

Section II: Schedule of Requirements

eSourcing reference: RFQ/2025/56234

Supply, Delivery, Installation and testing of 25kw X-Band Radar system including accessories to the Maritime Police in Kiribati, Nauru, Tuvalu and Vanuatu islands.

A. Requirements are comprised of the following lot:

Lot No	Description of the Item	Number of Units
1	Supply, Delivery, Installation and testing of 25kw X-Band Radar system including accessories to the Maritime Police in Kiribati, Nauru, Tuvalu and Vanuatu islands.	4

B. Technical Specifications for Goods and Comparative Data Table

Item No: 1 - X-Band Maritime Radar

No	Minimum Requirements
	X-Band Maritime Radar
	Make
	Model
	Country of Origin
1	ANTENNA
1.1	Radiator - Slotted waveguide array
1.2	Length - 6 feet
1.3	Beam width (H) - 1.4° or better
1.4	Beam width (V) - 20° or better
1.5	Rotation - 24 rpm or higher
2	TRANSCIVER
2.1	Power Output - 25kW or above
2.2	Frequency band - X- band (9410 MHz ±30 MHz, P0N)
2.3	Pulse length and PRF - Short, Medium, Long and very long
2.4	Receiver type - Solid state logarithmic
2.5	Noise figure - 6 dB or less
3	DISPLAY
3.1	Picture tube - 15" or above, multi-color LCD/LED

3.2	Minimum range and discrimination - 20 NM
3.3	Maximum range - 70+ NM
3.4	Accuracy:
	i) Range - 01% of range in use or 15m, whichever is greater
	ii) Bearing - Better than 1°
3.5	Presentation - Head-up, North-up, True Motion
3.6	Plotting facilities (ARPA) - Automatically or Manually acquired, ARPA cards to be included
3.7	Guard zones - Number of Guard zones Electronic bearing lines to be indicated
3.8	VRM & EBL - 02 (Active one to be indicated)
3.9	STC, FTC & Gain Tuning Controls - Manual/ Analog preferred
3.10	AIS Correlated Targets - Over 80+ AIS Targets displayed
3.11	Year of Manufacture - 2019 or later
3.12	Power Supply - 24 V DC or 230V, AC 50Hz
3.13	Warranty - Minimum One year
3.14	Access to Spare parts - Spare parts and after sales support for the next 5 years
4	ON-SITE INSTALLATION
4.1	The bids must include on-site installation of the maritime radar system including the installation of the antenna dome (on an existing tower or roof) and cable connection to the display/control unit within the building assigned for the radar installation.

Item No: 02 - AIS Receiver and Antenna

No	Minimum Requirements
	AIS Receiver and Antenna
	Make
	Model
	Country of Origin
1	AIS Receiver
1.1	AIS Receiver - Dual channel maritime Automatic Information System (AIS) Receiver with capability to receive AIS Class A signals, AIS Class B signals and AIS Class B+ signals.
1.2	Must have capability to acquire the following dynamic data from AIS signal:
	Ship's position
	Coordinated Universal Time (UTC)

	Course Over Ground (COG)
	Speed Over Ground (SOG)
	Rate Of Turn (ROT)
	Heading
	Navigation status
1.3	Display the following static data from AIS signal
	MMSI (Maritime Mobile Service Identity)
	IMO number
	Ship's name
	Ship's type
	Call sign
	Length and beam
	Location of position-fixing antenna on ship
1.4	Display the following voyage related data from AIS signal:
	Ship's draft
	Hazardous cargo
	Destination and ETA
2	Antenna for AIS Receiver
2.1	Should be designed for VHF / AIS Land and Marine Service
2.2	Should facilitate monitoring of AIS sea traffic
2.3	Omnidirectional feature should be enabled
2.4	Material: non-corrosive aluminum
2.5	Should be Rugged and corrosion resistant
2.6	Pole mount bracket should be included
2.7	10 m or better length cable should be included
2.8	Tunable frequency range of 135 -175 MHz
2.9	Weight: Max 600g
2.10	Should be supplied with centre element length L pre-adjusted for AIS frequencies
2.11	Should be supplied with J-mount antenna bracket for installation
2.12	Must be compatible with the AIS receiver; Covering Class A and Class B CS;
2.13	Comes with all necessary accessories such as power cable

Item No: 03 - Uninterrupted Power Supply (UPS)

No	Minimum Requirements
3	Uninterrupted Power Supply (UPS)
	Make
	Model
	Country of Origin
3.1	Input Nominal Voltage - 200-240 Vac (single phase)
3.2	Input Voltage Range - 100 ~ 300 Vac (full load)
3.3	Input Current Harmonic Distortion - < 5% (full load)
3.4	Input Frequency - 40 ~ 70 Hz
3.5	Output Voltage - 200-230(default) / 240 Vac (single phase)
3.6	Output Voltage Harmonic Distortion - \leq 2% (linear load)
3.7	Output Frequency - 50 or 60 \pm 0.05 Hz
3.8	Battery Capacity - 1000VA/800W
3.9	Devices Supported - 6 power supply outlets (6AC Output)
3.10	Control System - Microprocessor Control
3.11	Stabilizer - (AVR) for automatic voltage
3.12	Overload Alarm - Audio
3.13	Protection - Lightning & Surge Protection System
3.14	Noise - EMI/RFI Filter for electrical noise prevention
3.15	Back-up Duration - Backs up power for 20-30 minutes

C. Delivery Schedule

UNOPS Requirements	
Delivery time	Bidder shall deliver the goods within 2 months after Contract signature.
Incoterm applicable	DAP Incoterms Maritime Police in Kiribati, Nauru, Tuvalu and Vanuatu islands
Consignee details	Will be confirmed at the time of the Contract issuance stage.

**UNOPS Right to vary
requirements**

At the time the Contract is awarded, UNOPS reserves the right to vary the quantity of the goods and associated services specified above, provided this does not exceed +/- 25%, without any change in the unit prices or other terms and conditions of the RFQ.