

# **EXPRESSION OF INTEREST**

For

## **Consulting Services for Maintenance of Built Structures at Tsho Rolpa**

### **Consulting Firm/Joint Venture:**

.....  
.....  
.....

### **Prime Consultant (in case of a JV):**

.....  
.....

Employer:

Government of Nepal  
Ministry of Population Environment  
Department of Hydrology and Meteorology  
Naxal, Kathmandu

December 2017



**Government of Nepal**  
**Ministry of Population and Environment**  
**Department of Hydrology and Meteorology**

Naxal, Kathmandu

Notice No: 1/HD/DHM/074-75

First Date of Publication: 13/9/2074

**Expressions of Interest (EOI)**

The Government of Nepal, Department of Hydrology and Meteorology (DHM) invites EOI (Expressions of Interest) for the purpose of short listing the qualified, eligible and experienced Companies/firms and or their joint ventures for “**Consulting Services for Maintenance of Built Structures at Tsho Rolpa**” works.

1. The budget to this purpose has been allocated by the Government of Nepal (GON) for the fiscal year 2074/075.
2. Experienced, eligible and interested Consulting Firms or companies are invited to submit their EOI, either alone or in joint venture with other firms with a certified copy of Consultancy /Company Registration Certificate, VAT and Tax Clearance (2073/74)/ Tax Return Submission receipt for the last fiscal year.
3. EOI documents could be obtained free of cost from DHM upon request during office hour on all government working days within the 15<sup>th</sup> day of the first date of publication of this notice or can also be downloaded from the website: <http://www.dhm.gov.np>. The instruction to the consultant, prescribed format, evaluation criteria, scope of the work and duration of the study and other details of the project are mentioned in the EOI. Only lead firm may obtained EOI form mentioning the names of all members of Association/JV and submitting Association/JV agreement.
4. Applications for EOI must be clearly marked “**Consulting Services for Maintenance of Built Structures at Tsho Rolpa**” and shall be submitted in sealed envelopes by companies or their joint venture received by the due date and within the specified time in the presence of the applicant or their authorized representatives. Absence of any applicant (or their authorized representative), however, shall not obstruct or prevent the opening of the EOI in any way, which must be delivered to the following address within the given time below.

Last Date of EOI Submission:- 28/9/2074 & 12:00 noon

Date of EOI opening :- 28/9/2074 & 01:30 pm

5. Certified evidences of the client reference indicating satisfactory completion of the projects along with the cost of consulting services in NRs and date of completion of the assignment only will be counted.
6. In case the day of submission of the EOI falls on a public holiday, it shall then be submitted on the following working day at same hour. Only the short-listed Consulting Firms shall be invited for RFP (Request for Proposal). During the RFP process, the consulting firm/companies will be selected in accordance with quality and cost Based Selection procedure (QCBS).
7. DHM reserves the right to shortlist any or reject all of the Firms without assigning any reasons whatsoever. Further information or clarification can be obtained from DHM during office hours.

Procurement Unit  
Department of Hydrology and Meteorology  
Naxal, Kathmandu  
E-mail: [dhmprocurement@gmail.com](mailto:dhmprocurement@gmail.com)  
Website: [www.dhm.gov.np](http://www.dhm.gov.np)

**1. Consulting Services for Maintenance of Built Structures at Tsho Rolpa  
INFORMATION ON THE CONSULTING FIRM**

Information shall be provided in the following format. No field shall be left vacant. In case of a joint venture, the same form shall be filled by each of the JV partners separately. The form shall be submitted in the time, date and venue as mentioned in the published notice.

**1. General**

Name of Firm	Address	Telephone	Email	Fax	JV Percent

Out of the above list, .....  
.....will be the Prime Consultant.

**2. Financial Capacity**

Annual turnover over the last three years are as follows. The auditor’s report/tax clearance certificates are attached.

Fiscal year	Turnover (Rs.)

**3. Overall Experience\***

Overall experiences of the firm in relevant work during last ten years are as follows (Work completion certificates are attached).

Name of Project	Project	Client	Contract amount (excluding VAT)	Year of completion	Description of work carried out

**4. Specific Experience\***

Experiences of the firm in related field during last ten years are as follows. Work completion certificates are attached.

