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Date: 29 August 2016

## INDIVIDUAL CONSULTANT PROCUREMENT NOTICE

for individual consultants and individual consultants assigned by consulting firms/institutions

Country:	Viet Nam
Description of the assignment:	One International Consultant for Technical support to Rang Dong Vacuum Flash and Lamps Joint-Stock Company (Ralaco) on the use of ANSYS Icepak software package for LED Lighting Products
Project name:	Project 00092227: Local Development and Promotion of LED Technologies for Advanced General Lighting in Viet Nam
Period of assignment/services (if applicable):	30 working days within October 2016 to June 2017
Tender reference:	1-160805

1. Submissions should be sent by email to: [nguyen.thi.hoang.yen@undp.org](mailto:nguyen.thi.hoang.yen@undp.org) no later than: **12 September 2016 (Hanoi time)**.

**With subject line: (1-160805) International Consultant for Technical support on the use of ANSYS Icepak software**

Submission received after that date or submission not in conformity with the requirements specified this document will not be considered.

### Note:

- Any individual employed by a company or institution who would like to submit an offer in response to this Procurement Notice must do so in their individual capacity, even if they expect their employers to sign a contract with UNDP.
- Maximum size per email is **7 MB**.
- Any request for clarification must be sent in writing, or by standard electronic communication to the address or e-mail indicated above. Procurement Unit – UNDP Viet Nam will respond in writing or by standard electronic mail and will send written copies of the response, including an explanation of the query without identifying the source of inquiry, to all consultants.

2. Please find attached the relevant documents:

- [Terms of Reference \(TOR\)](#)..... (Annex I)
- [Individual Contract & General Conditions](#)..... (Annex II)
- [Reimbursable Loan Agreement](#) (for a consultant assigned by a firm)..... (Annex III)
- [Guidelines for CV preparation](#)..... (Annex IV)
- [Format of financial proposal](#)..... (Annex V)

3. Interested individual consultants must submit the following documents/information **(in English, PDF Format)** to demonstrate their qualifications:

**a. Technical component:**

- Signed Curriculum vitae
- Copy of 1-3 publications/writing samples on relevant subject.
- Reference contacts of past 4 clients for whom you have rendered preferably the similar service

**b. Financial proposal (with your signature):**

- The financial proposal shall specify a total lump sum amount in **US Dollar** including consultancy fees and all associated costs i.e. airfares, travel cost, meal, accommodation, tax, insurance etc. – see format of financial offer in Annex VII.
- Please note that the cost of preparing a proposal and of negotiating a contract, including any related travel, is not reimbursable as a direct cost of the assignment.
- If quoted in other currency, prices shall be converted to the above currency at UN Exchange Rate at the submission deadline.

4. Evaluation:

The technical component will be evaluated using the following criteria:

Consultant's experiences/qualification related to the services		
	Criteria	Maximum Points
1	Bachelor degree (Master preferable) in engineering, materials sciences mechanics, thermal techniques, physics, electronics or related fields., informatics	200
2	At least five years of track record work experience in application and operation of software for heat sink design (priority must be given to use of ANSYS Icepak software)	250
3	Proven track record of work experience in and good knowledge on manufacturing LED lighting products- in general and LED lighting products design, in particular	200
4	Proven experience in working with lighting/LED manufacturing facilities	150
5	Work experience in Asian countries is an advantage	100
6	Ability to function effectively in an international, multi-cultural environment; Fluency in English, both spoken and written	100
	<b>TOTAL</b>	<b>1000</b>

A two-stage procedure is utilized in evaluating the submissions, with evaluation of the technical components being completed prior to any price proposals being opened and compared. The price proposal will be opened only for submissions that passed the minimum technical score of 70% of the obtainable score of 1000 points in the evaluation of the technical component.

The technical component is evaluated on the basis of its responsiveness to the Term of Reference (TOR).

Maximum 1000 points will be given to the lowest offer and the other financial proposals will receive the points inversely proportional to their financial offers. i.e.  $S_f = 1000 \times F_m / F$ , in which  $S_f$  is the financial score,  $F_m$  is the lowest price and  $F$  the price of the submission under consideration.

The weight of technical points is 70% and financial points is 30%.

Submission obtaining the highest weighted points (technical points + financial points) will be selected.

Interview with the candidates may be held if deemed necessary.

## 5. Contract

“Lump-sum” Individual Contract will be applied for freelance consultant (Annex II)

“Lump-sum” RLA will be applied for consultant assigned by firm/institution/organization (Annex III)

Documents required before contract signing:

- Personal History
- International consultant whose work involves travel is required to complete the course on Basic Security in the Field and submit certificate to UNDP before contract issuance.

