



REPUBLIC OF THE PHILIPPINES  
DEPARTMENT OF TRANSPORTATION  
MARITIME INDUSTRY AUTHORITY

**REQUEST FOR QUOTATION**

Date: \_\_\_\_\_

Company/Business Name: \_\_\_\_\_

Address: \_\_\_\_\_

Business/Mayor's Permit No.: \_\_\_\_\_

TIN: \_\_\_\_\_

PhilGEPS Registration Number (required): \_\_\_\_\_

The **Maritime Industry Authority (MARINA)**, through its Bids and Awards Committee (BAC), intends to procure **PRODUCTION AND MEDIA EQUIPMENT FOR THE MARITIME INDUSTRY AUTHORITY (MARINA)** in accordance with Section 53.9 (Negotiated Procurement – Small Value Procurement) of the Updated 2016 Revised Implementing Rules and Regulations of Republic Act No. 9184. The Approved Budget for the Contract (ABC) is **Four Hundred Thousand Pesos (Php 400,000.00)**.

Please submit your duly signed quotation addressed to the Bids and Awards Committee (BAC) Chairperson and to the given address below, on or before 2:00 of 23 October 2024, subject to the compliance with the Terms and Conditions provided on this Request for Quotation (RFQ):

**Atty. MARIA ROWENA B. HUBILLA**

BAC Chairperson

MARINA BAC Office, 10<sup>th</sup> Floor MARINA Building,  
Bonifacio Drive cor., 20<sup>th</sup> Street, Port Area, Manila, Philippines.

Telephone No.: **+632) 8524-6518**

Email: [bacsec@marina.gov.ph](mailto:bacsec@marina.gov.ph)

Interested service provider shall also submit a copy of the following documents and along with the quotation on or before the above specified deadline of submission of quotation:

- a. Valid Mayor's/Business Permit
- b. Valid PhilGEPS Registration
- c. Registration certificate from SEC, Department of Trade and Industry (DTI) for sole proprietorship, or CDA for cooperatives

The Supplier/ Service Provider with the Single/Lowest Calculated Quotation shall submit its **Omnibus Sworn Statement (GPPB – Prescribed forms), Income/Business Tax Return (for ABC's above Php500k)** within a non-extendible period of five (5) calendar days from the receipt of the notice of Single/Lowest Calculated Quotation.

The Head of the Procuring Entity (HoPE) of the MARINA reserves the right to reject any and all quotations, declare a failure of procurement, or not award the contract at any time prior to contract award in accordance with Sections 35.6 and 41 of the 2016 revised IRR of RA No. 9184, without thereby incurring any liability to the affected bidder or bidders.

For any clarification, you may contact the BAC Secretariat at **+632) 8524-6518** or email address at [bacsec@marina.gov.ph](mailto:bacsec@marina.gov.ph).

*By the Authority of the Bids and Awards Committee:*



**ATTY. MARIVIC S. RAMOS**

*Head, Bids and Awards Committee Secretariat*

### **INSTRUCTIONS:**

Note: Failure to follow these instructions will disqualify your entire quotation.

(1) Do not alter the contents of this form in any way.

(2) The use of this RFQ is highly encouraged to minimize errors or omissions of the required mandatory provisions. In case of any changes, bidders must use or refer to the latest version of the RFQ, except when the latest version of the RFQ only pertains to deadline extension.

If another form is used other than the latest RFQ, the quotation shall contain all the mandatory requirements/provisions including manifestation on the agreement with the Terms and Conditions below.

In case a prospective supplier/service provider submits a filled-out RFQ with a supporting document (i.e., a price quotation in a different format), both documents shall be considered unless there will be discrepancies. In this case, provisions in the RFQ shall prevail.

(3) All technical specifications must be complied with. Failure to comply with the mandatory requirements shall render the quotation ineligible/disqualified.

(4) Quotations may be submitted through electronic mail at [bacsec@marina.gov.ph](mailto:bacsec@marina.gov.ph).

(5) Quotations, including documentary requirements, received after the deadline shall not be accepted. For quotations submitted via electronic mail, the date and time of receipt indicated in the e-mail shall be considered.

After having carefully read and accepted the Instructions and Terms and Conditions, I/we submit our quotation/s for the item/s as follows:

CONTRACT PACKAGE	SPECIFICATION	QTY	Statement of Compliance ("Comply" or "Not Comply")	Unit Cost (Vat Inclusive)	Total Cost (Vat Inclusive)
Drone	<p><b>Takeoff Weight</b></p> <ul style="list-style-type: none"> <li>Maximum: 2.1 lb / 958 g</li> </ul> <p><b>Dimensions</b></p> <ul style="list-style-type: none"> <li>Folded (without propellers): 231.1×98×95.4 mm (L×W×H)</li> <li>Unfolded (without propellers): 347.5×290.8×107.7 mm (L×W×H)</li> </ul> <p><b>Max Ascent Speed</b></p> <ul style="list-style-type: none"> <li>8 m/s</li> </ul> <p><b>Max Descent Speed</b></p> <ul style="list-style-type: none"> <li>6 m/s</li> </ul> <p><b>Max Horizontal Speed (at sea level, no wind)</b></p> <ul style="list-style-type: none"> <li>21 m/s</li> </ul> <p><b>Max Takeoff Altitude</b></p> <ul style="list-style-type: none"> <li>6000 m</li> </ul> <p><b>Max Flight Time</b></p> <ul style="list-style-type: none"> <li>43 minutes</li> </ul> <p><b>Max Hovering Time</b></p> <ul style="list-style-type: none"> <li>37 minutes</li> </ul> <p><b>Max Flight Distance</b></p> <ul style="list-style-type: none"> <li>28 km</li> </ul> <p><b>Max Wind Speed Resistance</b></p> <ul style="list-style-type: none"> <li>12 m/s</li> </ul> <p><b>Max Pitch Angle</b></p> <ul style="list-style-type: none"> <li>35°</li> </ul> <p><b>Operating Temperature</b></p> <ul style="list-style-type: none"> <li>-10° to 40° C (14° to 104° F)</li> </ul> <p><b>Global Navigation Satellite System</b></p> <ul style="list-style-type: none"> <li>GPS + Galileo + BeiDou</li> </ul> <p><b>Hovering Accuracy Range</b></p> <ul style="list-style-type: none"> <li>Vertical: ±0.1 m (with vision positioning) ±0.5 m (with GNSS positioning) Horizontal: ±0.3 m (with vision positioning) ±0.5 m (with high-precision positioning system)</li> </ul>	1			



