

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

National or International consultant: International

Description of the assignment (Title of consultancy): Solid Waste Expert

Project Title: Preparation for the EU-funded TaDWIR project

Period of assignment/services: 70 working days

Is this a LTA (yes/no): Yes

1. Background / Project Description

As in any country, waste generated by human activity results in major challenges for the livelihood conditions of the Lebanese population. Even if the sources of data differ because of the lack of a complete baseline for total solid waste production in Lebanon, it can be estimated that Lebanon produces nowadays a quantity close to 7 000 tons/day (Azzi, 2017). The potential impact of the high quantity of waste burned or disposed without proper treatment and landfilling have been described in many studies. Among the many reasons for the recurring waste crises in Lebanon are the demographics, the high population density, extensive urban development and the consumption patterns in the country, but also that the mixed waste has varying qualities and quantities, is received by a mixture of types of treatment facilities, is inadequately treated and ultimately, landfills are not available in sufficient capacity across the country..

The second highlight to be mentioned, that may be an important reason behind the high collected tonnage of waste v/s actual facilities capacity existing is the very limited separation of special streams of waste, including the hazardous part, except the main healthcare produced waste, from the municipal solid waste, which makes it difficult to maintain optimal technical solutions

TaDWIR is an EU project that aims at reducing the exposure of environmental and health risk of Lebanese population from waste. Its specific objective would be to improve the overall waste management sector across the country and sectors, by using both a multi-scalar and multi-stakeholder approach and structuring its intervention around 3 components: i) Central support to waste sector governance, ii) Sub-sector support to developing management solutions for special streams of waste, iii) Local targeted support to strengthening the performance and resilience of existing municipal solid waste management (MSWM) facilities. The support measures to MSW subsector aim at complementing previous EU support at municipal level to enhance the sustainability of existing MSW facilities. Furthermore, the project will also target soft interventions at central level aimed at strengthening the waste sector in general at policy, strategy and governance level. The critical approach of this project is to tackle special waste streams first and in specific to consider diverting as much as possible from the MSW streams and treated separately. The entire value chain of the waste streams needs to be taken into

consideration and the remaining waste, at municipal level, be tackled taking potential value chain and end-use should be taken into consideration to ensure sustainable solutions are designed.

For this purpose, UNDP in close partnership with the EU Delegation in Beirut is seeking the services of an international solid waste expert (referred to as “Individual Consultant (IC)”) to support in the detailed design of the TaDWIR project based on available data and studies. .

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:

- Support the UNDP Programme Manager in designing activities, related budgets, analysis and approaches for the TaDWIR project
- Provide advisory services on the various technical treatment options for waste streams and municipal waste particularly based on EU directives and best practices.
- Support in writing up the UNDP – EU Description of the Action for TaDWIR and elaborate all related annexes and required documentation
- Review reports received from consultants working on related analysis for this project including health care waste studies
- Draft terms of reference for the staff needed for the TaDWIR project
- Draft terms of reference for the consultancies and equipment/systems as required by the project

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:

Deliverable	Estimated number of days
Support the UNDP Programme Manager in designing activities, related budgets, analysis and approaches for the TaDWIR project	10
Provide advisory services on the various technical treatment options for waste streams and municipal waste particularly based on EU directives and best practices.	10
Support in writing up the UNDP – EU Description of the Action for TaDWIR and elaborate all related annexes and required documentation	20
Review reports received from consultants working on related analysis for this project including health care waste studies	10

Draft terms of reference for the staff needed for the TaDWIR project	10
Draft terms of reference for the consultancies and equipment/systems as required by the project	10

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 UNDP Programme Manager. During the fulfillment of the tasks under this agreement, the Consultant will ensure regular communication with the Rafeh manager 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 **15 June 2021 to December 2021** from date of contract signature with up to **70 working days**.

6. Duty station

The assignment requires deskwork, research, online meetings and brainstorming sessions. 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.

7. Requirements for experience and qualifications

- i. Academic Qualifications
University degree (at the master's level) in solid waste management, civil engineering industrial engineering, chemical engineering or closely related field
- ii. Years of experience
Minimum 10 years of relevant experience.
- iii. Technical experience
 - Proven experience in solid waste management, including hazardous waste, municipal waste and special stream waste
 - Knowledge of the Lebanese context of solid waste;

- Experience in designing project proposals and solid waste at both policy and implementation levels
- iv. Competencies
- Proficiency in English
 - 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**.