



## REQUEST FOR QUOTATION (RFQ) Goods and/or Services

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| NAME & ADDRESS SERVICE PROVIDER:<br>_____<br>_____<br>_____ | DATE: <b>15 July 2022</b><br>REFERENCE: <b><u>2021 POPULATION &amp; HOUSING CENSUS – MAPPING PROJECT</u></b> |
| <b>PARTICULARS PROSPECTIVE SERVICE PROVIDER</b>             |  |

Dear Sir / Madam:

You are kindly requested to submit your **Quotation** for the following **items before 13:00PM Afternoon** on: **Friday, 22 July 2022**

| Item | Generic Description: <b><u>PROCUREMENT OF ONE (1) MAPPING DRONE for the NSA</u></b>   | Quantity |
|------|---|----------|
| 1.   | <p><b><u>RFQ SPECIFICATIONS AS BELOW:</u></b></p> <p><b>1. Aircraft (DRONE)</b></p> <p>Max Flight Time: Approx. 30 minutes<br/>Operating Frequency: 2.400 GHz to 2.483 GHz; 5.725 GHz to 5.850 GHz<br/>Transmission Power (EIRP): 2.4 GHz CECE (Europe) / FCC United States / &lt; 26 dBm<br/>Hover Accuracy Range: RTK enabled and functioning properly: Vertical <math>\pm 0.1</math> m, Horizontal <math>\pm 0.1</math> m<br/>RTK disabled Vertical <math>\pm 0.1</math> m with vision positioning <math>\pm 0.5</math> m with GNSS positioning;<br/>Horizontal <math>\pm 0.3</math> m with vision positioning; <math>\pm 1.5</math> m with GNSS positioning</p> <p><b>Camera</b><br/>Sensor: 1" CMOS; Effective pixels: 20M<br/>Lens: FOV 84° 8.8 mm / 24 mm (35 mm format equivalent: 24 mm) f/2.8 – f/11, auto focus at 1 m –<br/>ISO Range: Video: 100-3200 (Auto), 100-6400 (Manual) Photo: 100-3200 (Auto), 100-12800 (Manual)<br/>Mechanical Shutter Speed: 8 – 1/2000 s<br/>Electronic Shutter Speed: 8 – 1/8000 s<br/>Max Image Size: 4864x3648 (4:3) 5472x3648 (3:2)<br/>Video Recording Modes: H.264-4K 3840x2160 30p<br/>Photo Format: JPEG<br/>Video Format: MOV<br/>Supported File Systems: FAT32 32 GB &amp; exFAT &gt; 32 GB<br/>Supported SD Cards: MicroSD, Max Capacity: 128 GB. Class 10 or UHS-1 rating required Write speed over 15 MB/s</p> |          |

**GNSS**

Single-Frequency, High-Sensitivity GNSS Module: GPS+BeiDou+Galileo

Frequency Used GPS L1/L2 GLONASS L1/L2 BeiDou B1/B2 Galileo\*E1/E5a

First-Fixed Time< 50 s

Positioning Accuracy: Vertical 1.5 cm + 1 ppm RMS

Horizontal 1 cm + 1 ppm RMS

1 ppm means the error has a 1mm increase for every 1 km of movement from the aircraft.

\*Available soon

**Gimbal**

Stabilization: 3-axis (tilt, roll, yaw)

Pitch: -90° to +30°

Max Controllable Angular Speed: 90°/s

Angular Vibration Range:  $\pm 0.02^\circ$

**Infrared**

Obstacle Sensing Range: 0.6-23 ft(0.2 – 7 m)

FOV: 70°(Horizontal),  $\pm 10^\circ$ (Vertical)

Measuring Frequency: 10 Hz

Operating Environment: Surface with diffuse reflection material, and reflectivity under 8% such as walls, trees, humans, etc.)

**Remote Controller**

Operating Frequency: 2.400 GHz-2.483 GHz; 5.725 GHz-5.850 GHz

Transmission Power (EIRP): 2.4 GHz CE / MIC / KCC< 20 dBm; 5.8 GHz SRRC / FCC< 26 dBm

Max Transmission Distance: FCC 4.3 mi(7 km) SRRC / CE / MIC / KCC 3.1 mi(5 km) (Unobstructed, free of interference)

Power Consumption: 16 W (typical value)

Display: 5.5 inch screen, 1920×1080, 1000 cd/m<sup>2</sup>, Android System

Memory: 4G RAM+16G ROM

**Vision System**

Velocity Range: 50 kph at 2 m above ground with adequate lighting

Altitude Range: 0 – 10 m

Operating Range: 0 – 10 m

Obstacle Sensing Range: 0.7-30 m

FOV: Forward/Rear: 60° (horizontal),  $\pm 27^\circ$  (vertical), Downward: 70° (front and rear), 50° (left and right)

Measuring Frequency: Forward/Rear 10 Hz; Downward 20 Hz

**Intelligent Flight Battery Charging Hub**

Voltage: 17.5 V

Operating Temperature Range: 5 to 40 °C

Capacity: 4920 mAh

Voltage: 7.6V

Battery Type: LiPo 2S

Energy: 37.39Wh

**Intelligent Battery Charging Hub (WCH2)**

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| 2.  | <p>Input Voltage: 17.3 – 26.2 V</p> <p>Output Voltage and Current: 8.7 V – 6 A, 5 V2 A<br/>Operating Temperature: 5 to 40°C</p> <p><b>AC Power Adapter</b><br/>Voltage: 17.4 V<br/>Rated Power: 160 W</p> <p><b>Other Accessories to be included:</b></p> <ul style="list-style-type: none"> <li>• 1 x car charger for flight battery</li> <li>• 1 x Remote Control with Display</li> <li>• 2 x Intelligent Flight Battery</li> <li>• 1 x Intelligent Battery for Remote Control</li> <li>• 1 x Charging Hub for Flight Battery</li> <li>• 1 x Charging Hub for Remote Control Battery)</li> <li>• 1 x Power Adapter</li> <li>• 1 x Power Cable</li> <li>• 8 x Propeller Pairs</li> </ul> <p>1. The bidding company will be required to provide: <u>(If possible, kindly give a clear separate costing of the listed items below in One Quote or Separate Quotation.</u></p> <ul style="list-style-type: none"> <li>• Provision of flight planning software</li> <li>• 1-year guarantee</li> <li>• Manuals and offer training to the NSA on how to fly drone and plan flights.</li> </ul> <p><b>Interested Companies are requested to provide a comprehensive Financial Proposal (Quotation) with Company Profile and other company Legal Docs; <u>Registration; Good Standing; Tax Registration; Banging Confirmation documents etc.</u></b></p> |  |
| <p>NAME, FUNCTIONAL TITLE: <b>_Procurement Associate – Hendrik Jossop</b></p> <p>Signature: _____</p> <p>CONTACT ADDRESS: <b>__38 – 44 Stein Street, UN HOUSE</b></p> <p><b>DATE: 15 July 2022</b></p> <p><b>FAX NO: _264-61-2046203</b></p> <p><b><u>Submit to: E-MAIL ADDRESS: <a href="mailto:procurement.na@undp.org">procurement.na@undp.org</a></u></b></p> |   |  |