<p><b>Internal Storage</b></p> <ul style="list-style-type: none"> <li>• Internal Storage: 8 GB (approx. 7.9GB available space)</li> <li>• Camera</li> </ul> <p><b>Image Sensor:</b> 4/3 CMOS</p> <p><b>Lens</b></p> <ul style="list-style-type: none"> <li>• Hasselblad Camera FOV: 84° Format Equivalent: 24mm Aperture: f/2.8-f/11 Focus: 1 m to ∞</li> <li>Medium Tele Camera FOV: 35° Format Equivalent: 70mm Aperture: f/2.8 Focus: 3 m to ∞</li> <li>Tele Camera FOV: 15° Format Equivalent: 166mm Aperture: f/3.4 Focus: 3 m to ∞</li> </ul> <p><b>ISO Range</b></p> <ul style="list-style-type: none"> <li>• Video Normal and Slow Motion: 100-6400 (Normal) 400-1600 (D-Log) 100-1600 (D-Log M) 100-1600 (HLG)</li> <li>Night: 800-12800 (Normal)</li> <li>Photo 100-6400</li> </ul> <p><b>Shutter Speed</b></p> <ul style="list-style-type: none"> <li>• Hasselblad Camera: 8-1/8000 s</li> <li>Medium Tele Camera: 2-1/8000 s</li> <li>Tele Camera: 2-1/8000 s</li> </ul> <p><b>Max Image Size</b></p> <ul style="list-style-type: none"> <li>• Hasselblad Camera: 5280×3956</li> <li>Medium Tele Camera: 8064×6048</li> <li>Tele Camera: 4000×3000</li> </ul> <p><b>Still Photography Modes</b></p>				
---	--	--	--	--

	<ul style="list-style-type: none"> <li>• Hasselblad Camera Single Shot: 20 MP Burst Shooting: 20 MP, 3/5/7 frames Automatic Exposure Bracketing (AEB): 20 MP, 3/5 frames at 0.7 EV step Timed: 20 MP, 2/3/5/7/10/15/20/30/60 s</li> </ul> <p>Medium Tele Camera Single Shot: 12 MP or 48 MP Burst Shooting: 12 MP or 48 MP, 3/5/7 frames Automatic Exposure Bracketing (AEB): 12 MP or 48 MP, 3/5 frames at 0.7 EV step Timed: 12 MP: 2/3/5/7/10/15/20/30/60 s 48 MP: 7/10/15/20/30/60 s</p> <p>Tele Camera Single Shot: 12 MP Burst Shooting: 12 MP, 3/5/7 frames Automatic Exposure Bracketing (AEB): 12 MP, 3/5 frames at 0.7 EV step Timed: 12 MP, 2/3/5/7/10/15/20/30/60 s</p> <p><b>Photo Format</b></p> <ul style="list-style-type: none"> <li>• JPEG/DNG (RAW)</li> </ul> <p><b>Video Resolution</b> Hasselblad Camera Apple ProRes 422 HQ/422/422 LT 5.1K: 5120×2700@24/25/30/48/50fps DCI 4K: 4096×2160@24/25/30/48/50/60/120*fps 4K: 3840×2160@24/25/30/48/50/60/120*fps</p> <p>H.264/H.265 5.1K: 5120×2700@24/25/30/48/50fps DCI 4K: 4096×2160@24/25/30/48/50/60/120*fps 4K: 3840×2160@24/25/30/48/50/60/120*fps FHD: 1920×1080@24/25/30/48/50/60/120*/200*fps</p> <p><b>Medium Tele Camera</b> Apple ProRes 422 HQ/422/422 LT</p>				
--	--	--	--	--	--

