



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 12 NN of 18 June 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, 10th Floor MARINA Building,
Bonifacio Drive cor., 20th Street, Port Area, Manila, Philippines.

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

Email: bacsec@marina.gov.ph

Interested supplier 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. PhilGEPS Registration Number
- b. Mayor's / Business Permit
- c. Omnibus Sworn Statement
- d. Registration certificate from SEC, Department of Trade and Industry (DTI) for sole proprietorship, or CDA for cooperatives

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.

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.

(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	Takeoff Weight <ul style="list-style-type: none">Maximum: 2.1 lb / 958 g Dimensions <ul style="list-style-type: none">Folded (without propellers): 231.1×98×95.4 mm (L×W×H)Unfolded (without propellers):	1			

	<p>347.5×290.8×107.7 mm (L×W×H)</p> <p>Max Ascent Speed</p> <ul style="list-style-type: none"> • 8 m/s <p>Max Descent Speed</p> <ul style="list-style-type: none"> • 6 m/s <p>Max Horizontal Speed (at sea level, no wind)</p> <ul style="list-style-type: none"> • 21 m/s <p>Max Takeoff Altitude</p> <ul style="list-style-type: none"> • 6000 m <p>Max Flight Time</p> <ul style="list-style-type: none"> • 43 minutes <p>Max Hovering Time</p> <ul style="list-style-type: none"> • 37 minutes <p>Max Flight Distance</p> <ul style="list-style-type: none"> • 28 km <p>Max Wind Speed Resistance</p> <ul style="list-style-type: none"> • 12 m/s <p>Max Pitch Angle</p> <ul style="list-style-type: none"> • 35° <p>Operating Temperature</p> <ul style="list-style-type: none"> • -10° to 40° C (14° to 104° F) <p>Global Navigation Satellite System</p> <ul style="list-style-type: none"> • GPS + Galileo + BeiDou <p>Hovering Accuracy Range</p> <ul style="list-style-type: none"> • 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) <p>Internal Storage</p> <ul style="list-style-type: none"> • Internal Storage: 8 GB (approx. 7.9GB available space) • Camera <p>Image Sensor: 4/3 CMOS</p> <p>Lens</p> <ul style="list-style-type: none"> • 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° 				
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	<p>Format Equivalent: 166mm Aperture: f/3.4 Focus: 3 m to ∞</p> <p>ISO Range</p> <ul style="list-style-type: none"> 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 <p>Shutter Speed</p> <ul style="list-style-type: none"> Hasselblad Camera: 8-1/8000 s Medium Tele Camera: 2-1/8000 s Tele Camera: 2-1/8000 s <p>Max Image Size</p> <ul style="list-style-type: none"> Hasselblad Camera: 5280×3956 Medium Tele Camera: 8064×6048 Tele Camera: 4000×3000 <p>Still Photography Modes</p> <ul style="list-style-type: none"> 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 				
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<p>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>Photo Format</p> <ul style="list-style-type: none"> • JPEG/DNG (RAW) <p>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</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>Medium Tele Camera 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@24/25/30/48/50/60fps FHD: 1920×1080@24/25/30/48/50/60fps</p> <p>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</p> <p>Video Format</p>				
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<p>MP4/MOV (MPEG-4 AVC/H.264, HEVC/H.265)</p> <p>MOV (Apple ProRes 422 HQ/422/422 LT)</p> <p>Max Video Bitrate</p> <ul style="list-style-type: none"> 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 <p>Supported File System</p> <ul style="list-style-type: none"> exFAT <p>Color Mode and Sampling</p> <p>Method</p> <p>Hasselblad Camera</p> <p>Normal: 10-bit 4:2:2 (Apple ProRes 422 HQ/422/422 LT) 8-bit 4:2:0 (H.264/H.265)</p> <p>D-Log: 10-bit 4:2:2 (Apple ProRes 422 HQ/422/422 LT) 10-bit 4:2:0 (H.264/H.265)</p> <p>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>Medium Tele Camera</p> <p>Normal: 10-bit 4:2:2 (Apple ProRes 422 HQ/422/422 LT) 8-bit 4:2:0 (H.264/H.265)</p> <p>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</p> <p>Normal: 10-bit 4:2:2 (Apple ProRes 422 HQ/422/422 LT) 8-bit 4:2:0 (H.264/H.265)</p> <p>HLG/D-Log M: 10-bit 4:2:2 (Apple ProRes 422 HQ/422/422 LT)</p>				
