



MINISTRY OF ENVIRONMENT, CLIMATE CHANGE AND TECHNOLOGY

Male' Republic of Maldives

Trainers for the RAC training programs under National Ozone Unit

TERMS OF REFERENCE

[15 August 2021]

Prepared by:

National Ozone Unit

1. INTRODUCTION

Maldives is a Party to the Montreal Protocol on Substances that Deplete the Ozone Layer and has acceded to the Vienna Convention and Montreal Protocol in May 1998. As a party to the Vienna Convention and Montreal Protocol on Substances that Deplete the Ozone Layer, Maldives has phased out several ozone depleting substances (ODS).

Maldives has ratified the Kigali Amendment (KA) which proposes to phase down the production and usage of hydrofluorocarbons (HFCs) by mid-2040. HFCs are man-made chemicals that are widely used in air-conditioning, refrigeration and foam insulation and are powerful greenhouse gases, more potent than carbon dioxide. As such they contribute significantly to climate change. KA is therefore a significant milestone in the international environmental protection as its achievement could help to reduce the global temperature rise by 0.5 degree Celsius by the year 2100.

The Fisheries Sector and Tourism sector are the largest consumers of the ODS and ODS alternatives in the Maldives. Maldives being a tropical island country with a hot and humid climate, various types of cooling, refrigeration and air conditioning equipment are used in each resort and tourist establishments such as guest houses, safari vessels and hotels. Refrigerant needed for servicing of RAC equipment is largely supplied by local servicing shops. A total of 13% of total imports of refrigerant is imported by the tourist related establishments for their own use.

HFCs in the Maldives are used mainly in the RAC servicing sector. However, the servicing sector remains largely unregulated since the Maldives currently does not have a regulation that controls the opening of a RAC servicing workshop nor a registration system for RAC service workshops. Any business or company registered in the Ministry of Economic Development can provide servicing for RAC equipment. This makes it challenging to provide the exact number of RAC servicing workshops operating in the country.

The majority of the workshops are located in Male and most resorts have their in-house technicians to service the RAC equipment. It is estimated that about 80% of the workshops engage in the repair and maintenance of domestic RAC equipment, and the remaining 20% provide servicing for commercial RAC equipment. Only a limited number of workshops provide servicing for commercial equipment as they require properly trained technicians with more skills, knowledge and tools.

There is currently no regulation that mandates a practicing license or certificate for RAC technicians. Hence any person can offer RAC servicing, and the practice remains largely unregulated. As there is not a mandatory registration or certification system, it is not possible to categorize the percentage of certified technicians.

2. SCOPE OF WORKS

The Scope of this service is to run training programs under National Ozone Unit, for Refrigeration and Air Conditioning technicians. The online training programs will cover the good practices and safe handling of refrigerants, with a focus on commonly used refrigerants.

- Trainer is expected to develop and prepare the training materials based on the areas to be covered for the programs.
- A presentation must be made in English for all the training programs to be conducted. Presentation must be shared with National Ozone Unit, 1 week prior to the first training session.
- Explanations must be provided in Dhivehi as deemed necessary or on request of trainees.
- Training programs will be held on online platform Microsoft Teams (NOU will provide the technical support in form of arranging and assisting in running the training meetings).
- Each training session must be a minimum of 1 hour 30 minutes.
- The areas to be covered can be distributed among the 2 sessions for each deliverable.

The training programs to must cover (but not limited to) the following areas:

Technical and safety training (THEORY ONLY)	
<ul style="list-style-type: none"> • Tools and fundamentals of RAC • Good practices for reducing refrigerant consumption and emission • Safe handling of refrigerants • Basics of Retrofitting • Information about current and commonly used refrigerants and their requirements • Repair and Maintenance of RAC equipment • Safety Rules and Regulations • Safe handling of Flammable refrigerants • Leak testing and Repair Leak • System Recovery • Information regarding the upcoming and new refrigerants in the market 	

3. DELIVERABLES

#	<u>DELIVERABLE</u>	<u>DELIVERY DATE</u>
1	2 (Two) Online training sessions for RAC Technicians working in Tourism Sector	By 6 th week upon signing
2	2 (Two) Online training sessions for RAC Technicians working in Fisheries Sector	By 12 th week upon signing
3	2 (Two) Online training sessions for RAC Technicians	By 20 th week upon signing

4. DURATION

The duration of this assignment is 5 months upon the signing of the agreement

5. PAYMENT SCHEDULE

Applicants must submit their financial proposal which must indicate the rate per deliverable and price for the total assignment.