<p>4K: 3840×2160@24/25/30/48/50/60fps</p> <p>H.264/H.265 4K: 3840×2160@24/25/30/48/50/60fps</p> <p>FHD: 1920×1080@24/25/30/48/50/60fps</p> <p><b>Tele Camera</b> Apple ProRes 422 HQ/422/422 LT 4K: 3840×2160@24/25/30/48/50/60fps</p> <p>H.264/H.265 4K: 3840×2160@24/25/30/50/60fps</p> <p>FHD: 1920×1080@24/25/30/50/60fps</p> <p><b>Video Format</b></p> <p>MP4/MOV (MPEG-4 AVC/H.264, HEVC/H.265)</p> <p>MOV (Apple ProRes 422 HQ/422/422 LT)</p> <p><b>Max Video Bitrate</b></p> <ul style="list-style-type: none"> <li>Hasselblad Camera: H.264/H.265: 200 Mbps ProRes 422 HQ: 3772 Mbps ProRes 422: 2514 Mbps ProRes 422 LT: 1750 Mbps</li> </ul> <p>Medium Tele Camera: H.264/H.265: 160 Mbps ProRes 422 HQ: 1768 Mbps ProRes 422: 1178 Mbps ProRes 422 LT: 821 Mbps</p> <p>Tele Camera: H.264/H.265: 160 Mbps ProRes 422 HQ: 1768 Mbps ProRes 422: 1178 Mbps ProRes 422 LT: 821 Mbps</p> <p><b>Supported File System</b></p> <ul style="list-style-type: none"> <li>exFAT</li> </ul> <p><b>Color Mode and Sampling</b></p> <p><b>Method</b> Hasselblad Camera Normal: 10-bit 4:2:2 (Apple ProRes 422 HQ/422/422 LT) 8-bit 4:2:0 (H.264/H.265) D-Log: 10-bit 4:2:2 (Apple ProRes 422 HQ/422/422 LT)</p>			
--	--	--	--

	<p>10-bit 4:2:0 (H.264/H.265) HLG/D-Log M: 10-bit 4:2:2 (Apple ProRes 422 HQ/422/422 LT) 10-bit 4:2:0 (H.265)</p> <p><b>Medium Tele Camera</b> Normal: 10-bit 4:2:2 (Apple ProRes 422 HQ/422/422 LT) 8-bit 4:2:0 (H.264/H.265) HLG/D-Log M: 10-bit 4:2:2 (Apple ProRes 422 HQ/422/422 LT) 10-bit 4:2:0 (H.265)</p> <p>Tele Camera Normal: 10-bit 4:2:2 (Apple ProRes 422 HQ/422/422 LT) 8-bit 4:2:0 (H.264/H.265) HLG/D-Log M: 10-bit 4:2:2 (Apple ProRes 422 HQ/422/422 LT) 10-bit 4:2:0 (H.265)</p> <p><b>Digital Zoom (only in Normal Video Mode and Explore Mode)</b></p> <ul style="list-style-type: none"> <li>Hasselblad Camera: 1-3x Medium Tele Camera: 3-7x Tele Camera: 7-28x</li> </ul> <p><b>Gimbal</b></p> <p><b>Stabilization</b></p> <ul style="list-style-type: none"> <li>3-axis mechanical gimbal (tilt, roll, pan)</li> </ul> <p><b>Mechanical Range</b></p> <ul style="list-style-type: none"> <li>Tilt: -140° to 50° Roll: -50° to 50° Pan: -23° to 23°</li> </ul> <p><b>Controllable Range</b></p> <ul style="list-style-type: none"> <li>Tilt: -90° to 35° Pan: -5° to 5°</li> </ul> <p><b>Max Control Speed (tilt)</b></p> <ul style="list-style-type: none"> <li>100°/s</li> </ul> <p><b>Angular Vibration Range</b></p> <ul style="list-style-type: none"> <li>Hovering Without Wind: ±0.001° Normal Mode: ±0.003° Sport Mode: ±0.005°</li> </ul> <p><b>Sensing</b></p> <p><b>Sensing Type</b></p> <ul style="list-style-type: none"> <li>Omnidirectional binocular vision system, supplemented with an infrared sensor at the bottom of the aircraft</li> </ul> <p><b>Forward</b></p> <ul style="list-style-type: none"> <li>Measurement Range: 0.5-20 m</li> </ul>			
--	---	--	--	--



	<p>Detection Range: 0.5-200 m Effective Sensing Speed: Flight Speed <math>\leq</math> 15 m/s FOV: Horizontal 90°, Vertical 103°</p> <p><b>Backward</b></p> <ul style="list-style-type: none"> <li>• Measurement Range: 0.5-16 m Effective Sensing Speed: Flight Speed <math>\leq</math> 12 m/s FOV: Horizontal 90°, Vertical 103°</li> </ul> <p><b>Lateral</b></p> <ul style="list-style-type: none"> <li>• Measurement Range: 0.5-25 m Effective Sensing Speed: Flight Speed <math>\leq</math> 15 m/s FOV: Horizontal 90°, Vertical 85°</li> </ul> <p><b>Upward</b></p> <ul style="list-style-type: none"> <li>• Measurement Range: 0.2-10 m Effective Sensing Speed: Flight Speed <math>\leq</math> 6 m/s FOV: Front and Back 100°, Left and Right 90°</li> </ul> <p><b>Downward</b></p> <ul style="list-style-type: none"> <li>• Measurement Range: 0.3-18 m Effective Sensing Speed: Flight Speed <math>\leq</math> 6 m/s FOV: Front and Back 130°, Left and Right 160°</li> </ul> <p><b>Operating Environment</b></p> <ul style="list-style-type: none"> <li>• Forward, Backward, Left, Right, and Upward: surfaces with discernible patterns and adequate lighting (lux &gt; 15) Downward: surfaces with discernible patterns, diffuse reflectivity &gt; 20% (e.g. walls, trees, people), and adequate lighting (lux &gt; 15)</li> </ul> <p><b>Video Transmission</b> <b>Video Transmission System</b></p> <ul style="list-style-type: none"> <li>• O3+</li> </ul> <p><b>Live View Quality</b></p> <ul style="list-style-type: none"> <li>• Remote Controller: 1080p/30fps, 1080p/60fps</li> </ul> <p><b>Operating Frequency</b></p> <ul style="list-style-type: none"> <li>• 2.400-2.4835 GHz 5.725-5.850 GHz</li> </ul> <p><b>Transmitter Power (EIRP)</b></p> <ul style="list-style-type: none"> <li>• 2.4 GHz:</li> </ul>				
--	---	--	--	--	--