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<p>10-bit 4:2:0 (H.265)</p> <p>Digital Zoom (only in Normal Video Mode and Explore Mode)</p> <ul style="list-style-type: none"> Hasselblad Camera: 1-3x Medium Tele Camera: 3-7x Tele Camera: 7-28x <p>Gimbal</p> <p>Stabilization</p> <ul style="list-style-type: none"> 3-axis mechanical gimbal (tilt, roll, pan) <p>Mechanical Range</p> <ul style="list-style-type: none"> Tilt: -140° to 50° Roll: -50° to 50° Pan: -23° to 23° <p>Controllable Range</p> <ul style="list-style-type: none"> Tilt: -90° to 35° Pan: -5° to 5° <p>Max Control Speed (tilt)</p> <ul style="list-style-type: none"> 100°/s <p>Angular Vibration Range</p> <ul style="list-style-type: none"> Hovering Without Wind: $\pm 0.001^\circ$ Normal Mode: $\pm 0.003^\circ$ Sport Mode: $\pm 0.005^\circ$ <p>Sensing</p> <p>Sensing Type</p> <ul style="list-style-type: none"> Omnidirectional binocular vision system, supplemented with an infrared sensor at the bottom of the aircraft <p>Forward</p> <ul style="list-style-type: none"> Measurement Range: 0.5-20 m Detection Range: 0.5-200 m Effective Sensing Speed: Flight Speed ≤ 15 m/s FOV: Horizontal 90°, Vertical 103° <p>Backward</p> <ul style="list-style-type: none"> Measurement Range: 0.5-16 m Effective Sensing Speed: Flight Speed ≤ 12 m/s FOV: Horizontal 90°, Vertical 103° <p>Lateral</p> <ul style="list-style-type: none"> Measurement Range: 0.5-25 m Effective Sensing Speed: Flight Speed ≤ 15 m/s FOV: Horizontal 90°, Vertical 85° <p>Upward</p> <ul style="list-style-type: none"> Measurement Range: 0.2-10 m Effective Sensing Speed: 				
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	<p>Flight Speed ≤ 6 m/s FOV: Front and Back 100°, Left and Right 90°</p> <p>Downward</p> <ul style="list-style-type: none"> Measurement Range: 0.3-18 m Effective Sensing Speed: Flight Speed ≤ 6 m/s FOV: Front and Back 130°, Left and Right 160° <p>Operating Environment</p> <ul style="list-style-type: none"> 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) <p>Video Transmission Video Transmission System</p> <ul style="list-style-type: none"> O3+ <p>Live View Quality</p> <ul style="list-style-type: none"> Remote Controller: 1080p/30fps, 1080p/60fps <p>Operating Frequency</p> <ul style="list-style-type: none"> 2.400-2.4835 GHz 5.725-5.850 GHz <p>Transmitter Power (EIRP)</p> <ul style="list-style-type: none"> 2.4 GHz: <p>Max Transmission Distance (unobstructed, free of interference)</p> <ul style="list-style-type: none"> FCC: 15 km CE: 8 km SRRC: 8 km MIC: 8 km <p>Max Transmission Distance (unobstructed, with interference)</p> <ul style="list-style-type: none"> 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 <p>Max Transmission Distance (obstructed, with interference)</p> <ul style="list-style-type: none"> Low Interference and Obstructed by Buildings: approx. 0-0.5 km 			
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	<p>Low Interference and Obstructed by Trees: approx. 0.5-3 km</p> <p>Max Download Speed</p> <ul style="list-style-type: none"> • 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* <p>Lowest Latency</p> <ul style="list-style-type: none"> • 130 ms (with DJI RC-N1 Remote Controller) 120 ms (with DJI RC Pro) 130 ms (with DJI RC) <p>Antenna</p> <ul style="list-style-type: none"> • 4 antennas, 2T4R <p>Battery Capacity</p> <ul style="list-style-type: none"> • 5000 mAh <p>Weight</p> <ul style="list-style-type: none"> • 335.5 g <p>Nominal Voltage</p> <ul style="list-style-type: none"> • 15.4 V <p>Max Charging Voltage</p> <ul style="list-style-type: none"> • 17.6 V <p>Type</p> <ul style="list-style-type: none"> • Li-ion 4S <p>Energy</p> <ul style="list-style-type: none"> • 77 Wh <p>Charging Temperature</p> <ul style="list-style-type: none"> • 5° to 40° C (41° to 104° F) <p>Charging Time</p> <ul style="list-style-type: none"> • Approx. 96 minutes Approx. 70 minutes <p>Rated Power</p> <p>Charging Temperature</p> <ul style="list-style-type: none"> • 5° to 40° C (41° to 104° F) <p>With microSD Cards With Charger</p>				
Camera	<ul style="list-style-type: none"> • 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 	1			

