Expression of Interest (EOI)

For

Preparation of River Training Manual for Nepal

Job No. : 2073/74-1

Budget Head: 3081014

January, 2016
Government of Nepal

Water and Energy Commission Secretariat

Singha Durbar, Kathmandu

Invitation for Expression of Interest (EOI) for Consultancy Services

(Date of First Publication: ……………)

1. The Water and Energy Commission Secretariat (WECS) intends to prepare a list of competent Nepali national consulting firms for the Job indicated below, which is proposed to be conducted using funds from Government of Nepal (GON)’s own resources. This Invitation for Expression of Interest (EOI) is made to invite applications from interested and eligible Nepali national consulting firms registered in Nepal under GON rules & regulations and/or their joint ventures (JV)

<table>
<thead>
<tr>
<th>Job No.</th>
<th>Job Title</th>
</tr>
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<tbody>
<tr>
<td>2073/74-1</td>
<td>Preparation of River Training Manual for Nepal</td>
</tr>
</tbody>
</table>

2. The consulting firm can apply either in single or in JV. The number of consulting firms in a JV should not exceed three including the lead firm. In addition, same consulting firm is not allowed to enter into more than one JV for the Job.

3. EOI document could be obtained free of cost during office hours on all government working days within 15th day of first date of publication of this EOI notice from WECS or can be downloaded from the website http://www.wecs.gov.np. The instructions to applicants, prescribed formats for EOI preparation, evaluation criteria, detailed information, and Terms of Reference (TOR) for the job are provided in the EOI document.

4. Duly completed EOI documents in hard copy should be submitted to the address mentioned below clearly mentioning the name of the job in sealed envelopes before 12 Noon (NST-Nepal Standard Time) within 16th day of first publication of this notice:

   The Secretary, Water and Energy Commission Secretariat
   Singh Durbar, Kathmandu
   Tel:4211423 , Fax: 4211425, Email: wecs@mos.com.np

5. If the deadline specified herein falls on a government holiday, the deadline shall be extended automatically to the next working day at the same hour. Duly completed EOI documents received after the due date & time shall be considered late, summarily rejected and returned un-opened.

6. The completed EOI documents received by the due date and within the specified time shall be opened at 14:00 (NST) on the 16th day of first date of publication of this notice in the presence of the applicants or their authorized representatives whosoever wish to attend. Absence of the applicant or their authorized representatives, however, shall not obstruct or prevent the opening of the EOI in any way.

7. The EOI documents received from the applicants will be evaluated on the basis of the approved eligibility and evaluation criteria. The evaluation of EOI application of eligible JV consulting...
firm(s) will be done in cumulative basis. Only six top ranked consulting firms obtaining at least 60% marks in the EOI evaluation will be shortlisted for the job and considered as qualified firms.

8. Request for Proposal (RFP) for this job will be subsequently issued to qualified short listed firms. The Quality and Cost Based Selection (QCBS) procedure will be used for final selection of the consulting firm.

9. WECS reserves the right to accept or reject any or all EOI applications with or without giving any reason whatsoever.
1. INSTRUCTIONS TO APPLICANTS

1.1 INTRODUCTION

1.1.1 Scope of Qualification

1. The Water and Energy Commission Secretariat (WECS) intends to prepare a list of competent Nepali national consulting firms to conduct study titled “Preparation of River Training Manual for Nepal”. This Invitation for Expression of Interest (EOI) is made to invite applications from interested and eligible Nepali national consulting firms registered in Nepal under GoN rules & regulations and/or their joint ventures.

1.2 Definition of Terms

Unless otherwise specified, the following terms used in this EOI have the following meanings:

“Applicant” means a single consulting firm or a joint venture of firms which intends to submit completed EOI document as per the published notice and instructions given in this EOI document.

“Authorized Representative” means an individual authorized by the Applicant as the duly authorized entity to legally bind the Applicant to the EOI process, is the authorized signatory to the process, and is the point of contact for WECS in connection with the process.