Note: The Basic Security in the Field Certificate can be obtained from website: <https://training.dss.un.org/consultants>. The training course takes around 3-4 hours to complete. The certificate is valid for 3 years.

- Full medical examination and Statement of Fitness to work for consultants from and above 62 years of age and involve travel. (This is not a requirement for RLA contracts).
- Release letter in case the selected consultant is government official.

## 6. Payment

UNDP shall effect payments to the consultant (by bank transfer to the consultant's bank account provided in the vendor form (Annex V) upon acceptance by UNDP of the deliverables specified the TOR.

First payment: 40% of contract amount will be paid upon submission of Detailed Work-plan and 1<sup>st</sup> mission report with satisfactory acceptance by PMU/HTD-VAST and UNDP;

Final payment: 60% of contract amount will be paid upon the completion of final products under the contract with satisfactory acceptance by PMU/HTD-VAST and UNDP.

If two currencies exist, UNDP exchange rate will be applied at the day UNDP instructs the bank to effect the payment.

7. Your proposals are received on the basis that you fully understand and accept these terms and conditions.

### **TERMS OF REFERENCE (TOR)**

#### **Technical support to Ralaco Company on the use of ANSYS Icepak software package for LED Lighting Products**

<b>Title:</b>	01 International Consultant for Technical support to Rang Dong Vacuum Flash and Lamps Joint-Stock Company (Ralaco) on the use of ANSYS Icepak software package for LED Lighting Products
<b>Type of contract:</b>	Individual contract
<b>Project ID and title:</b>	00092227: Local Development and Promotion of LED Technologies for Advanced General Lighting in Viet Nam.
<b>Duration &amp; timing:</b>	30 working days: 8 home-based working days and 22 days for two missions to Viet Nam (The first mission to Viet Nam will be in Quarter 4/2016, the second is expected to be in Quarter 1/2017).
<b>Duty station:</b>	Hanoi and homebased.
<b>Reporting to:</b>	Project Management Unit/VAST, UNDP

#### **1) GENERAL BACKGROUND**

Viet Nam Academy of Science and Technology is implementing the Project “Local Development and Promotion of LED Technologies for Advanced General Lighting in Viet Nam” funded by GEF/UNDP and co-financing by Viet Nam agencies/institutions.

The objective of the Project is to mitigate GHG emissions through transformation of the lighting market towards greater usage of locally produced LED lighting products in Viet Nam. This objective will be achieved by removing barriers to increased production and utilization of locally produced LED lighting products in Viet Nam through two components:

- i) The transfer of skills, knowledge and technology for the manufacturing of LED lamps in Viet Nam; and
- ii) The demonstration of cost-effective local commercial production of LED lighting devices.

The Project will be implemented over a 4-year period and is expected to achieve GHG emission reductions through the displacement of electricity generation from fossil-fueled power plants.

Currently, the local lighting industry has recognized that the quality of LEDs they produce needs to be improved, especially in an increasingly competitive market place, and components design is one of the areas where they are focusing their efforts. A key component of an LED lamp that have great impact on LED lamp quality and lifetime is the heat sink or heat management component. A design software with suitable thermal management features will help producers to optimally design heat sinks, greatly contributing to the quality improvement process.

The project has supported Rang Dong Vacuum Flash and Lamps Joint-Stock Company (Ralaco), a key lighting products producer and LED manufacturer in Viet Nam, to procure an ANSYS Icepak software. ANSYS Icepak is being used world-wide, particularly in developed countries, and has proved its efficiency and optimality in simulation and design of thermal management components, including for LED lamps. This software package is suitable for the Ralaco's requirement of LED heat sink design.

In order to effectively use the software to design heat sinks for LED lamps produced by Ralaco (including 30-35W alley LED lamps and 80-160W workshop LED lamps that will be provided for project's demonstrations) there is a need of international expertise and experiences in the field of ANSYS Icepak software exploitation, operation and application including database system development for Ralaco LED lighting products.

The project plans to support Ralaco to improve their production management and product quality through engagement of three international consultants in the fields of (i) Training on the use of ANSYS Icepak software package for LED lighting products; (ii) Quality testing and assessment of LED lighting products; (iii) Technology and production management of LED lighting products; and one national consultant on Technical support to LED lighting products manufacturing of Ralaco. These four consultants will closely collaborate to support Ralaco to improve quality of LED lighting products, in general, and that of 30-35W alley LED lamps and 80-160W workshop LED lamps, in particular.

This TOR is for the international consultant to support Ralaco in the use of ANSYS Icepak software package for LED Lighting Products (IS-Ralaco).