	<ul style="list-style-type: none"> • 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 <ul style="list-style-type: none"> • 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) <p>Recording System (Still Image)</p> <ul style="list-style-type: none"> • Recording Format : JPEG, RAW • Image Quality Modes : RAW, RAW and JPEG, JPEG <p>Recording System (Movies)</p> <ul style="list-style-type: none"> • Video Compression : XAV S: MPEG-4 AVC/H.264 <p>Audio Recording Format : XAV S: LPCM 2 ch</p>				
KVM Switch	<ul style="list-style-type: none"> • 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 	1			

	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				
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	Statement of Compliance ("Comply" or "Not Comply")
<u>DOCUMENTATION:</u> 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.	
<u>TRANSFER OF TECHNOLOGY</u> Training and technology transfer should be conducted before final project acceptance.	
<u>TERMS OF PAYMENT:</u> 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.	

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
Four Hundred Thousand Pesos only (Php 400,000.00)	In words: _____

	In figures: _____

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 Small Value Procurement (SVP).

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 ≤ 15 m/s

FOV:

Horizontal 90°, Vertical 103°

- **Backward**

- Measurement Range:

0.5-16 m

Effective Sensing Speed:

Flight Speed ≤ 12 m/s

FOV:

Horizontal 90°, Vertical 103°

- **Lateral**

- Measurement Range:

0.5-25 m

Effective Sensing Speed:

Flight Speed ≤ 15 m/s

FOV:

Horizontal 90°, Vertical 85°

- **Upward**

- Measurement Range:

0.2-10 m

Effective Sensing Speed:

Flight Speed ≤ 6 m/s

FOV:

Front and Back 100°, Left and Right 90°

- **Downward**

- Measurement Range:

0.3-18 m

Effective Sensing Speed:

Flight Speed ≤ 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-Swappable: 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.

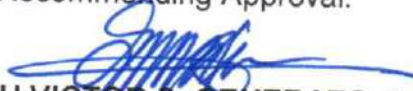
Prepared by:



ADRIAN G. RAMOS

Management Information Systems Service
OIC-Information Technology Division

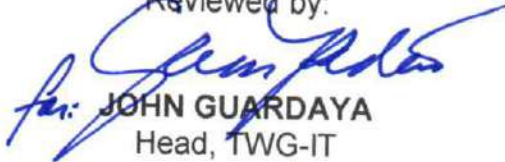
Recommending Approval:



JOSEPH VICTOR S. GENERATO PhD

Management Information Systems Service
Director

Reviewed by:


for: **JOHN GUARDAYA**
Head, TWG-IT
Atty. SHARON D. ALEDO
Chairperson, BAC

Approved by:


SONIA B. MALALUAN
Administrator

per 4/26/24

Omnibus Sworn Statement (Revised)
[shall be submitted with the Bid]

REPUBLIC OF THE PHILIPPINES)
CITY/MUNICIPALITY OF _____) S.S.

