

# 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 No.	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><b>Branded 65" 4K UHD DIGITAL SIGNAGE</b></p> <p>Display: 65" 4K UHD            Resolution: UHD 3840 x 2160            Panel Technology: IPS,VA            Support Portrait/ Landscape orientation            Operation Hours (Hours/Days): 16/7            Number of CPUs : Quad            Main Processor (SoC) : a5 Gen5 AI Processor 4K            Refresh Rate: Refresh Rate 60 Hz            Brightness: 360 nits            Video and Picture Quality: AI 4K Upscaling, FILMMAKER MODE, Dynamic Tone Mapping,HDR10 Pro, HLG, HGIG Mode, 9 Modes (Vivid, Standard, Eco, Cinema, Sports, Game, Filmmaker, (ISF) Expert (Bright Room), (ISF) Expert (Dark Room)</p>	

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	<p>Audio and Sound Quality: AI Sound (Virtual 5.1 Up-mix), Bluetooth Surround Ready, Sound Bar Mode Control, TV Sound Mode Share</p> <p>Speakers: 2.0 Stereo Speakers</p> <p>Broadcasting System: DVB-T2/T, DVB-C, DVB-S2/S</p> <p>Warranty: 3 years , Onsite</p>	
2	<p><b>Branded HDMI over IP Transmitter, with USB 2.0 port</b></p> <p>HDMI HDCP Compatible ,Delivers visually lossless high-quality video up to 4K @ 30 Hz 4:4:4 , advanced video lossless compression technology, EDID Expert , Extends AV connections from a simple point-to-point to a multi-point to multi-point setup via LAN , Web GUI-Based Management, input sources via top panel pushbuttons</p> <p>Audio signal can be embedded into the HDMI stream</p> <p>Video Input Interfaces:1 x HDMI Type A Female</p> <p>Video Input Impedance: 100 ohms</p> <p>Video Input Max Distance: 1.8m</p> <p>Video Max Data Rate : 150-500Mbps</p> <p>Compliance: HDMI (4K)HDCP Compatible</p> <p>Max Resolutions: Up to 4K 4096 x 2160 / 3840 x 2160 @ 60Hz (4:2:0) 4096 x 2160 / 3840 x 2160 @ 30Hz (4:4:4)</p> <p>Max Distance: 100m (Cat5e/6 point to point)</p> <p>Audio Input: 1 x HDMI Type A Female   1 x Mini Stereo Jack Female</p> <p>LAN: 1 x RJ45 Female</p> <p>IR: 1 x Mini Stereo Jack Female</p> <p>RS-232:Connector: 1 x Terminal Block, 3 pole   Baud Rate: 19200, Data Bits:8,   Stop Bits:1, no parity and flow control</p> <p>USB:1 x USB Type B Female</p> <p>Power supply: DC5V: 3.07W</p> <p>Warranty: 2 years</p>	
3	<p><b>Branded HDMI over IP Receiver with USB 2.0 port</b></p> <p>HDMI HDCP Compatible, Delivers visually lossless high-quality video up to 4K @ 30 Hz 4:4:4 , advanced video lossless compression technology, EDID Expert , Extends AV connections from a simple point-to-point to a multi-point to multi-point setup via LAN , Web</p>	

	<p>GUI-Based Management, input sources via top panel pushbuttons</p> <p>Audio stream can be extracted from the HDMI stream and delivered as a separate audio signal</p> <p>Video Output Interfaces: 1 x HDMI Type A Female</p> <p>Video Output Impedance: 100 ohms</p> <p>Video Max Data Rate : 150-500Mbps</p> <p>Compliance: HDMI (4K)HDCP Compatible</p> <p>Max Resolutions: Up to 4K 4096 x 2160 / 3840 x 2160 @ 30Hz (4:4:4)</p> <p>Max Distance: 100m (Cat5e/6 point to point)</p> <p>Audio Output: 1 x HDMI Type A Female   1 x Mini Stereo Jack Female</p> <p>LAN: 2 x RJ45 Female</p> <p>IR: 1 x Mini Stereo Jack Female</p> <p>RS-232: Connector: 1 x Terminal Block, 3 pole   Baud Rate: 19200, Data Bits:8,   Stop Bits:1, no parity and flow control</p> <p>USB: 2 x USB Type B Female</p> <p>Pwr supply: DC5V: 4.28W (without USB peripheral device loading)</p> <p>Warranty: 2 years</p>	
4	<p><b>Branded High Speed 4K HDMI Cable with Ethernet</b></p> <p>HDMI Ethernet Channel functionality: additional dedicated data channel supports networking</p> <p>HDMI (3D, Deep Color, 4K); HDCP 2.2 compliant</p> <p>Gold-plated connectors for reliable transmissions</p> <p>Bend Radius 90°</p>	
5	<p><b>Digital Signage Content Management over network</b></p> <p>"Support various contents: Image/Video/Flash/Web/RSS/Ticker/TV/HTML/Flash EXE/Flash SWF/Application</p> <p>Various screen composition: Effective screen composition from divide screen to full screen by layer</p> <p>Client control: Set a time of order such as On &amp; Off/Reboot/Play/Stop for contents</p> <p>PIP/VIV support"</p> <p>Perpetual License</p>	
6	<p><b>PoE 24-Port Switch</b></p> <p><b>24 PORT UNMANAGED GIGABIT POE+ SWITCH (120W)</b></p>	

7	<p><b>Installation, Passive Components, Roughing Ins, Commissioning and End User Training</b></p> <p>Installation, Wiring &amp; Cable pulling, Installation of supplied equipment, engineering supervision, testing and commissioning. Includes pipes, hangers/supports, junction boxes, screws, nuts, bolts, end-connectors, and other hardware materials. Includes labor, such as chipping and drilling works.</p>	
<p>***** <b>Nothing Follows</b>*****</p>		

Additional Requirements:

The technical specification that shall be submitted by the Bidder shall include, among others:

1. *product specifications as supported by brochures or catalogues;*
2. *certification from the manufacturer/distributor as authorized reseller for Item nos. 1, 2 and 3; and*
3. *certification of Service Center within the Philippines for Item no. 1.*