and Record Status, Record Button, Channel Preview Multiview, HDMI Output, Ethernet ATEM</p>	

*Technical Specifications - Proposed Procurement for the Supply, Delivery, Installation and Commissioning of ICT Equipment for All-In-One Production Studio for the Project "Learning Management Enhancement and Establishment of 21<sup>st</sup> Century Webinar/Smart Classroom"*





Control, Media Player, Computer Input Support, Color and Pattern Generators, DVE Transition, Chroma/Luma Keyers	
2. [ 42 UNITS] - 4K/UHD Professional Camera with Durable Video Tripod, Shutter Speed: [60i]: 1/8 - 1/10,000 (1/6 - 1/10,000 when shooting with 24p), 1.0-type (13.2 mm x 8.8 mm) back-illuminated Exmor RS CMOS sensor, XLR-type 3-pin (female) (x2), line/mic/mic +48 V selectable, 1.0 cm (0.39 type) OLED Approx. 1.44M dots view finder, 8.8 cm (3.5 type) Approx. 1.56M dots LCD display, MS/SD(1),SD(1), Wi-Fi/NFC functions, BNC (x1), 3G/HD/SD SMPTE ST 424/ST 292-1/ST 259 SDI output standards	
3. [ 14 UNITS] - Integrated Audio Production Studio for Podcast/Broadcast Quality, 4 High-Quality XLR Mic Inputs, Echo-Free Phone, and App Calls, APHEX Processing for Rich & Warm Voice, Programmable Pads for FX Playback, Ducking on Host Channel, 8 Faders to Control Audio Levels, TRRS, USB, and Bluetooth Connectivity, 4 Discrete Headphone Outputs, Record Mix to microSD Card or Computer, Onboard & USB multitrack recording, Programmable Pads for instant Sound FX, USB Streaming	
4. [ 28 UNITS] - UHF Wireless Lapel, Receiver/Transmitter with Omni Lavalier Clip-on Microphone with battery (2TX, 1RX), 2 x SR-M1 Omnidirectional Lav Mic, 2x Rugged Bodypack Transmitter, 2-Channel Camera-Mount Receiver, 96 Auto-scan frequencies, headphone output, 6hrs AA battery, Up to 8Mics on Set 330Degrees Range	
5. [ 28 UNITS] - Professional Dynamic Microphone with XLR Cable, handheld, capsule dynamic, polar pattern cardioid, Frequency Range 50 Hz to 16 kHz, Impedance 150 Ohms Sensitivity -55 dBV/Pa, Tuned for Vocal Applications On/Off Switch	
6. [ 42 UNITS] - Continuous Studio LED Video Light with diffuser, portable, and with light stand, Bi-color 3200K-5600K, controllable/dimmable, 100W 504pcs high quality LED beads to give out ultra-bright light; CRI95, help restore the true color of the items. Rollable cloth design, roll-up, or roll-	

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	<p>out for creating different lighting situations. Bi-color temperature 3000K - 5600K, 0 - 100% step-less dimmable brightness, with a controller with touch screen for adjusting brightness/ color temperature/ channel. (3 way lighting)</p> <p>7. [ 14 UNITS] - Studio Green Screen Backdrop, 2X3m/6.6X10ft , washable Polyester-Cotton Fabric w Support Stand Bracket and Clamps, movable</p> <p>8. [ 14 UNITS] - All-in-One AI Teaching Interactive Teaching Device, Interactive Camera built-in 3D dual-band optical with a stylus pen, touch, and Wireless touch support, Plug and play interactivity, device mirroring, in-built camera, beamforming microphone, AI-powered OS and Android Embedded OS (Galileo/EducationalOS), Cross-platform support (BYOD) and Wireless Collaboration, Converts handwritten into digital text, Quad-core ARM Cortex™ Main Processor - A53 Processor, CPU 1.8GHz + Dedicated 600MHz GPU, Video Ultra HD 4K and Full HD 1080p video decoding, Security System Trust zone based security architecture, Driverless Yes (connect to any other PC/MAC etc. via USB as standard HID device and use all native Applications), WiFi IEEE 802.11a/b/g/n (Dual Band), Edge-blending System Support More than 8 devices can be connected to 1 USB port in PC for a Edge-blending setup, Automatic Calibration, Multi-touch Points 255#, OS Support (on host PC) BYOD - supports all OS platform on host PC like Windows®, MacOSX™, Linux®, Chromebook®, I/O Ports HDMI®, USB 2.0, OTG micro USB, IR receiver, DC in, Micro SD Card, IR remote</p> <p>9. [ 28 UNITS] - 65" 4k/UHD Smart TV with Optical, HDMI, HDMI ARC with bracket (screen for smart board and studio output preview)</p> <p>10. [ 14 UNITS] - Branded Editing Desktop PC with Dual 34" LED Monitors, i7 Processor, 16GB DDR4 RAM, M.2 512GB SSD, 2TB SATA HDD, 4GB video card, Windows 10, with USB Mouse, and USB KB (for Editing animations, videos and photos), 1000 VA UPS</p>		
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<p>11. [ 14 UNITS] - Editing Software Application Suite Single License (Photoshop, Premier, After Effects, etc)</p> <p>12. [ 14 UNITS] - Live Switching/Streaming Software/VMiX Studio Pro License (for pre-canned videos/ready-to-play multimedia)</p> <p><b>II – ACCESSORIES/PERIPHERALS</b></p> <p>1. [ 14 UNITS] - Rack with cable manager for audio mixer/video mixer, computer and switcher monitor</p> <p>2. [ 14 UNITS] - Teleprompter, 20" or larger</p> <p>3. [ 28 UNITS] - Headset for monitor/operator, stereo, Driver sensitivity at 1kHz/1mW (dB): 96, Dynamic frequency response range (Hz): 20Hz-20 kHz, Impedance (ohms): 32, Built-in Mic</p> <p>4. [ 14 UNITS] - Complete high-speed HDMI cables, power strips/outlets (from the main outlet to the rack and studio set, including to IA Interactive Board and TVs)</p> <p>5. [ 14 UNITS] - 2.1 Soundbar with Subwoofer, BT, Optical, HDMI ARC, Composite Connection for playback with cable for playback, 150-160W, Subwoofer Type (Active/ Passive/Wireless, Built-in ) Passive (for monitor/playback)</p> <p>6. [ 14 UNITS] - Additional Video Switcher PC Monitor, 24" UHD, IPS, Display Bit Depth 8 bits (6 bits+FRC), Frame Rate Control Yes, Max Number of Colors 16777216, 24 Bits, W-LED Backlight Source, Screen Brightness 250cd/m<sup>2</sup> Static Screen Contrast 1000: 1, Dynamic Screen Contrast 50000000:1, horizontal Viewing Angle 178°, Vertical Viewing Angle 178, Minimum Response Time 4 ms, Display Coating Anti-glare/Matte (3H)</p> <p>Training for 50 studio operators, two (2) sessions, 16 hours per sessions, Face-to-Face, with provision of 1 meal (lunch) and 2 snacks per day/sessions</p> <p>Configuration and commissioning</p>	
***** Nothing Follows*****	

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