Payments will be made in accordance with the schedule specified below:

REQUIREMENT	ALLOCATION
1 st Payment after completing deliverable 1	25%
2 nd Payment after completing deliverable 2	25%
3 rd Payment after completing deliverable 3	50%
Total	100%

6. EXPERIENCE & QUALIFICATION

1. Qualification:
 - a. Minimum diploma certificate in Refrigeration and Air Conditioning (RAC), Electrical, Engineering, Education or any relevant fields
2. Experience:
 - a. Experience in Refrigeration and Air Conditioning (RAC) field (minimum 5 years)

7. EVALUATION CRITERIA

Preliminary Evaluation

In the preliminary evaluation it will be checked if the bidder has submitted all the mentioned documents in the **Section 8** of this ToR.

If proponents do not meet any of the listed criteria in **section 8**, their proposal may not be considered for further evaluation.

Technical & Financial Evaluation

The following criteria will be applied during the Technical evaluation of the proposals and attention should be paid while preparing the proposals.

Evaluation Criteria	Score Weight [%]	Documents Allocated
<u>Academic Qualification</u> Masters in any related field (20 marks) Degree in any related field (15 marks) Diploma in any related field (10 marks)	20 points	Based on relevancy of copies of the higher degree certificate and transcript OR listing of modules Note: If applicant has finished but not graduated yet, a letter of completion from the university will suffice
<u>Experience</u> Experience in Refrigeration and Air Conditioning (RAC) field (minimum 5 years) (5 marks per year up to 8 years)	40 points	Based on letters of experience and/or reference
<u>Financial Proposal</u> (The Financial Proposal will be evaluated by applying the following formula) $S_f = 40 \times F_q / F$, in which S_f is the financial score, F_q is the <u>Lowest Financial Quote received</u> and F is the price of the proposal under consideration.)	40 points	Based on FORM-2: FINANCIAL BREAKDOWN
TOTAL	100 points	

The Bidder who is able to meet the eligibility criteria and scores the highest total marks from evaluation will be selected for award

*Note: After evaluation, highest scoring party will be notified to submit the tax clearance report.
Tender will be awarded upon submission of the tax clearance report*

8. SUBMISSION REQUIREMENTS

All applicants must submit the following documents required to demonstrate their capacity and experience to carry out the services stated in the TOR.

DOCUMENT PRECHECK

- Copy of Business (company/partnerships/institutions/sole proprietorship) registration certificate.
- Copy of notification of Tax registration
- Copy GST registration (if applicable)
- **FORM -1: PROPOSAL SUBMISSION FORM (signed by the owner of the entity)**
- Completed **Form 2: FINANCIAL BREAKDOWN FORM** – Financial proposal should include GST (if applicable), rate per training session and total price for work
- Completed **Form 3: LETTER OF COMMITMENT (signed by the proposed trainer)**
- CV of the proposed trainer
- Copy of national identity card for the Trainer
- Attested copies of educational qualifications of the proposed trainer
- Completed **Form 4: WORK SCHEDULE**
- Summary on similar works (experiences) performed in the past – Please provide links, Reference letters (emails from respective clients are also acceptable) or copies of the samples of relevant works.
- **FORM-5: DESCRIPTION OF APPROACH, METHODOLOGY AND WORK PLAN FOR PERFORMING THE ASSIGNMENT**

Note 01: All bidders should clearly identify Trainer in the proposal. For bids submitted by Company/Institution/Organization, Trainer signed in Form 3 will be considered for the evaluation process.

Note 02: If a Sole proprietorship is interested in submitting proposal for this assignment the proposed Trainer should be the owner of the Sole proprietorship.

9. SUBMISSION

Applications must be submitted to the Ministry of Environment, Climate Change and Technology no later than 1100 Hours on 23rd August 2021. Applications must be submitted to the following address:

10. CLARIFICATION

If clarification is needed regarding this tender, please mail us on the below address on or before 19th August 2021 1100 Hours
procurement@environment.gov.mv

Ministry of Environment, Climate Change and Technology
Handhuvaree Hingun, Male'

