Terms of Reference

Description of the assignment (Title of consultancy): National Consultant for carrying out an in-country survey on HFCs and their alternatives in mobile air-conditioning sector (MAC)

Project Title: LEB/SEV/74/TAS/35 – Survey of ODS alternatives at the national level in Lebanon

Period of assignment/services: 20 calendar weeks

1. Background

In the 74th Meeting of the Executive Committee, project preparation funding was approved for Lebanon to conduct inventories or surveys on the Hydrofluorocarbons (HFCs) and their alternatives in the country.

The national consultant would undertake survey planning, data collection and data analysis under the technical guidance of the Ministry of Environment and UNDP.

The details of the Terms of Reference (TOR) given below presents the scope of work, deliverables and timelines for the national consultant. This TOR will form the basis for engagement of the national consultant.

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

The purpose of the consultancy is for providing technical assistance and consultancy services at the national level, carrying out an in-country survey on HFCs and their alternatives currently used in MAC sector and forecasting the alternatives of HFCs most commonly to be used in Lebanon in this sector in the future. This study/survey and data collection will be a complementary study to the main report which was submitted to fill in data gaps in the MAC sub-sector.

Under the direct supervision of the Project Manager, the national consultant should undertake the following tasks:

- 1) Define a survey plan through:
 - Developing a questionnaire to be completed with full details on the MAC service workshops (collecting data on refrigerant types and quantities and prices);
 - Carrying out data analysis on information obtained from institutional and field sources;
 - Compiling the data;
 - Forecasting the expected growth in this sector and compiling the progress and final report.
- 2) With the prior approval of the Project Manager, undertake site visits to identify all MAC service workshops nation-wide and collect baseline information and other data as may be required by the Project Team, in accordance with the questionnaire designed for this purpose. The data shall be collected for the years from 2015-2017.

- 3) Classify the data by sector and sub-sectors
 - Consumption of refrigerants in the sector including imports and exports by origin and destination countries, respectively.
 - List of service workshops by size (small-medium-large)
 - List of users who previously received assistance under the Montreal Protocol Programme
 - List of users who did not receive assistance under the Montreal Protocol Programme
- 4) Collect and compile data, segregated by service workshop size at the national level:
 - Historical import data of refrigerants used in the MAC sector for the years 2015-2017 and segregated by originating countries
 - Data on population of cars, refrigerated trucks and transportation buses equipped with Air-conditioning systems.
- 5) Provide the Project Team with progress reports on data collected as specified in the proposed work plan and a final report incorporating the expected results as mentioned above, at the end of the contract period.

The survey consultant should work in close consultation with the Project Team and with the Ministry of Environment on the survey process for HFCs and their alternatives. The overall approach and outputs from the survey would be guided by decisions taken in the 74th and 75th Executive Committee meeting; relevant MOP meetings and Secretariat document no. 75/77.

3. Expected Outputs and deliverables

- Detailed work plan
- National survey report on HFCs and their alternatives used in MAC sector (collected and compiled as requested) in all sectors and sub-sectors
- 2 progress reports
- Final report

Deliverables/ Outputs	Estimated Duration to Complete	Target Due Dates	Review and Approvals Required
20% Payment after submission of detailed work plan describing the activities and timelines	2 weeks after contract signature	August 14, 2018	Project Manager
25% Payment after submission of Progress report 1	8 weeks after contract signature	September 25, 2018	Project Manager
30% Payment after submission of Progress report 2	16 weeks after contract signature	November 20, 2018	Project Manager
25% Payment after submission of Final report	20 weeks after contract signature	December 18,2018	Project Manager

4. Institutional arrangements

All deliverables should be handed out in 1 hard copy and 1 soft copy (word format and excel format for tables) and a PDF format for web publishing. If relevant, copies of high resolution maps and graphics should also be handed out to the NOU project manager for approval.

During the fulfillment of the assignment, the consultant will ensure regular communication with the project team, and will ensure a timely delivery of the expected outputs as mentioned in the table above and will regularly inform the project team of the progress as well as any obstacles that might occur.

The consultant is responsible to cover all logistic/transport/communication expenses related to the implementation of his tasks throughout this contract

5. Duration of work

The overall duration of the assignment covered by this ToR is 20 calendar weeks from the date of contract signature.

6. Duty station

The assignment requires deskwork, meetings, coordination, and intensive field work to cover selected MAC workshops all over Lebanon. The consultant is expected to perform his/her duties under home office arrangements and meetings at the Ministry of Environment in Beirut when requested. The Consultant will perform the needed using his/her own property and technology, and will hold direct responsibility for the quality of delivered outputs

7. Requirements for experience and qualifications

I. Academic Qualifications:

Bachelor degree in Mechanical/ Chemical Engineering, Environmental Science or related fields

II. Years of experience:

Minimum of 7 Years of relevant experience

III. Technical experience:

The Consultant should possess the following experience and qualifications:

- Previous experience in carrying out similar surveys
- Demonstrated experience in the ODSs and their alternatives' consuming sectors
- Demonstrated experience in Montreal Protocol activities
- Knowledge and understanding of the Montreal Protocol Programme in Lebanon and relevant policies and regulations
- Prior experience in working with government departments and international organizations

IIV. Competencies:

- Good command of English and Arabic languages
- Good organizational and analytical skills
- Good communication, coordination and reporting skills

8. Scope of Price Proposal and Schedule of Payments

Payments will be made upon submission and approval of deliverables and upon submission of the certificate of payment.

The schedule of payment is detailed in section 3.