<p><b>Max Transmission Distance (unobstructed, free of interference)</b></p> <ul style="list-style-type: none"> <li>FCC: 15 km</li> <li>CE: 8 km</li> <li>SRRC: 8 km</li> <li>MIC: 8 km</li> </ul> <p><b>Max Transmission Distance (unobstructed, with interference)</b></p> <ul style="list-style-type: none"> <li>Strong Interference: Urban landscape, approx. 1.5-3 km</li> <li>Medium Interference: Suburban landscape, approx. 3-9 km</li> <li>Low Interference: Suburb/seaside, approx. 9-15 km</li> </ul> <p><b>Max Transmission Distance (obstructed, with interference)</b></p> <ul style="list-style-type: none"> <li>Low Interference and Obstructed by Buildings: approx. 0-0.5 km</li> <li>Low Interference and Obstructed by Trees: approx. 0.5-3 km</li> </ul> <p><b>Max Download Speed</b></p> <ul style="list-style-type: none"> <li>O3+: <ul style="list-style-type: none"> <li>5.5 MB/s (with DJI RC-N1 Remote Controller)</li> <li>15 MB/s (with DJI RC Pro)</li> <li>5.5 MB/s (with DJI RC)</li> <li>Wi-Fi 6: 80 MB/s*</li> </ul> </li> </ul> <p><b>Lowest Latency</b></p> <ul style="list-style-type: none"> <li>130 ms (with DJI RC-N1 Remote Controller)</li> <li>120 ms (with DJI RC Pro)</li> <li>130 ms (with DJI RC)</li> </ul> <p><b>Antenna</b></p> <ul style="list-style-type: none"> <li>4 antennas, 2T4R</li> </ul> <p><b>Battery Capacity</b></p> <ul style="list-style-type: none"> <li>5000 mAh</li> </ul> <p><b>Weight</b></p> <ul style="list-style-type: none"> <li>335.5 g</li> </ul> <p><b>Nominal Voltage</b></p> <ul style="list-style-type: none"> <li>15.4 V</li> </ul> <p><b>Max Charging Voltage</b></p> <ul style="list-style-type: none"> <li>17.6 V</li> </ul> <p><b>Type</b></p> <ul style="list-style-type: none"> <li>Li-ion 4S</li> </ul> <p><b>Energy</b></p> <ul style="list-style-type: none"> <li>77 Wh</li> </ul> <p><b>Charging Temperature</b></p> <ul style="list-style-type: none"> <li>5° to 40° C (41° to 104° F)</li> </ul> <p><b>Charging Time</b></p>			
--	--	--	--

	<ul style="list-style-type: none"> <li>• Approx. 96 minutes</li> <li>Approx. 70 minutes</li> </ul> <p><b>Rated Power</b></p> <p><b>Charging Temperature</b></p> <ul style="list-style-type: none"> <li>• 5° to 40° C (41° to 104° F)</li> </ul> <p><b>With microSD Cards</b></p> <p><b>With Charger</b></p>				
<b>Camera</b>	<ul style="list-style-type: none"> <li>• 24MP APS-C CMOS sensor</li> <li>• Highly reliable AF system with face and eye detection</li> <li>• 4K/24p video capture with no crop (4K/30p is cropped)</li> <li>• 1080/120p capture for slow-motion footage (cropped)</li> <li>• Built-in directional 3-capsule microphone with windscreen</li> <li>• Fully articulating touch-sensitive display</li> <li>• 3.5mm headphone and microphone ports</li> <li>• Livestream-capable via USB-C connection</li> <li>• 440 shots per charge, 80 mins continuous record per charge</li> <li>• Capable of shooting vertical video</li> <li>• with XLR-K3M-Microphone</li> <li>• with HVL-F28M Flash</li> <li>• with AC Adaptor</li> <li>• Lens Cap</li> <li>• Power Code</li> <li>• Rechargeable Battery</li> <li>• Shoulder Strap</li> <li>• USB Cable</li> <li>• Lens Mount: E-mount</li> <li>• Image Sensor <ul style="list-style-type: none"> <li>• Aspect Ratio: 3:2</li> <li>• Number of Pixels (Effective): Approximately 24.2 megapixels</li> <li>• Number of Pixels (Total): Approximately 25.0 megapixels</li> <li>• Sensor Type: APS-C Type (23.5 x 15.6 mm)</li> </ul> </li> </ul> <p>Recording System (Still Image)</p> <ul style="list-style-type: none"> <li>• Recording Format : JPEG, RAW</li> <li>• Image Quality Modes : RAW, RAW and JPEG, JPEG</li> </ul> <p>Recording System (Movies)</p>	<b>1</b>			

