



## **Equipment Tender Document (The Second Time): Online Monitoring Station's Sensors April 6<sup>th</sup>, 2022**

**The present tender document** is posted in the framework of implementation of the Project: Mediterranean Forum for Applied Ecosystem-Based Management (MED4EBM). This is a partnership project funded by the ENI CBC MED Programme 2014-2020, under the Thematic Objective B.4 (Environmental Protection, Climate Change Adaptation and Mitigation), and Thematic Priority B.4.4 (Incorporate the Ecosystem-Based Management Approach to ICZM into Local Development Planning).

**The Project aims at** enhancing capacities of various stakeholders and institutional actors involved in the management of coastal and marine areas, and at establishing a cooperation and coordination platform for effectively implement Ecosystem-Based Integrated Coastal Zone Management (EB-ICZM). Governments and other ICZM stakeholders can benefit from this platform in taking informed decisions on planning and managing coastal resources and achieve effective coordination on the ground.

**The Royal Marine Conservation Society of Jordan (JREDS)** as MED4EBM project partner, hereby requests qualified companies to apply for a tender to provide sensors to be fitted in two existing Online Monitoring Stations.

**Station I (Southern Station)** is running on an embedded industrial PC with available ports (USB, RJ45, COM port RS 232) having all real-time collected sensors readings on a special software called (XMar2.0 CStation) that is intended to manage all coming in data into readable files then all data files are sent on timely manner to the server-side over internet

**Station II (Northern Station)** is running without an embedded industrial PC. It works on a special datalogger (Advantech ECU-1251) that collects sensors readings on a real-time basis to be transferred automatically to the land server-side using a networking switch device and router device over internet.

Interested qualified companies may visit the site to see the Online Monitoring Stations during the period Dec. 19<sup>th</sup> – 23<sup>rd</sup> 2021 based on pre-arrangement. The offer should include delivery and installation.

### **The following technical conditions must be considered:**

1. Sensors are up to date in operation technology, reliability and effectiveness
2. Compatibility with the respective existing Online Monitoring Station
3. Sensors are of European or North American make
4. Provision of detailed specifications of the sensors, as well as of documentation and necessary certifications of quality and compliance to standards and best practices of operational conditions in the Gulf of Aqaba seawater (Salinity: 40-41PSU; Temperature 20-30°C)
5. Reliability of results checked against robust analytical methods suitable for waters of the Gulf of Aqaba, Red Sea

**Sensors Required for Station I:**

1. Conductivity/Salinity: Qty 1
2. Chlorophyll *a* concentration: Qty 1
3. Turbidity: Qty 1
4. pH: Qty 1
5. Dissolved Oxygen concentration: Qty 1

**Sensors Required for Station II:**

1. Conductivity/Salinity: Qty 1
2. Chlorophyll *a* concentration: Qty 1
3. Turbidity: Qty 1
4. pH: Qty 1
5. Dissolved Oxygen concentration: Qty 1
6. Ammonia NH<sub>3</sub>: Qty 1
7. Nitrite NO<sub>3</sub>: Qty 1

**General Bidding Conditions**

1. Bidders must provide three years Warranty and Support for all the offered items. A certified cheque is required
2. **Bidders must apply to two prices separately: Station I (Southern) and Station II (Northern)**
3. Bidders must visit the site and prepare their own detailed fitting plan
4. Bidders must have local qualified technical team to support installation and maintenance
5. Quantities mentioned in this document can be considered as minimum requirements. Bidders are fully responsible for end-to-end solutions including all necessary quantities
6. Bidders shall provide complete knowledge transfer and documentation that cover all aspects of the project. All related material for the products should be included, i.e. configuration and the necessary manuals
7. Bidders shall provide to the customer's team on-site training on the hardware installation and software configuration.
8. The price is paid in full within 40 days of issuance of the invoice
9. Bidders may submit their offers in closed and sealed envelopes only, specifying "MED4EBM Project – Sensors for the Online Monitoring Station" JREDS; delivered to JREDS' Office in Amman - Um Al-Summaq, Hamed Jaber Street, Building No. 15
10. Deadline of receiving offers is at 13:00 h of Thursday, April 21<sup>st</sup>, 2022