Name of Project	Project	Client	Contract amount (excluding VAT)	Year of completion	Description of work carried out

*\* The firm/s shall produce certified evidences of the client reference indicating satisfactory completion of the mentioned projects along with the cost of consulting services in NRs and date of completion of the assignment are required for the consideration of that project for evaluation. Sublet works or assignment as a sub consultant shall not be considered for evaluation.*

## 5. Human Resources

### Human Resources in the company

Staff Member	Details	
	Permanent/part time	Name of personals

## 7. Other Resources

Other relevant resources available with us are as follows. The office layout, invoice/bill of equipment/vehicle/software/computer is attached.

Resource	Unit	Total Available	Engaged by Works on Hand
Office area	m2		
Telephone lines	line		
Photocopy, Printers	set		
High capacity Computer	set		
vehicles(Four wheel Drive)	no		

Authorized signature:

Seal:

Date:

## **ANNEX 1: INFORMATION TO THE CONSULTING FIRM**

### **General Information**

- Purpose of inviting the EOI:** The main purpose shall short-list suitable consulting firms for **Consulting Services for Maintenance of Built Structures at Tsho Rolpa** and related products so that proposals could be invited from them only. However, the client may extend the short-list to include additional relevant consulting firms which are capable of giving the desired output.
- Format and Signing of Application:** Applicant intending to file an application in response to this EOI should submit an “Application together with the duly completed EOI form providing all the information required therein after signing in by Authorized Representative of Consulting Firm or company (in case of Joint Venture, Authorized Representative of Lead Firm) with Company’s seal in every page of EOI forms.
- Minimum eligibility of the firm:** Registered consulting firms/company; registered at VAT office and tax clearance certificates.
- Deadline for submission of EOI:** at or before 12 Noon (NST-Nepal Standard Time) within 28/9/2074
- Number of copies to be submitted:** Two
- Joint Venture:** A firm may apply to be short-listed alone or in joint venture with other firms. However once short-listed, JV partners are unchangeable.
- Duration of completion:** Duration to complete the works will be 90 days from the signing of the contract agreement.
- Information from the Client:** In due course of time, the shortlist shall be published on the Client’s notice board, at the website: [www.dhm.gov.np](http://www.dhm.gov.np). The client shall mail the short-list to each of the firms/JV submitting the EOI and initiate the process of RFP without waiting for the receipt from the firms that they have received the short-list.

**ANNEX 2: EVALUATION CRITERIA****(I) Eligibility Criteria (Pass / Fail)**

<i>Sr. No.</i>	<i>Eligibility Criteria</i>	<i>Requirement</i>	<i>Compliance</i>	<i>Remarks</i>
1.	Corporate Registration	Mandatory	Yes/ NO	Pass/Fail
2.	Tax Clearance / Tax Return Submission receipt for the last fiscal year (2073/74)	Mandatory	Yes/ NO	Pass/Fail
3.	Vat Registration	Mandatory	Yes/ NO	Pass/Fail
4.	Minimum Years of Standing	The applicant or the Lead partner of J/V applicant must have min. 3 years of standing.	Yes/ NO	Pass/Fail

**II) Ranking Criteria (Out of 100%)**

<b>General Experience of the firm (10 marks)</b>	<b>Specific Experience of the firm (60 marks)</b> Excellent = 100%, Very Good = 80%, Good = 60%, Acceptable = 40%, not acceptable = 0	<b>Organization Profile of the firm: in terms of clarity in role and responsibility (15 marks)</b>	<b>Professional competency of the firm Commitment for availability of adequate number and /or experience of professionals as required by TOR (15 marks)</b>										
<p>Years of Experience in the field of survey and design (4 marks)</p> <p>Number of assignments carried out in the field of survey and design during last 3 years (6 marks)</p>	<p>(A) Specific experience in survey and design of hydropower projects. (50 marks)</p> <p>(Number of assignments, Duration of assignment , volume of assignments in last three years will be counted)</p> <p>(B) Specific experience in field survey above 3500 meter (10 marks)</p>	<table border="0"> <tr> <td>Excellent</td> <td>100%</td> </tr> <tr> <td>Very good</td> <td>80%</td> </tr> <tr> <td>Good</td> <td>60%</td> </tr> <tr> <td>Acceptable</td> <td>40%</td> </tr> <tr> <td>Not Acceptable</td> <td>0%</td> </tr> </table>	Excellent	100%	Very good	80%	Good	60%	Acceptable	40%	Not Acceptable	0%	<p>1. Team Leader - 1 person – 7 marks</p> <p>2. Civil Engineer - 1 person – 5 marks</p> <p>3. Sub Engineer - 1 person – 3 marks</p> <p>(Note: Permanent staff – 100%, Temporary staff- 80%)</p>
Excellent	100%												
Very good	80%												
Good	60%												
Acceptable	40%												
Not Acceptable	0%												