	<ul style="list-style-type: none"> <li>• Video Compression : XAV S: MPEG-4 AVC/H.264</li> </ul> <p>Audio Recording Format : XAV S: LPCM 2 ch</p>			
<b>KVM Switch</b>	<ul style="list-style-type: none"> <li>• 8 Port PS2 USB Combo</li> <li>• Computer Connections ( Single KVM:8, Cascade Chaining:Up to 512 )</li> <li>• Selection Method : Switch Button, Hot-Keys (PS/2 Keyboard), and On-Screen-Display (OSD)</li> <li>• LEDs: Red for PC Selected, Green for PC-On-Line/Ready</li> <li>• PC Connectors: 8 x HDB-15 female, Support both PS/2 and USB Platform servers</li> <li>• Hot-Swappable: Yes</li> <li>• Firmware Upgrade Port: Mini USB</li> <li>• Console Ports: Keyboard: 1x6 pin mini-DIN female, Mouse:1x6 pin mini-DIN female, Video:1xHDB-15 female</li> <li>• Auto Scan interval: 5-90 seconds</li> <li>• Power: 5V, 2A</li> <li>• Housing Material: Metal</li> <li>• Package Contents: 8-Port PS2/USB Combo KVM Switch, 4 sets of 6ft 4-in-1 PS/2 KVM cables, Rack Mount Bracket Kit Set,</li> <li>• Power Adapter, Quick Install Guide</li> </ul>	1		

	Statement of Compliance ("Comply" or "Not Comply")
<p><b><u>DOCUMENTATION:</u></b></p> <p>The winning supplier must provide complete technical and product documentation for every deliverable. All documentation must be written in English and be available in soft or paper formats.</p>	
<p><b><u>TRANSFER OF TECHNOLOGY</u></b></p> <p>Training and technology transfer should be conducted before final project acceptance.</p>	
<p><b><u>TERMS OF PAYMENT:</u></b></p> <p>The payment shall be made upon issuance of Billing Statement on a Bank-to-Bank- basis. Automatic Debit</p>	



Arrangement (ADA) through Land Bank of the Philippines (LBP) facilities, for other Commercial bank, applicable bank charges shall be for the account of the winning bidder. The winning bidder shall submit bank details together with the billing statement/invoice for ready reference.

#### TERMS AND CONDITIONS:

1. Bidders shall provide correct and accurate information required in this form.
2. Any interlineations, erasures or overwriting shall be valid only if they are signed or initialed by you or any of your duly authorized representative/s.
3. Price quotation/s must be valid for a period of **FORTY-FIVE (45) calendar days** from the date of submission.
4. Price quotation/s, to be denominated in Philippine peso shall include all taxes, duties and/or levies payable.
5. Quotations exceeding the Approved Budget for the Contract shall be rejected.
6. In case of two or more bidders are determined to have submitted the Lowest Calculated Quotation/Lowest Calculated and Responsive Quotation, the MARINA shall adopt and employ "draw lots" as the tie-breaking method to finally determine the single winning provider in accordance with GPPB Circular 06-2005.
7. Award of contract shall be made to the lowest quotation which complies with the technical specifications, requirements and other terms and conditions stated herein.
8. The item/s shall be delivered according to the accepted offer of the bidder.
9. Item/s delivered shall be inspected on the scheduled date and time of the MARINA. The delivery of the item/s shall be acknowledged upon the delivery to confirm the compliance with the technical specifications.
10. Payment shall be made after delivery and upon the submission of the required supporting documents, i.e. Order Slip and/or Billing Statement, by the supplier, contractor, or consultant. Our Government Servicing Bank, i.e. the Land Bank of the Philippines, shall credit the amount due to the identified bank account of the supplier, contractor, or consultant **not earlier than twenty-four (24) hours, but not later than forty-eight (48) hours**, upon receipt of our advice. Please note that the corresponding bank transfer fee, if any, shall be chargeable to the account of the supplier, contractor, or consultant in accordance with existing accounting rules and regulations. Please note that the **corresponding bank transfer fee, if any, shall be chargeable to the supplier's account.**
11. Liquidated damages equivalent to one tenth of one percent (0.1%) of value of the goods not delivered within the prescribed delivery period shall be imposed per day of delay. The MARINA may terminate the contract once the cumulative amount of

liquidated damages reaches ten percent (10%) of the amount of the contract without prejudice to other courses of action and remedies open to it.

12. The Procuring Entity may cancel or terminate the contract at any time in accordance with the grounds provided under RA No. 9184 and its updated 2016 revised IRR.
13. The RFQ, Purchase Order (PO), and other related documents for the above-stated Procurement project/s shall be deemed to form part of the contract.

**FINANCIAL OFFER**

**Terms of Payment:**

*Within fifteen to thirty (15-30) calendar days upon receipt of billing invoice/Statement of Account and issuance of Inspection and Acceptance report by the MARINA;*

**Payment Details:**

Banking Institution : \_\_\_\_\_

Account Number : \_\_\_\_\_

Account Name  
(should be the exact account  
name as registered in the bank): \_\_\_\_\_

Bank Branch : \_\_\_\_\_

*Please quote your best offer for the item/s below. Please do not leave any blank items. Indicate "0" if item being offered is for free.*

PROCUREMENT OF PRODUCTION AND MEDIA EQUIPMENT FOR THE MARITIME INDUSTRY AUTHORITY (MARINA)	
Approved Budget for the Contract (ABC)	Total Offered Quotation
<p><b>Four Hundred Thousand Pesos only</b> <b>(Php 400,000.00)</b></p>	<p>In words: _____</p> <p>_____</p> <p>_____</p> <p>In figures: _____</p> <p>_____</p>

\_\_\_\_\_  
Signature over Printed Name

\_\_\_\_\_  
Position/Designation

\_\_\_\_\_  
Office Telephone/Fax/Mobile Nos.

