



**MedWaves, the UNEP/MAP Regional Activity Centre for SCP**

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Terms of Reference (ToR) for technical assistance to design a circular economy pilot action on copper ore management, recycling and water reuse in the Port of Bar, Montenegro.

## Background

### *About MedWaves*

MedWaves, the UNEP/MAP regional activity centre for sustainable consumption and production, is a centre for international cooperation on development and innovation based on the sustainable consumption and production approach (hereinafter SCP).

The Centre is one of the Regional Activity Centres established in the framework of UNEP/[Mediterranean Action Plan \(hereinafter UNEP/MAP\)](#), the programme of UN Environment established to support the member countries of the Barcelona Convention for the Protection of Marine Environment and the Coastal Region of the Mediterranean. The Centre also operates in support of the Stockholm Convention, an international agreement involving 180 countries to fight against the generation of persistent organic pollutants, highly polluting and toxic substances. MedWaves has the mandate from the Barcelona and Stockholm Conventions to provide assistance to their Contracting Parties in fulfilling their commitments under those treaties, particularly through the support to the countries to shift to sustainable consumption and production patterns and circular economy (CE).

In the performance of its mandate, MedWaves fosters the introduction of solutions on eco-innovation, marine litter/plastic pollution prevention, circular economy, and safe alternatives to toxic chemicals through the provision of advisory services, technical assistance, innovative training materials, networking services and accompaniment in the implementation of measures. MedWaves also leads a comprehensive support programme for the creation and development of green, circular business models and enterprises.

The Centre is based in Barcelona, and it is legally hosted by the Catalan Waste Agency, a public service agency considered a reference organization in waste prevention and management and the promotion of circular economy.

## Framework of the assignment of this ToR

For the biennium 2022-2023, the Ministry of Environment and Energy Security of Italy is financing specific activities of the UNEP/Mediterranean Action Plan (MAP) Programme of Work 2022-2023. This is operationalized through a Bilateral Agreement between Ministry of the Environment and Energy Security of Italy and the Coordinating Unit of the Mediterranean Action Plan / Barcelona Convention Secretariat. One of the activity included in this Bilateral Agreement is Activity 4.2.3. “Promote sustainable entrepreneurship in the Blue Economy Sector including through the integration of circular economy principles”, that includes the implementation of demonstration activities in Albania and Montenegro to be led by MedWaves.

These demo activities will built on the findings of a study jointly prepared between MedWaves and the Conference of Peripheral Maritime Regions (CPMR) on circular economy within selected Blue Economy sectors titled “[A Circular Blue Economy for the Mediterranean: Current practices](#)”

[and opportunities](#)”, which focused on defining a vision, identifying best practices and then opportunities and recommendations for the integration of circular economy within selected sectors of the Blue Economy.

In 2022, a first analysis of the blue economy sectors was conducted in Albania and Montenegro to identify the best sectors for piloting the integration of circular economy. Following this initial step, several options were developed and discussed with the MedWaves National Focal Points in Albania and Montenegro, within the Ministries of Environment. It was finally decided to focus the implementation of the demonstration activities in ports in both targeted countries. The selected ports were the Port of Bar (Montenegro) and Port of Vlorë (Albania). The ports have been analyzed and several opportunities for implementing circular economy principles have been identified.

In this context, MedWaves needs to rely on a company or expert to provide technical assistance in developing the engineering design of one of the previously identified circular economy pilot actions.

## Objective

MedWaves, the UNEP/MAP Regional Activity Centre for SCP is looking for an expert to design a circular economy pilot action on copper ore management, recycling and water reuse in the dry bulk terminal of the “Port of Bar” A.D., in Montenegro.

The main commodity (business) of the “Port of Bar” A.D. is copper concentrate that comes from the Bor mines (Serbia) and is exported to China. In 2022, more than 800,000 tons of copper concentrate were handled for this company, with growth planned in the coming years.

Copper ore is a hazardous material, which easily comes into contact with workers, since the copper concentrate is easily dispersed. The port administration has taken measures to prevent the dispersion of copper concentrate in the port area to avoid impacts on workers and the environment surrounding the port. Despite of these measures, there are still problems, primarily due to the insufficient awareness of workers and truck drivers (especially external workers) about the importance of following procedures when working with this type of cargo.

The copper concentrate should be transported in closed systems to avoid dispersion of the material. This is generally done with a special type of container in which the goods would be unloaded directly into the ship. For now, there is no interest on implementing this type of transport for economic reasons.

Currently, the copper ore is stored outdoors, and when it rains the rain water drags part of the copper ore, causing an environmental impact on the sea and a loss of valuable resources. This is problematic from both an economic and environmental point of view, which requires to be solved.

The objective of the consultancy is to design an engineering solution/proposal to:

1. Recover rainwater contaminated with copper ore;

2. Treat this contaminated water to recover copper ore for recycling/reuse at the Bor mines (Serbia) avoiding copper ore losses;
3. Reuse recycled water in a sprinkler system that reduces the dust during the bulk cargo handling.
4. Explore opportunities of rain harvesting water for the sprinkler system and/or for other uses in the port.

## Description of work

The consultant shall undertake the following work:

### **Activity 1. Field visit for project design in the Port of Bar**

Implementation of a field visit to explore the copper ore problem and interview with Port authorities.

### **Activity 2. Development of the circular economy pilot action project design and feasibility information**

Development of a project design and feasibility information to:

- Recover rainwater contaminated with copper ore;
- Treat this contaminated water to recover copper ore for recycling/reuse at the Bor mines (Serbia) avoiding copper ore losses;
- Reuse recycled water for a sprinkler system that reduces the dust during the bulk cargo handling; and
- Explore opportunities of rain harvesting for the sprinkler system and/or for other water uses in the port.