NOTE: The consultant should score more than 60 percent on the overall ranking criteria as mentioned above to qualify for short listing

# Terms of Reference (TOR) for Maintenance of Built Structures at Tsho Rolpa

## Project Description

### 1 Introduction

Tsho Rolpa glacial lake is the largest glacial lake in Nepal with about  $92.4 \times 10^6 \text{ m}^3$  of water occupying about  $1.76 \text{ km}^2$  area. A 150 m high unconsolidated natural moraine dam retains the lake. One of the most studied lakes in the region, Tsho Rolpa was identified as the most vulnerable glacial lake to outbreak and mitigation measures were carried out by the Department of Hydrology and Meteorology (DHM) under the Tsho Rolpa GLOF Risk Reduction Project (TRGRRP), NP004101 from August 1998 to December 2002. The drawdown of lake water was achieved on 24 June 2000 with the project being the first of its kind in Nepal. Years 2001 and 2002 were project maintenance and monitoring period. Further details including the design drawings of built up structures can be referred from Rana et.al. 2000 (<http://www.reynolds-international.co.uk/uploads/files/rana-et-al-2000.pdf>).

Sustainability of the project mainly depends upon the proper preservation by inspecting and monitoring of the built structures at Tsho Rolpa glacial lake site. The built structures mainly consist of open channel with manual steel gates, operator house, generator house, equipment storage huts, workshop and a 15 kW micro-hydro plant. The most recent maintenance works were carried out in the year 2061/62. The condition of the structures was worsened by the earthquake in 2071. The Department of Hydrology and Meteorology in the fiscal year 2074/75 intends to procure the service of local consultants for site inspection study and preparation of design documents, cost estimate and tender document for the procurement of required maintenance works in the next fiscal year.

### 2 Objective

The objective of this work is to conduct a thorough investigation at site, suggest recommended measures for the maintenance of the built structures at Tsho Rolpa glacial lake and prepare design drawings, cost estimates and tender documents for the procurement of the maintenance works.

### 3 Scope of Services/Works:

An inspection visit will be made by the consultant during which time visual inspection and thorough observation of the built structures at Tsho Rolpa glacial lake, detailed inspection and measurements of damaged parts, photograph and videos of the various components shall be taken. Based on the outcomes of the field report, consultative meeting recommendations, the consultant shall prepare the detailed design, cost estimate and tender document for the procurement of necessary maintenance works.

#### Specific Considerations:

The services that need to be incorporated/considered in the report are listed as under the specific headings but not limited to these:

- a. Visual inspection, walkover survey of the site.
- b. Inspection, photo and videography of the built structures focusing mainly on the outlet canal, gate structures and the micro hydro plant.
- c. Observation and detailed measurements of the damaged structures and equipment at the site, profile survey (using total station) from the intake to the powerhouse supported with colour photography.
- d. Suggestion of necessary repair/maintenance/replacement works also stating the order of priority for maintenance.
- e. Preparation of detailed design, cost estimate and tender document for the procurement of such works in the next fiscal year.  
The documents should be prepared following government approved engineering norms, district rates and public procurement rules and regulations.

### 4. Methodology

The methodologies described below are in general and comprise following as minimum requirement.

#### 4.1 Literature Review



The consultant shall study, review, analyse, and refer to the extent possible all available resources, project reports and reports of past maintenance works carried out at Tsho Rolpa glacial lake. The consultant shall compile the findings of the literature review and compile the relevant documents.

#### **4.2 Consultative Meeting**

The consultant shall conduct consultative meetings with stakeholders, experienced personnel (5 experts, 1 day) involved in the TRGORRP with consent/presence of DHM/MoPE (5 persons) representatives for breakdown in scopes of works in detail during preparation of inception report. The selection of the experts for consultative meetings shall be carried out in close consultation with and the consent of DHM. The meeting shall be conducted at the DHM office and the consultant should bear the cost of expenses incurred for the meeting including allowance of invited professionals *as of Dolidar norms for the specialist/expert at the rate of NRs. 3080.00 per expert reimbursable or deductible regarding payment schedule*. Information about scopes of works and corresponding schedules will be updated in inception report which will be valid for this project.

#### **4.3 Field Visit**

The consultant shall organize a field/site visit including all the key professional experts and 2 personnel from DHM after submission and approval of inception report. The consultant must bear the expenses for logistics of DHM personnel as well. The main objectives of field visits are to collect relevant data and measurements regarding necessary maintenance works of the built up structures at the site. During the field visit, inspection of the various structures, measurement of dimensions of damaged parts and a profile survey from the intake to the powerhouse shall be carried out thoroughly. Consultant shall notify DHM at least one week prior to the field visit.