\_\_\_\_\_  
Email address/es



## TERMS OF REFERENCE

### PROCUREMENT OF PRODUCTION AND MEDIA EQUIPMENT FOR THE MARITIME INDUSTRY AUTHORITY (MARINA)

#### A. Background

The Maritime Industry Authority (MARINA) is a government agency established pursuant to Presidential Decree No. 474 and attached to the Department of Transportation (DOTr). In compliance with the Republic Act No. 9184 known as the "Government Procurement Reform Act", MARINA will be procuring ICT equipment for the official use in the MARINA Central Office and MARINA Regional Offices.

#### B. Objective

1. To be able to procure a drone that can shoot smooth and crisp footage, help MARINA employees push the boundaries of what was previously possible, capturing remarkable aerial shots and unique angles - quickly and easily.
2. To be able to procure a versatile camera device that offers excellent frame rates in a variety of creative modes, making it the perfect option for capturing every detail of the subject.

#### C. Approved Budget for the Contract (ABC)

The Approved Budget for the Contract (ABC) is Four Hundred Thousand Pesos (**Php 400,000.00**), inclusive of VAT and other applicable government taxes to be charged against the General Appropriations Act FY 2024 .

#### D. Mode of Procurement

The mode of procurement is **Alternative Method of Procurement (Negotiated Procurement)**.



## E. Eligibility Requirements

### 1) Class "A" Documents

#### Legal Documents

1.1 Registration certificate from SEC, Department of Trade and Industry (DTI) for sole proprietorship, or CDA for cooperatives.

1.2 Mayor's/Business permit issued by the city or municipality where the principal place of business of the prospective bidder is located, or the equivalent document for Exclusive Economic Zones or Areas. A recently expired Mayor's/Business permit together with the official receipt as proof that the prospective bidder has applied for renewal within the period prescribed by the concerned local government unit, shall be accepted by the PhilGEPS for the purpose of updating the PhilGEPS Certificate of Registration and Membership in accordance with Section 8.5.2 of the 2016 Revised IRR of RA 9184.

1.3 Omnibus Sworn Statement

## F. Deliverables (Lot) and Technical Specifications

Item	Unit	Description	Quantity
1	pc	Drone	1
2	pc	Camera	1
3	pc	8 Port PS2 USB Combo KVM Switch	1

**Below are the minimum specifications of the One (1) Drone to be procured:**

- **Takeoff Weight**
  - Maximum: 2.1 lb / 958 g
- **Dimensions**
  - Folded (without propellers): 231.1×98×95.4 mm (L×W×H)
  - Unfolded (without propellers): 347.5×290.8×107.7 mm (L×W×H)

- **Max Ascent Speed**
  - 8 m/s
- **Max Descent Speed**
  - 6 m/s
- **Max Horizontal Speed (at sea level, no wind)**
  - 21 m/s
  
- **Max Takeoff Altitude**
  - 6000 m
  
- **Max Flight Time**
  - 43 minutes
  
- **Max Hovering Time**
  - 37 minutes
  
- **Max Flight Distance**
  - 28 km
  
- **Max Wind Speed Resistance**
  - 12 m/s
- **Max Pitch Angle**
  - 35°
- **Operating Temperature**
  - -10° to 40° C (14° to 104° F)
- **Global Navigation Satellite System**
  - GPS + Galileo + BeiDou
- **Hovering Accuracy Range**
  - Vertical:
    - ±0.1 m (with vision positioning)
    - ±0.5 m (with GNSS positioning)
  
  - Horizontal:
    - ±0.3 m (with vision positioning)
    - ±0.5 m (with high-precision positioning system)

- **Internal Storage**

- Internal Storage: 8 GB (approx. 7.9GB available space)

- 

- **Camera**

- **Image Sensor:** 4/3 CMOS

- **Lens**

- Hasselblad Camera

FOV: 84°

Format Equivalent: 24mm

Aperture: f/2.8-f/11

Focus: 1 m to ∞

Medium Tele Camera

FOV: 35°

Format Equivalent: 70mm

Aperture: f/2.8

Focus: 3 m to ∞

Tele Camera

FOV: 15°

Format Equivalent: 166mm

Aperture: f/3.4

Focus: 3 m to ∞

- **ISO Range**

- Video

Normal and Slow Motion:

100-6400 (Normal)

400-1600 (D-Log)

100-1600 (D-Log M)

100-1600 (HLG)

Night:

800-12800 (Normal)

Photo

100-6400

- **Shutter Speed**

- Hasselblad Camera: 8-1/8000 s  
Medium Tele Camera: 2-1/8000 s  
Tele Camera: 2-1/8000 s

- **Max Image Size**

- Hasselblad Camera: 5280×3956  
Medium Tele Camera: 8064×6048  
Tele Camera: 4000×3000

- **Still Photography Modes**

- Hasselblad Camera  
Single Shot: 20 MP  
Burst Shooting: 20 MP, 3/5/7 frames  
Automatic Exposure Bracketing (AEB): 20 MP, 3/5 frames at 0.7 EV step  
Timed: 20 MP, 2/3/5/7/10/15/20/30/60 s

Medium Tele Camera

- Single Shot: 12 MP or 48 MP  
Burst Shooting: 12 MP or 48 MP, 3/5/7 frames  
Automatic Exposure Bracketing (AEB): 12 MP or 48 MP, 3/5 frames at 0.7 EV step  
Timed:  
12 MP: 2/3/5/7/10/15/20/30/60 s  
48 MP: 7/10/15/20/30/60 s

Tele Camera

- Single Shot: 12 MP  
Burst Shooting: 12 MP, 3/5/7 frames  
Automatic Exposure Bracketing (AEB): 12 MP, 3/5 frames at 0.7 EV step  
Timed: 12 MP, 2/3/5/7/10/15/20/30/60 s