## **2) OBJECTIVES OF THE ASSIGNMENT**

The objective of this consultancy assignment is to provide:

- (i) Guidance on the application of principles of exploiting thermal simulation software -ANSYS Icepak software for designing heat sinks for LED lamps.
- (ii) Guidance on the use of ANSYS Icepak software to design the heat sinks for 30-35W alley LED lamps and 80-160W workshop LED lamps produced by the Ralaco.
- (iii) Development of a database system used for the ANSYS Icepak software and development of the software operation procedure.

## **3) SCOPE OF WORK**

The selected consultant that will work on the assignment with Ralaco will be responsible for the following tasks and activities:

### **Quarter 4/2016**

- Prepare a draft Work Plan for the whole contract duration.
- Work with PMU and Ralaco to detail and finalize the Workplan. The Work plan must include, but not limited to, the methodology for implementation of the assignment, the action plan/timeline, detail contents of technical service activities, target, expected results from technical services.
- Provide training to Ralaco's engineers on the basic and advanced features of the software use to design heat sinks for LED lighting products.
- Provide technical assistance and advice on simulation trial and design of the heat sinks based on the ANSYS Icepak software for LED lamps.
- Provide technical assistance to Ralaco in operating and using of the ANSYS Icepak software for designing of (i) 30-35W alley LED lamps; and (ii) 80-160W workshop LED lamps;
- Analyse the results and provide recommendations for improvement.

### **Quarter 1/2017**

- Assess and finalize application process of the software for heat sink design of the above-mentioned LED lighting products. Put forth the recommendations and solutions for improvement of the design quality and production so that the LED lighting products could meet the local and international standards and have a competitive price.
- Prepare a procedure of application and operation of ANSYS Icepak software for designing heat sinks of Ralaco LED lighting products;
- Develop a database system of heat sinks design and guideline on its use for Ralaco LED lighting products based on the ANSYS Icepak software.
- Prepare the final second mission report.

**Methodology:** The selected consultant will propose and discuss with PMU and NTS the approach in undertaking the assignment. This shall include: i) desktop review of the project documents and related information within the LED Lighting sector; ii) meet and interview with key project partners, relevant experts, and PMU staff as agreed with VAST and UNDP. During the mission the consultant will work closely with

Ralaco, relevant international and national consultants, provide technical inputs/advices/consultancies/on-hand direct trainings to the Ralaco's relevant engineers/technicians.

#### 4) DURATION OF ASSIGNMENT, DUTY STATION AND EXPECTED PLACES OF TRAVEL

- Duration and Timing: 30 working days within October 2016 to June 2017 including 8 home-based working days and 22 days for two missions to Hanoi, Viet Nam. The first mission to Viet Nam will be in Quarter 4/2016, the second mission is expected to be in Quarter 1/2017.
- Duty station: Hanoi and home based.

#### 5) DELIVERABLE

The consultant will deliver the followings:

- **5.1.** Detailed Work Plan for the whole contract duration. The Work plan must include, but not limited to, the methodology for implementation of the assignment, the action plan/timeline, detail contents of technical service activities, target, expected results from technical services. The Work plan has to be submitted and discussed with the PMU/HTD-VAST, UNDP within one week upon the signing of the contract; and
- **5.2:** Two mission reports (for the first and the second missions) documenting the findings and implementation results of all required tasks specified in the "Scope of Work" corresponding to the workplan. The reports must include all supporting deliverables such as training materials and lectures, a database system of heat sinks design and guideline, results of advices/technical services/all kind of trainings.
- **5.3:** Consultancy assignment report–Summary or highlights of the consultancy assignment, including conclusions and recommendations on the consultancy assignment.

All reports must be written in excellent English, well formatted and will be submitted to and approved by PMU/HTD-VAST, UNDP.

#### 6) PROVISION OF MONITORING AND PROGRESS CONTROLS

The selected consultant will perform tasks as required under the direct supervision of the National Project Director. The consultant is required to regularly report to the Project Management Unit (PMU)/HTD-VAST on the progress of the work. After the signing of the contract, the selected consultant, PMU and UNDP will agree on the mechanism and actual timeline of the reporting requirement. Upon that the consultant will develop a detailed work plan which must be agreed between (PMU)/HTD-VAST, UNDP

#### 7) DEGREE OF EXPERTISE AND QUALIFICATIONS

Minimum qualifications and experience of the consultant are as follows:

- Bachelor degree (Master preferable) in engineering, materials sciences mechanics, thermal techniques, physics, electronics or related fields., informatics
- At least five years of track record work experience in application and operation of software for heat sink design (priority must be given to use of ANSYS Icepak software);
- Proven track record of work experience in and good knowledge on manufacturing LED lighting products- in general and LED lighting products design, in particular; Proven expertise on heat transfer/thermal management
- Proven experience in working with lighting/LED manufacturing facilities
- Work experience in Asian countries is an advantage;
- Ability to function effectively in an international, multi-cultural environment; and

- Fluency in English, both spoken and written.

