Terms of Reference for Individual Contractor

<table>
<thead>
<tr>
<th>Post Title</th>
<th>Artificial Seeding Expert</th>
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<tbody>
<tr>
<td>Starting Date:</td>
<td>ASAP</td>
</tr>
<tr>
<td>Duration:</td>
<td>6 months</td>
</tr>
<tr>
<td>Location:</td>
<td>Jeddah, Saudi Arabia</td>
</tr>
<tr>
<td>Project/Agency:</td>
<td>United Nations Environment Programme (UNEP)</td>
</tr>
<tr>
<td>National or International consultancy:</td>
<td>International Consultancy</td>
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A. Project Title
Artificial Seeding Expert

B. Project Description
Organizational Setting:
The United Nations Environment Programme (UNEP) is the leading global environmental authority that sets the global environmental agenda, promotes the coherent implementation of the environmental dimension of sustainable development within the United Nations system and serves as an authoritative advocate for the global environment. The Regional Office for West Asia delivers advisory services and capacity building support to countries to achieve environment and sustainable development objectives. This consultancy is established at the West Asia Office within the framework of the Strategic Cooperation Agreement between UNEP and the Ministry of Environment, Water and Agriculture of the Kingdom of Saudi Arabia. The Consultant will report to the Programme Manager at UNEP West Asia Office.

C. Duties and Responsibilities
Under the direct supervision of the Programme Manager in UNEP West Asia Office and in coordination with the respective department in the Ministry of Environment, Water and Agriculture in Saudi Arabia and the National Centre for Meteorology, the Consultant will carry out, inter alia, the following duties and responsibilities:

- In the field of research and seeding aircraft equipment and devices: Following up the latest developments in the manufacturing and improvement of these devices and equipment and make recommendations in this regard.
- In the field of used materials in seeding: studying the possibility of using nanotechnology to produce new materials for seeding and make sure whether there is a positive significant return for this technology.
- In the field of developing and using radar programs: define the characteristics of the targeted clouds and their water content. In addition, using satellite images and short-term forecasts in the setting of real-time forecasts (0-3 hours) for the development and movement of clouds.
- Analysis of information: using the previous collected experiments and information that supporting future experiments.
- Applying the latest appropriate statistics methods and development of numerical models of clouds in an attempt to ensure the positive results of artificial seeding.
- Training: evaluating the current capabilities available, proposing local and external training programs and the required levels, coordinating with the provided programs by the contractor, and providing short training courses (3-5 days) in the workplace.
D. Expected Outputs and Deliverables

The consultant will be expected to deliver the following outputs:
- A report of nanotechnology to produce new materials for seeding.
- A report on real time forecasts.
- Numerical models of clouds for positive results of artificial seeding.
- Capacity building and training programs.

E. Institutional Arrangement

The consultant will be supervised by the Programme Manager in UNEP West Asia Office in close collaboration with the National Center for Meteorology and the relevant department in the Ministry of Environment, Water and Agriculture of Saudi Arabia.

F. Duration of the Work

The contract duration will be for an initial period of six months with a possibility of extension subject to continuation of mandate, availability of funding and satisfactory performance.

G. Duty Station

Jeddah, Saudi Arabia

H. Scope of Price Proposal and Schedule of Payments

All proposals must be expressed in a lump sum amount. This amount must be “all-inclusive”. Please note that the terms “all-inclusive” implies that all costs (professional fees, living allowances, communications, consumables, etc.) that could possibly be incurred are already factored into the final amounts submitted in the Proposal.

Payments shall be made to the expert upon successful completion and certification by UNDP that services have been satisfactorily performed, based upon the actual number of working days. Payment shall be made as a deliverables-based lump sum payment, to be paid in instalments. The schedule of payment will be distributed upon satisfactory submission of the deliverables listed in the table hereunder:

<table>
<thead>
<tr>
<th>Payment</th>
<th>Deliverables/Milestones</th>
<th>Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly Payment</td>
<td>Monthly payment upon submission and acceptance of the monthly working plan and successful delivery of outputs.</td>
<td>Monthly</td>
</tr>
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</table>

I. Qualifications of the Successful Individual Contractor

➢ Min. Academic Education:
  ✓ PhD or equivalent degree in meteorology, atmospheric physics or environment sciences or other similar fields.