- **Photo Format**

- JPEG/DNG (RAW)

- **Video Resolution**

- Hasselblad Camera  
Apple ProRes 422 HQ/422/422 LT



5.1K: 5120×2700@24/25/30/48/50fps  
DCI 4K: 4096×2160@24/25/30/48/50/60/120\*fps  
4K: 3840×2160@24/25/30/48/50/60/120\*fps

H.264/H.265

5.1K: 5120×2700@24/25/30/48/50fps  
DCI 4K: 4096×2160@24/25/30/48/50/60/120\*fps  
4K: 3840×2160@24/25/30/48/50/60/120\*fps  
FHD: 1920×1080@24/25/30/48/50/60/120\*/200\*fps

Medium Tele Camera

Apple ProRes 422 HQ/422/422 LT  
4K: 3840×2160@24/25/30/48/50/60fps

H.264/H.265

4K: 3840×2160@24/25/30/48/50/60fps  
FHD: 1920×1080@24/25/30/48/50/60fps

Tele Camera

Apple ProRes 422 HQ/422/422 LT  
4K: 3840×2160@24/25/30/48/50/60fps

H.264/H.265

4K: 3840×2160@24/25/30/50/60fps  
FHD: 1920×1080@24/25/30/50/60fps

### **Video Format**

- MP4/MOV (MPEG-4 AVC/H.264, HEVC/H.265)  
MOV (Apple ProRes 422 HQ/422/422 LT)

### **Max Video Bitrate**

- Hasselblad Camera:
  - H.264/H.265: 200 Mbps
  - ProRes 422 HQ: 3772 Mbps
  - ProRes 422: 2514 Mbps

ProRes 422 LT: 1750 Mbps

Medium Tele Camera:

H.264/H.265: 160 Mbps

ProRes 422 HQ: 1768 Mbps

ProRes 422: 1178 Mbps

ProRes 422 LT: 821 Mbps

Tele Camera:

H.264/H.265: 160 Mbps

ProRes 422 HQ: 1768 Mbps

ProRes 422: 1178 Mbps

ProRes 422 LT: 821 Mbps

- **Supported File System**

- exFAT

- **Color Mode and Sampling Method**

- Hasselblad Camera

Normal:

10-bit 4:2:2 (Apple ProRes 422 HQ/422/422 LT)

8-bit 4:2:0 (H.264/H.265)

D-Log:

10-bit 4:2:2 (Apple ProRes 422 HQ/422/422 LT)

10-bit 4:2:0 (H.264/H.265)

HLG/D-Log M:

10-bit 4:2:2 (Apple ProRes 422 HQ/422/422 LT)

10-bit 4:2:0 (H.265)

Medium Tele Camera

Normal:

10-bit 4:2:2 (Apple ProRes 422 HQ/422/422 LT)

8-bit 4:2:0 (H.264/H.265)

HLG/D-Log M:

10-bit 4:2:2 (Apple ProRes 422 HQ/422/422 LT)

10-bit 4:2:0 (H.265)

## Tele Camera

### Normal:

10-bit 4:2:2 (Apple ProRes 422 HQ/422/422 LT)

8-bit 4:2:0 (H.264/H.265)

### HLG/D-Log M:

10-bit 4:2:2 (Apple ProRes 422 HQ/422/422 LT)

10-bit 4:2:0 (H.265)

## Digital Zoom (only in Normal Video Mode and Explore Mode)

- Hasselblad Camera: 1-3x  
Medium Tele Camera: 3-7x  
Tele Camera: 7-28x

## Gimbal

- **Stabilization**
  - 3-axis mechanical gimbal (tilt, roll, pan)
- **Mechanical Range**
  - Tilt: -140° to 50°  
Roll: -50° to 50°  
Pan: -23° to 23°
- **Controllable Range**
  - Tilt: -90° to 35°  
Pan: -5° to 5°
- **Max Control Speed (tilt)**
  - 100°/s
- **Angular Vibration Range**
  - Hovering Without Wind:  $\pm 0.001^\circ$   
Normal Mode:  $\pm 0.003^\circ$   
Sport Mode:  $\pm 0.005^\circ$

## Sensing

- **Sensing Type**

- Omnidirectional binocular vision system, supplemented with an infrared sensor at the bottom of the aircraft

- **Forward**

- Measurement Range:  
0.5-20 m  
Detection Range:  
0.5-200 m  
Effective Sensing Speed:  
Flight Speed  $\leq$  15 m/s  
FOV:  
Horizontal 90°, Vertical 103°

- **Backward**

- Measurement Range:  
0.5-16 m  
Effective Sensing Speed:  
Flight Speed  $\leq$  12 m/s  
FOV:  
Horizontal 90°, Vertical 103°

- **Lateral**

- Measurement Range:  
0.5-25 m  
Effective Sensing Speed:  
Flight Speed  $\leq$  15 m/s  
FOV:  
Horizontal 90°, Vertical 85°

- **Upward**

- Measurement Range:  
0.2-10 m  
Effective Sensing Speed:  
Flight Speed  $\leq$  6 m/s  
FOV:  
Front and Back 100°, Left and Right 90°



- **Downward**

- Measurement Range:  
0.3-18 m
- Effective Sensing Speed:  
Flight Speed  $\leq$  6 m/s
- FOV:  
Front and Back 130°, Left and Right 160°

- **Operating Environment**

- Forward, Backward, Left, Right, and Upward:  
surfaces with discernible patterns and adequate lighting (lux > 15)
- Downward:  
surfaces with discernible patterns, diffuse reflectivity > 20% (e.g. walls, trees, people), and adequate lighting (lux > 15)