## **8) ADMIN SUPPORT AND REFERENCE DOCUMENTS**

UNDP and PMU/HTD-VAST will provide all logistical and administrative support to the selected consultant in meeting with relevant stakeholders and in working with Ralaco.

Copies of relevant documents regarding the ANSYS Icepak Software and Ralaco products will be shared upon the commencement of the assignment.

## **9) REVIEW TIME REQUIRED AND PAYMENT TERM**

- The first payment of 40 % contract amount will be paid upon submission of Detailed Work-plan and 1<sup>st</sup> mission report with satisfactory acceptance by PMU/HTD-VAST and UNDP;
- The second (final) payment of 60% contract amount will be paid upon the completion of final products under the contract with satisfactory acceptance by PMU/HTD-VAST and UNDP.

## **10) CONSULTANT PRESENCE REQUIRED ON DUTY STATION/PMU/HTD-VAST PREMISES**

☐ NONE      ☐ PARTIAL      ☒ INTERMITTENT      ☐ FULL-TIME

## **Annex VI**

### **GUIDELINES FOR PREPARING CV**

WE REQUEST THAT YOU USE THE FOLLOWING CHECKLIST WHEN PREPARING YOUR CV:

Limit the CV to 3 or 4 pages

NAME (First, Middle Initial, Family Name)

Address:

City, Region/State, Province, Postal Code

Country:

Telephone, Facsimile and other numbers

Internet Address:

Sex, Date of Birth, Nationality, Other Citizenship, Marital Status

Company associated with (if applicable, include company name, contact person and phone number)

#### **SUMMARY OF EXPERTISE**

Field(s) of expertise (be as specific as possible)

Particular development competencies-thematic (e.g. Women in Development, NGOs, Privatization, Sustainable Development) or technical (e.g. project design/evaluation)

Credentials/education/training, relevant to the expertise

#### **LANGUAGES**

Mother Tongue:

Indicate written and verbal proficiency of your English:

#### **SUMMARY OF RELEVANT WORK EXPERIENCE**

Provide an overview of work history in reverse chronological order. Provide dates, your function/title, the area of work and the major accomplishments include honorarium/salary. References (name and contact email address) must be provided for each assignment undertaken by the consultant that UNDP may contact.

#### **UN SYSTEM EXPERIENCE**

If applicable, provide details of work done for the UN System including WB. Provide names and email address of UN staff who were your main contacts. Include honorarium/salary.

#### **UNIVERSITY DEGREES**

List the degree(s) and major area of study. Indicate the date (in reverse chronological order) and the name of the institution where the degree was obtained.

#### **PUBLICATIONS**

Provide total number of Publications and list the titles of 5 major publications (if any)

#### **MISCELLANEOUS**

Indicate the minimum and maximum time you would be available for consultancies and any other factors, including impediments or restrictions that should be taken into account in connection with your work with this assignment.

Please ensure the following statement is included in the resume and that it is signed and dated:

I CERTIFY THAT ALL INFORMATION STATED IN THIS RESUME IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE. I AUTHORIZE UNDP/UNOPS OR ITS AGENT TO VERIFY THE INFORMATION PROVIDED IN THIS RESUME.

(Signature)



## **Annex VII**

### **FINANCIAL OFFER**

Having examined the Solicitation Documents, I, the undersigned, offer to provide all the services in the TOR for the sum of USD .....

This is a lump sum offer covering all associated costs for the required service (fee, meal, accommodation, travel, taxes etc).

#### **Cost breakdown:**

<b>No.</b>	<b>Description</b>	<b>Number of days</b>	<b>Rate (USD)</b>	<b>Total</b>
1	Consultancy fee			
2	Out of pocket expenses			
2.1	Travel			
2.2	Per diem			
2.3	Full medical examination and Statement of Fitness to work for consultants from and above 62 years of age and involve travel – (required before issuing contract). *			
2.5	Others (pls. specify).....			
	<b>TOTAL</b>			

*\* Individual Consultants/Contractors who are over 62 years of age with assignments that require travel and are required, at their own cost, to undergo a full medical examination including x-rays and obtaining medical clearance from **an UN-approved doctor** prior to taking up their assignment.*

I undertake, if my proposal is accepted, to commence and complete delivery of all services specified in the contract within the time frame stipulated.

I agree to abide by this proposal for a period of 120 days from the submission deadline of the proposals.

Dated this day /month

of year

Signature