### **Activity 3. Reporting of project design**

Prepare a report on the project design.

#### Duration

1 month (1<sup>st</sup> December 2023 – December 31<sup>th</sup> 2023)

#### Location

Bar, Montenegro.

MedWaves is looking to partner with a consultant, company, or association (hereinafter Contractor) to ensure the implementation of the project and help achieve the expected objectives.

## Deliverables and timeline

The consultant will start the work after the validation of the submitted offer by the contractor.

The deliverable should be written in a very concise manner, limiting the number of pages, highlighting key facts and main messages.

#	Activities	Deliverable	Deadline
1	Field visit Port of Bar	Short report of the visit	10 <sup>th</sup> December 2023
2	Development of the circular economy pilot action	Draft Report	20 <sup>th</sup> December 2024
3	Reporting of project design	Concept report of the designed pilot action	31 <sup>st</sup> December 2023

The Contractor is expected to liaise with the Policy Area of MedWaves throughout the project implementation to ensure full coordination and a common understanding of the approach and methodology. Weekly meetings are expected to monitor project implementation and adapt as need be.

## Means and modalities of work

- The Contractor will start the work after receiving the email of acceptance of the offer by Agència de Residus de Catalunya (hosting MedWaves), expected by the beginning of Novembre.
- The Contractor will work under the supervision and in close coordination with the team of the Policy Area of MedWaves.
- The Contractor will work with its own means: equipment, consumables, local travel, health and travel insurances, and any other expense should be included in the financial offer.
- Working languages are:
  - Montenegrin: communication with local stakeholders.

- English: communication with Medwaves and international experts. Deliverables will have to be written in English also.

## Eligibility

The applicant (and its subcontractor, if any) must fulfil the following requirements:

- Be an individual consultant, firm or association. Note: This ToR is not a subvention but a provision of services and hence the Contractor shall comply with the national tax context.
- Be able to comply with national fiscal context and rules for receipt of international funds.
- Have a bank account whose holder name must be the same as the applicant.
- Partnership and subcontracting are allowed as long as the applicant has a substantive role in the assignment (e.g., layout service can be subcontracted).
- Fluent communication in Montenegrin (reading, speaking, and writing) and very good level of English (reading, speaking, and writing).
- Extensive experience in water treatment processes and recovery systems related to contaminated water.
- Knowledge of port activities, facilities and related stakeholders.
- Experience in international projects.

## How to apply and selection process

Candidates should submit the following documents:

- 1) Technical offer (maximum 3 pages): a conceptual note based on the activities and deliverables listed above. The offer should specify the envisaged approach/methodology and key elements to consider given the local context for a successful implementation of the proposed activities.
- 2) Profile and project references: the candidate (or team) should submit a brief professional background, including references to related projects. CV(s) of the team members shall be included as annex.
- 3) Financial offer: the consultant(s) should state the personnel dedication expressed in days (1 day = 8 working hours) and per task, as well as a lump sum for other costs related to the implementation of work.

**The maximum amount considered is 14.000€ (all taxes included).**

**Important information regarding the consideration of the added-value tax (VAT)**

1. Applicants legally registered in Spain: This is a provision of services and therefore VAT applies. Offers must include Spanish VAT number, and financial offer clearly indicate total before VAT, VAT amount, and total including VAT. This information should be equally reflected in the invoices.
2. Applicants legally registered in an EU Member State, other than Spain: they must be registered in the VIES registry (VAT Information Exchange System). Offers must include EU VAT number (including country code), and financial offer indicate total before VAT, along with the statement "both provider and client are registered in the VIES system and therefore VAT is not included in the offer". This information should be equally reflected in the invoices.
3. Applicants legally registered in an EU Member State exempted of VAT: they must submit official proof of exemption of VAT. Financial offers must include the statement "the provider is exempted of VAT as for [legal document]". This information should be equally reflected in the invoices.
4. Applicants legally registered in a non-member country of the EU: The provider is liable for paying taxes related to the provision of services as per tax regulations in its country. Financial offer must comprise that cost, and invoices submitted with all taxes included.

- 4) Bank form filled in, signed, and stamped by the bank.

**Offers must be sent to [octavi.domingo@gencat.cat](mailto:octavi.domingo@gencat.cat) with copy to [jesus.maestro@gencat.cat](mailto:jesus.maestro@gencat.cat) with the subject "technical assistance copper ore water treatment" before **24<sup>th</sup> November, midnight (CET)**.**

All candidates will be notified upon the reception of the offers.

Offers will be assessed according to the following criteria and scores:

Points	Criteria
Maximum 45 points	Extent to which the technical bid is responding to the needs.
Maximum 20 points	Financial bid
Maximum 25 points	Technical expertise in the same type of missions

Maximum 10 points	Other qualifications and additional proposals for improvement
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MedWaves may contact candidates to convene an interview to facilitate the evaluation

If you have questions concerning these ToR, please contact: [octavi.domingo@gencat.cat](mailto:octavi.domingo@gencat.cat).

## Selection and payments

The winning candidate will be notified by email on the selection of the offer. From that moment, the work can start according to the calendar.

Payments will be done as it follows:

- Submission and approval of deliverables 1, 2 and 3: 100%

Payments will be done in a period of 60 days after reception and validation of the invoice. The Contractor is not responsible for banking costs that might be applied by the consultant(s) bank, neither for changes in currency exchange.