#### **Video Transmission**

- **Video Transmission System**

- O3+

- **Live View Quality**

- Remote Controller:  
1080p/30fps, 1080p/60fps

- **Operating Frequency**

- 2.400-2.4835 GHz
- 5.725-5.850 GHz

- **Transmitter Power (EIRP)**

- 2.4 GHz:

- **Max Transmission Distance (unobstructed, free of interference)**

- FCC: 15 km
- CE: 8 km
- SRRC: 8 km
- MIC: 8 km

- **Max Transmission Distance (unobstructed, with interference)**
  - Strong Interference: Urban landscape, approx. 1.5-3 km
  - Medium Interference: Suburban landscape, approx. 3-9 km
  - Low Interference: Suburb/seaside, approx. 9-15 km
- **Max Transmission Distance (obstructed, with interference)**
  - Low Interference and Obstructed by Buildings: approx. 0-0.5 km
  - Low Interference and Obstructed by Trees: approx. 0.5-3 km
- **Max Download Speed**
  - O3+:
    - 5.5 MB/s (with DJI RC-N1 Remote Controller)
    - 15 MB/s (with DJI RC Pro)
    - 5.5 MB/s (with DJI RC)
    - Wi-Fi 6: 80 MB/s\*
- **Lowest Latency**
  - 130 ms (with DJI RC-N1 Remote Controller)
  - 120 ms (with DJI RC Pro)
  - 130 ms (with DJI RC)
- **Antenna**
  - 4 antennas, 2T4R

## **Battery**

- **Capacity**
  - 5000 mAh
- **Weight**
  - 335.5 g
- **Nominal Voltage**
  - 15.4 V
- **Max Charging Voltage**
  - 17.6 V
- **Type**

- Li-ion 4S
- **Energy**
  - 77 Wh
- **Charging Temperature**
  - 5° to 40° C (41° to 104° F)
- **Charging Time**
  - Approx. 96 minutes
  - Approx. 70 minutes
- **Rated Power**
  
- **Charging Temperature**
  - 5° to 40° C (41° to 104° F)
- **With microSD Cards**
- **With Charger**

**Below are the minimum specifications of the One (1) Camera to be procured:**

- 24MP APS-C CMOS sensor
- Highly reliable AF system with face and eye detection
- 4K/24p video capture with no crop (4K/30p is cropped)
- 1080/120p capture for slow-motion footage (cropped)
- Built-in directional 3-capsule microphone with windscreen
- Fully articulating touch-sensitive display
- 3.5mm headphone and microphone ports
- Livestream-capable via USB-C connection
- 440 shots per charge, 80 mins continuous record per charge
- Capable of shooting vertical video
- with XLR-K3M-Microphone
- with HVL-F28M Flash
- with AC Adaptor
- Lens Cap
- Power Code
- Rechargeable Battery
- Shoulder Strap
- USB Cable
- Lens Mount: E-mount
- Image Sensor
  - Aspect Ratio: 3:2

- Number of Pixels (Effective): Approximately 24.2 megapixels
- Number of Pixels (Total): Approximately 25.0 megapixels
- Sensor Type: APS-C Type (23.5 x 15.6 mm)
- Recording System (Still Image)
  - Recording Format : JPEG, RAW
  - Image Quality Modes : RAW, RAW and JPEG, JPEG
- Recording System (Movies)
  - Video Compression : XAV S: MPEG-4 AVC/H.264
  - Audio Recording Format : XAV S: LPCM 2 ch

**Below are the minimum specifications of the One (1) KVM Switch to be procured:**

- 8 Port PS2 USB Combo
- Computer Connections ( Single KVM:8, Cascade Chaining:Up to 512 )
- Selection Method : Switch Button, Hot-Keys (PS/2 Keyboard), and On-Screen-Display (OSD)
- LEDs: Red for PC Selected, Green for PC-On-Line/Ready
- PC Connectors: 8 x HDB-15 female, Support both PS/2 and USB Platform servers
- Hot-Swappabale: Yes
- Firmware Upgrade Port: Mini USB
- Console Ports: Keyboard: 1x6 pin mini-DIN female, Mouse:1x6 pin mini-DIN female, Video:1xHDB-15 female
- Auto Scan interval: 5-90 seconds
- Power: 5V, 2A
- Housing Material: Metal
- Package Contents: 8-Port PS2/USB Combo KVM Switch, 4 sets of 6ft 4-in-1 PS/2 KVM cables, Rack Mount Bracket Kit Set,
- Power Adapter, Quick Install Guide

## **G. DOCUMENTATION**

The winning supplier must provide complete technical and product documentation for every deliverable. All documentation must be written in English and be available in soft or paper formats.



## H. TRANSFER OF TECHNOLOGY

1. Training and technology transfer should be conducted before final project acceptance.

## I. TERMS OF PAYMENT

The payment shall be made upon issuance of Billing Statement on a Bank-to-Bank-basis. Automatic Debit Arrangement (ADA) through Land Bank of the Philippines (LBP) facilities, for other Commercial bank, applicable bank charges shall be for the account of the winning bidder. The winning bidder shall submit bank details together with the billing statement/invoice for ready reference.

Prepared by:



**ADRIAN G. RAMOS**

Management Information Systems Service  
OIC-Information Technology Division

Approved by:



**JOSEPH VICTOR S. GENERATO PhD**

Management Information Systems Service  
Director II