AFFIDAVIT

I, [Name of Affiant], of legal age, [Civil Status], [Nationality], and residing at [Address of Affiant], after having been duly sworn in accordance with law, do hereby depose and state that:

1. *[Select one, delete the other:]*

[If a sole proprietorship:] I am the sole proprietor or authorized representative of [Name of Bidder] with office address at [address of Bidder];

[If a partnership, corporation, cooperative, or joint venture:] I am the duly authorized and designated representative of [Name of Bidder] with office address at [address of Bidder];

2. *[Select one, delete the other:]*

[If a sole proprietorship:] As the owner and sole proprietor, or authorized representative of [Name of Bidder], I have full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for [Name of the Project] of the [Name of the Procuring Entity], as shown in the attached duly notarized Special Power of Attorney;

[If a partnership, corporation, cooperative, or joint venture:] I am granted full power and authority to do, execute and perform any and all acts necessary to participate, submit the bid, and to sign and execute the ensuing contract for [Name of the Project] of the [Name of the Procuring Entity], as shown in the attached [state title of attached document showing proof of authorization (e.g., duly notarized Secretary's Certificate, Board/Partnership Resolution, or Special Power of Attorney, whichever is applicable;)];

3. [Name of Bidder] is not "blacklisted" or barred from bidding by the Government of the Philippines or any of its agencies, offices, corporations, or Local Government Units, foreign government/foreign or international financing institution whose blacklisting rules have been recognized by the Government Procurement Policy Board, **by itself or by relation, membership, association, affiliation, or controlling interest with another blacklisted person or entity as defined and provided for in the Uniform Guidelines on Blacklisting;**

4. Each of the documents submitted in satisfaction of the bidding requirements is an authentic copy of the original, complete, and all statements and information provided therein are true and correct;

5. [Name of Bidder] is authorizing the Head of the Procuring Entity or its duly authorized representative(s) to verify all the documents submitted;

6. *[Select one, delete the rest:]*

[If a sole proprietorship:] The owner or sole proprietor is not related to the Head of the Procuring Entity, Procurement Agent if engaged, members of the Bids and Awards

Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

[If a partnership or cooperative:] None of the officers and members of *[Name of Bidder]* is related to the Head of the Procuring Entity, Procurement Agent if engaged, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

[If a corporation or joint venture:] None of the officers, directors, and controlling stockholders of *[Name of Bidder]* is related to the Head of the Procuring Entity, Procurement Agent if engaged, members of the Bids and Awards Committee (BAC), the Technical Working Group, and the BAC Secretariat, the head of the Project Management Office or the end-user unit, and the project consultants by consanguinity or affinity up to the third civil degree;

7. *[Name of Bidder]* complies with existing labor laws and standards; and
8. *[Name of Bidder]* is aware of and has undertaken the responsibilities as a Bidder in compliance with the Philippine Bidding Documents, which includes:
 - a. Carefully examining all of the Bidding Documents;
 - b. Acknowledging all conditions, local or otherwise, affecting the implementation of the Contract;
 - c. Making an estimate of the facilities available and needed for the contract to be bid, if any; and
 - d. Inquiring or securing Supplemental/Bid Bulletin(s) issued for the *[Name of the Project]*.
9. *[Name of Bidder]* did not give or pay directly or indirectly, any commission, amount, fee, or any form of consideration, pecuniary or otherwise, to any person or official, personnel or representative of the government in relation to any procurement project or activity.
10. **In case advance payment was made or given, failure to perform or deliver any of the obligations and undertakings in the contract shall be sufficient grounds to constitute criminal liability for Swindling (Estafa) or the commission of fraud with unfaithfulness or abuse of confidence through misappropriating or converting any payment received by a person or entity under an obligation involving the duty to deliver certain goods or services, to the prejudice of the public and the government of the Philippines pursuant to Article 315 of Act No. 3815 s. 1930, as amended, or the Revised Penal Code.**

IN WITNESS WHEREOF, I have hereunto set my hand this ___ day of ___, 20___ at _____, Philippines.

[Insert NAME OF BIDDER OR ITS AUTHORIZED REPRESENTATIVE]

[Insert signatory's legal capacity]
Affiant

[Jurat]

[Format shall be based on the latest Rules on Notarial Practice]