➢ Min. years of relevant Work experience:
  ✓ Minimum 15 years of operational and theoretical experience in cloud seeding components: seeding and research aircraft and their instrumentation, seeding materials, radar utilization for cloud characteristics identification and now casting, clouds numerical modelling and data analysis and management.

➢ Required skills and competencies:
  ✓ Previous practical experience in similar tasks and knowledge of computer operating systems, software and tools needed in cloud seeding.
Desired additional skills and competencies

- Knowledge of radar meteorology is an added advantage.
- Experience in international publication (not less than 5 peered) on weather modification, cloud seeding and related issues.
- Knowledge of environment issues in Saudi Arabia is an asset.
- Work experience on organizing training and workshops.
- Teamwork and communication skills

Required Language(s) (at working level)

- Fluency in written and spoken English is required, proficiency in Arabic is preferred

Professional Certificates

- Training courses and workshops on cloud physics, weather modification and related issues.
- Member in International or regional institution or organization that concerns with weather modification

J. Recommended Presentation of Offer

For purposes of generating Offers whose contents are uniformly presented and to facilitate their comparative analysis, it is best to recommend the preferred contents and presentation of the Offer to be submitted, as well as the format/sequencing of their presentation. The following documents may be requested:

a) Duly accomplished Letter of Confirmation of Interest and Availability using the template provided by UNDP.

b) Personal CV or P11, indicating all experience from similar projects, as well as the contact details (email and telephone number) of the Candidate and at least three (3) professional references.

c) Financial Proposal that indicates the all-inclusive total contract price, supported by a breakdown of costs, as per template provided. The terms “all-inclusive” implies that all costs (professional fees, travel costs, living allowances, communications, consumables, etc.) that could possibly be incurred are already factored into the final amounts submitted in the Proposal. If an Offeror is employed by an organization/company/institution, and he/she expects his/her employer to charge a management fee in the process of releasing him/her to UNDP under Reimbursable Loan Agreement (RLA), the Offeror must indicate at this point, and ensure that all such costs are duly incorporated in the financial Proposal submitted to UNDP.

K. EVALUATION

Individual consultants will be evaluated based on the following methodologies:

Step I: Screening and desk review:

Individual consultants will be evaluated based on the following methodology.

Technical Criteria (CV review and Desk Review/Interview optional) – maximum 70 points. Only candidates who obtained at least 70% of points from the CV desk review (who will score at least 49 points) will be considered for the next stage of evaluation, i.e. financial evaluation.

Applications will be first screened and only candidates meeting the following minimum criteria will progress to the pool for shortlisting:
• Educational qualifications: PhD or equivalent degree in meteorology, atmospheric physics or environment sciences, or similar field.
• Minimum 15 years of operational and theoretical experience in cloud seeding components: seeding and research aircraft and their instrumentation, seeding materials, radar utilization for cloud characteristics identification and now casting, clouds numerical modelling and data analysis and management.
• Previous practical experience in similar tasks and knowledge of computer operating systems, software and tools needed in cloud seeding.
• Fluency in spoken and written English is required, proficiency in Arabic is desirable.

➢ Desired additional skills and competencies
   ✓ Knowledge of radar meteorology is an added advantage.
   ✓ Experience in international publication (not less than 5 peered) on weather modification, cloud seeding and related issues.
   ✓ Knowledge of environment issues in Saudi Arabia is an asset
   ✓ Work experience on organizing training and workshops.
   ✓ Teamwork and communication skills
➢ Professional Certificates
   ✓ Training courses and workshops on cloud physics, weather modification and related issues.
   ✓ Member in International or regional institution or organization that concerns with weather modification

Only candidates obtaining a minimum of 49 points (70% of the total technical points) would be considered for the Financial Evaluation.