### **5. Reports Deliverables:**

#### **5.1. Inception Report**

Three copies of the Inception Report shall be prepared and submitted to DHM no later than a (1) month after signing the contract agreement. This report shall contain the understanding of the job, collected reference and study materials, scopes of works, input from consultative meeting, general approach and methodology, and detail work plan/schedule that the Consultant proposes to complete the Study and Detailed design, cost estimation and tender document preparation for Maintenance of structures at Tsho Rolpa glacial lake within expected time. DHM shall provide comments/suggestions within 15 days after the inception meeting. After all the comments provided have been incorporated, and if found acceptable, the revised Inception report will be approved by the Department. The Inception Report must be approved by DHM before any further work can be reimbursed.

#### **5.2 Field Report**

Three copies of Field Reports shall be prepared and submitted to DHM no later than three (3) months after signing the contract agreement. This report shall contain the details of the field visit conducted and the outcome of the field visits with supporting colour photographs. DHM shall provide comments/suggestions on the field report.

#### **5.4 Draft Report**

Three copies of Draft Reports shall be prepared and submitted to DHM no later than four months after signing the contract agreement. The Draft Report of the study shall include preparation of detailed design, cost estimate and standard bid document

with technical specifications for the procurement of maintenance works in the next fiscal year and other details as specified in the scope of work in the Inception Report. DHM shall provide comments/suggestions on the draft report.

### 5.5 Final Report

Five (5) copies of Final Reports in book binding form shall be prepared and submitted to DHM no later than five (5) months after signing the contract agreement. The final report shall be a complete set of design documents, cost estimate and bid documents for the procurement of necessary repair/maintenance works. A digital copy of all the documents should also be submitted along with the final report.

### 5.6 Miscellaneous

Consultant shall submit one copy of CD at the time of Inception Report, Field Report, , Draft Report and Final Report submission. The CD shall contain all the content of the report as in the hard copy in addition to the supporting presentation slides, movies or videos, photographs, charts and figures, data tables, information and analyses that were collected and carried out for the study. Beside this, the consultant shall have presentation of the inception report, field report, draft report to DHM officials for approval and payment process. Key professional experts listed in section 7 of this TOR need to present their progress/works DHM officials in addition to their signatory requirements to assure professional quality and ownership of their works.

## 6 Institutional and Organizational Support to the Project

DHM shall provide any available study reports related to the study. DHM shall also assist the consultant by providing recommendation letters to various organizations for collecting data, information and documents but the cost of collecting such information shall be borne by the consultant.

## 7 Human Resources Requirement

The study needs multidisciplinary experts and hence teamwork is essential for successful completion of this project. Team leader shall be expert in the field of hydropower engineering with master degree and minimum five years of experience in the same field. The main responsibility of the team leader is to lead members of working team. The team leader is also responsible for co-ordinating project management, activities and team members for timely completion, quality control, successful completion of this project with professional ethics. The minimum key professional experts for successful completion of this project are as listed in Table 1.

**Table 1:** List of key professional experts

S.N.	Description	Minimum Qualification	Minimum Experience in related field (hydropower engineering)
1.	Team Leader	Master Level (Hydropower Engineering)	5 years
3.	Civil Engineer	Bachelor's level	5 years
4.	Sub Engineer	Diploma / PCL	5 years

## 8 Payment Schedule

The consultant shall get payment in three instalments for the project work as scheduled below after the submission and approval of the report.

<b>Report</b>	<b>Percentage of contract agreement</b>
1. Inception Report Submission and approval	20 %
2. Draft Report submission	40 %
3. Final Report submission and approval	40 %

## Consultant Requirements

### Qualifications and Experience:

- 2.1. The company/Consultant has working experience in similar works.
- 2.2. The company must be a registered organization of Nepal.
- 2.3. The company should show its financial strength and tax clearance proof of year 2073/74

### Submission of Proposal

Interested consultants/Company should submit their sealed **technical proposals and financial proposals**.

### The Technical Proposal includes following document:

- i. Commitment Letter
- ii. Profile of Company/consultant
- iii. Qualification of Technical Persons

### The financial Proposal includes following document:

- i. Commitment Letter
- ii. Attested Copy of Registration Certificate
- iii. Attested Copy of Permanent Account Number / Value Added Tax Certificate
- iv. Attested Copy of Tax Clearance Certificate