

Annex I - Terms of Reference for Individual Contractor (IC)

National or International consultant: National

Description of the assignment (Title of consultancy): Hazardous and E-Waste Expert

Project Title: Sustainable Recovery of Lebanon from the Beirut Explosion – Solid Waste Management

Period of assignment/services: 100 working days

Is this a LTA (yes/no): Yes

1. Background / Project Description

The Beirut Port explosions occurred as Lebanon had been in the midst of a multi-faceted crisis since October 2019, with an accelerating economic and financial crisis that has since led to increasing levels of poverty and food insecurity, further compounding structural gender inequalities and needs among the Lebanese and non-Lebanese communities alike, including the significant refugee populations. In addition, increasing COVID-19 transmission is straining the country's health systems while also damaging country's tourism and service sector due to the sequence of lockdown measures. Within this context, the project will support the sustainable recovery of Lebanon after the massive explosion occurred on August 4, 2020 amidst the economic crisis and COVID-19 pandemic. More specifically, the project will support the country's recovery effort from the devastating explosion via several interventions, which one of them is related to disaster waste management, specifically on e-waste.

While there was emergency humanitarian support for the deployment of search and rescue experts, food, medical care, and other essential items, the support for early and longer-term recovery effort is essential and its needs are bigger than the available support. In light of this, UNDP undertook the damage assessment surrounding the Port of Beirut in order to plan and design recovery interventions with focus on debris and waste management in collaboration with the Ministry of Environment (MoE). The assessment found that approximately 23% of buildings generated e-waste (air conditioners, household electronics) from the blast. While a lot of actors focus on visible debris, e-waste attracts less attention despite its potential hazardous impact without adequate management.

Even before the crises, Lebanon had very weak infrastructure and a limited institutional capacity to properly manage e-waste and capture the values by reusing (repairing) and recycling. More specifically, there is no public facility working on e-waste collecting or treatment yet. According to the Global E-waste Statistics developed by ITU, UNU and ISWA¹, Lebanon is generating approximately 50,000 tons of e-waste per year as of 2019, which was estimated from the amount of the import and export of each electronic items. Till now, there is neither statistical data nor

¹ <https://globalewaste.org/statistics/country/lebanon/2019/>

indicative data on types and amount of e-waste generated, collected and recycled at household and enterprise-level.

Nonetheless, there are different actors involved in this sector. A few local NGOs are collecting e-wastes and batteries from households and institutions but most of them do not possess a treatment process. Till now, there are one NGO and one private company with a treatment process for e-waste. However, their service coverage and capacity are limited and thus does not reach the significant scale yet. The e-waste generated from disaster can have a detrimental impact on human health and environment if not disposed appropriately. The current haphazard disposal methods applied for e-waste in Lebanon, such as burning e-waste to extract metals and improper disposal of e-waste, represent considerable economic losses and negative environmental and health impacts. On the other hand, the proper e-waste management system enables not only environmentally sound disposal but also value capturing and improvement of livelihoods of vulnerable population through repairing and recycling activities including the recovery of valuable metals

For this purpose, UNDP in close coordination with the MoE is planning to undertake a detailed survey on e-waste in Lebanon to assess the current status of the sector, identify necessary actions to improve e-waste management in Lebanon and implement them. The project is funded by the Government of Japan to support Lebanon's sustainable recovery from the Beirut Explosion. In parallel, this work will fit into the overall hazardous waste management such as healthcare waste, agricultural waste, sludges, e-waste, and batteries.

To improve project capabilities and implement and design the project activities swiftly, a Hazardous Waste Expert (referred to as "Individual Consultant (IC)") will be recruited to support the team and to respond to the various technical requirements related to the viability of the planned interventions.

2. Scope of work, responsibilities and description of the proposed analytical work

The Consultant shall perform all the services/work as necessary to fulfill the objectives of the consultancy contract.

The Consultant will be expected to carry out tasks such as:

- Review relevant literature related to the project with particular focus on applicable national standards and legislations.
- Identify and coordinate with national and international stakeholders, including but not limited to EU partners, UN University, UNIDO and others, in the relevant sector and establish network with them for data collection/sharing and collaboration.
- Conduct field visits to the project sites as needed and conduct necessary assessment of the concerned facilities on behalf of UNDP.
- Support project team in designing activities, data collection, as well as surveys that will be conducted under this intervention.
- Provide advisory services on linkages with other pipeline projects on hazardous waste and drafting related notes and terms of references accordingly.
- Prepare and review tender documents for e-waste related activities within this project in addition to complementary hazardous waste projects.
- Identify capacity building needs and design related programmes to be outsourced.

- Seek or review offers and/or any other available documentations in view of assessing the technical feasibility of the proposed sub-projects and prepare evaluation reports accordingly.
- Ensure that the proposed sub-projects follow the applicable environmental and social requirements as well as the national environmental legislation.
- Submit a technical report in line with the project's requirements.
- Provide technical support to the project in the collection, evaluation, and processing of relevant technical information as needed.

3. Expected Outputs and deliverables

The consultant is expected to submit one report for each assigned task. The following deliverables requirements will apply to this agreement:

- Provision period of required services will be defined in coordination with the project team.
- Deliverables and related man-days will be agreed upon in writing with the project team prior to the initiation of each task.

All deliverables should be handed out in two hard copies as well as one soft copy (Word format and Excel format for tables) and a PDF format for web publishing. If relevant, copies of high-resolution maps (if applicable), research material and graphics should also be handed out to the project management team.

4. Institutional arrangements

The Consultant will work under the direct supervision of the project Manager. During the fulfillment of the tasks under this agreement, the Consultant will ensure regular communication with the project team and will ensure a timely delivery of the expected outputs and will regularly inform the project team of the progress as well as any obstacles that might occur.

5. Duration of work

The contract will be on a long-term agreement basis with an expected duration until **31 December 2022** from date of contract signature with up to **100 working days**.

6. Duty station

The assignment requires deskwork, research, meetings, fieldwork as well as coordination between the different concerned entities. The consultant is expected to consider that he/she will perform the needed work in his/her own premises, using his/her own property and technology, and hold direct responsibility for the quality of delivered outputs.

The consultant shall make his own arrangements for all transportation required to perform the required tasks including site visits to industries. When possible, the project will provide support service and/or logistical support (excluding transportation to the office and communication costs) during this assignment.

7. Requirements for experience and qualifications

- i. Academic Qualifications
University degree (at the master's level) in Environmental Sciences/Engineering, Waste Management, or closely related fields.
- ii. Years of experience
Minimum 10 years of relevant experience.
- iii. Technical experience
 - Proven experience in environmental management and hazardous waste, including e-waste
 - Good experience in conducting technical assessments
 - Good experience in developing national regulatory plans and standards related to the field
 - Good knowledge of hazardous waste sector's and environmental compliance
 - Sound experience in similar projects in the required domains.
- iv. Competencies
 - Proficiency in English and Arabic. French is an asset
 - Demonstrable analytical skills and report-writing skills
 - Excellent communication skills.

8. Scope of Price Proposal and Schedule of Payments

Payment will be made against each deliverable/output (or a package of deliverables/outputs) on pre-agreed workday basis - an IC Time Sheet must be submitted by the Consultant, and duly approved by the Project Manager; this shall serve as the basis for the payment of fees, in addition to the PO raised for each assignment (s).

The UNDP shall effect payments to the Consultant after acceptance by UNDP of the deliverables submitted by the Consultant, and submission of a certificate of payments including the time-sheets. The payment currency of the Contract is **USD**.