<table>
<thead>
<tr>
<th>Weight Per Technical Competence</th>
<th>Description</th>
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<tbody>
<tr>
<td>5 (outstanding): 96% - 100%</td>
<td>The individual consultant/contractor has demonstrated an OUTSTANDING capacity for the analyzed competence.</td>
</tr>
<tr>
<td>4 (Very good): 86% - 95%</td>
<td>The individual consultant/contractor has demonstrated a VERY GOOD capacity for the analyzed competence.</td>
</tr>
<tr>
<td>3 (Good): 76% - 85%</td>
<td>The individual consultant/contractor has demonstrated a GOOD capacity for the analyzed competence.</td>
</tr>
<tr>
<td>2 (Satisfactory): 70% - 75%</td>
<td>The individual consultant/contractor has demonstrated a SATISFACTORY capacity for the analyzed competence.</td>
</tr>
<tr>
<td>1 (Weak): Below 70%</td>
<td>The individual consultant/contractor has demonstrated a WEAK capacity for the analyzed competence.</td>
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</tbody>
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UNDP applies the “Best value for money approach” – the final selection will be based on the combination of the applicants’ qualification and financial proposal.

Financial proposal – Maximum 30 points
• Duly accomplished Confirmation of Interest and Submission of Financial Proposal Template using the template provided by UNDP (Annex II)

PRICE PROPOSAL AND SCHEDULE OF PAYMENTS

The contractor shall submit a price proposal as below:
The total professional fee shall be converted into a lump-sum contract and payments under the contract shall be made on submission and acceptance of deliverables under the contract in accordance with the schedule of payment linked with deliverables. Financial proposal should include all relevant cost (consultancy fees, all envisaged travel costs, living allowances, etc.).

Financial evaluation - Total 30% (30 points)
The following formula will be used to evaluate the financial proposal:

\[ p = y \left( \frac{\mu}{z} \right) \]

- \( p \) = points for the financial proposal being evaluated
- \( y \) = maximum number of points for the financial proposal
- \( \mu \) = price of the lowest-priced proposal
- \( z \) = price of the proposal being evaluated

Interested applicants are advised to carefully review this advertisement and ensure that they meet the requirements and qualifications described.

Interested applicants are advised to carefully review this advertisement and ensure that they meet the requirements and qualifications described.

Given the volume of applications that UNDP receives, only shortlisted offerors will be notified.

UNDP reserves the right to reject any incomplete applications.
Please be informed that we don’t accept applications submitted via email.

Interested Offerors are required to submit an application via UNDP Jobsite system as the application screening and evaluation will be done through UNDP Jobsite system. Please note that UNDP Jobsite system allows only one uploading of application documents, so please make sure that you merge all your documents into a single file. Your online application submission will be acknowledged where an email address has been provided. If you do not receive an email acknowledgement within 24 hours of submission, your application may not have been received. In such cases, please resubmit the application if necessary. Please combine all your documents into one (1) single PDF document as the system only allows to upload a maximum one document.

Any request for clarification/additional information on this procurement notice shall be communicated in writing to UNDP office or send to email mohammed.abbas@undp.org with a copy to nora.alzahid@undp.org While the Procurement Unit would endeavour to provide information expeditiously, only requests receiving at least 3 working days prior to the submission deadline will be entertained. Any delay in providing such information will not be considered as a reason for extending the submission deadline. The UNDP’s response (including an explanation of the query but without identifying the source of inquiry) will be posted in the Individual Consultant (IC) Procurement Notice page as provided above. Therefore, all prospective Offerors are advised to visit the page regularly to make obtain update related to this Individual Consultant (IC) Procurement Notice.

UNDP is committed to achieving workforce diversity in terms of gender, nationality and culture. Individuals from minority groups, indigenous groups and persons with disabilities are equally encouraged to apply. All applications will be treated with the strictest confidence.
UNDP does not tolerate sexual exploitation and abuse, any kind of harassment, including sexual harassment and discrimination. All selected candidates will, therefore, undergo rigorous reference and background checks.

In view of the volume of applications UNDP receives, only shortlisted offerors will be notified.

L. Approval

This TOR is approved by: [indicate name of Approving Manager]

Signature
Name and Designation
Date of Signing