“Bidder” means a successful Applicant that are shortlisted under this EOI and submits Technical and Financial proposal in response to RFP.

“WECS” means the “Water and Energy Commission Secretariat”

“GoN” means “Government of Nepal”

“JV” means “Joint Venture”

“Lead Firm” means an entity or firm that is the authorized leader of a team comprising the Lead Firm and its constituents to submit the EOI and perform the assignment.

“EOI” means “Expression of Interest”

“RFP” means a “Request for Proposal”

“TOR” means “Terms of Reference”

“VAT” means “Value Added Tax”

1.1.3 Eligible Applicants

1. In order to be eligible, the consulting firms should be registered in Nepal under GoN rules & regulations and should submit valid Registration Certificate, VAT Registration Certificate, Income Tax Clearance/Submission Certificate for FY 072/73. These eligibility certificates shall be notarized by authorized entity.
2. In addition, the Applicant (consulting firms) should submit Self Declaration as per clause 40 – 2 (e) of Public Procurement Rule, 2064 mentioning their eligibility, non-conflict of interest, non receipt of any punishment while doing consulting business and litigation history (if any).

3. In case of a Joint Venture, each member of the JV shall submit the above eligibility documents.

4. In case of a Joint Venture, the consulting firms shall submit Joint Venture Agreement between the JV partners duly signed by authorized signatories & stamped with company seal of each member of JV & clearly mentioning name of the lead firm, name of JV partners, role and responsibility of each JV partner, share percentage of each members, and names and signatures of the authorized signatories. A power of attorney of authorized signatories in the JV from their respective firms with signature and seal of each member in the JV is also required.

5. Firms are not allowed to enter into more than one joint venture for the job. The total number of consulting firms including the lead firm should not exceed a maximum of three in a joint venture.

6. The minimum share percentage of the lead firm should be at least 40% and that of each of the other JV partners should be at least 20%. The lead firm should have an Average Annual Turnover of at least NRs. 10.00 millions on average in the best three fiscal years among the last five consecutive fiscal years.

7. If the consulting firm or any member of the joint venture fails to submit the above documents or does not meet any of the above mentioned eligibility criteria, the consulting firm will be considered as non-eligible and will NOT be considered for further evaluation.

1.2 GENERAL INSTRUCTION TO CONSULTANTS

1.2.1 Clarification on EOI Documents

A prospective Applicant requiring any clarification on this EOI document may seek clarification by contacting WECS during office hours on all working days prior to the deadline for submission of the completed EOI document at the address mentioned below

Contact person
Dr. Maheswor Shrestha
Senior Divisional Engineer
WECS, Singha Durbar, Kathmandu
Tel:- 4211423, 4211429 Fax:- 4211425
Email: wecs@mos.com.np

1.2.2 Amendment to EOI Documents

1. At any time prior to the deadline for the submission of the EOI document, WECS may amend the EOI clauses, for any reason, whether on its own initiative or in response to a clarification requested by an Applicant.
2. All Applicants will be notified in writing about the amendments. All Applicants will be bound by the amendments. Applicants will be required to acknowledge the receipt of any amendment within three business days of such receipt. Otherwise, WECS will assume that the information contained in the amendment is taken into account by the Applicant in its Application.

### 2.3 Cost of Preparation of EOI and Liability

Applicant shall bear all costs associated with the preparation and submission of the EOI document. WECS will, in no case, be responsible or liable for these costs, or have any other liability to any Applicant, regardless of the conduct or outcome of the EOI process. WECS shall have no obligation to any Applicant to reimburse any costs incurred in preparing a response to this EOI.

### 1.2.4 Confidentiality of the Document

If an Applicant believes that any portion of the submittal is to be treated in confidence, he/she shall identify such information clearly in the submittal. WECS will make every effort to treat such documents in confidence as far as possible.

### 1.2.5 Joint Liability for Joint Venture Firms

By submitting an EOI in joint venture, the Applicant represents that, if qualified and if awarded the contract after the RFP process, the Applicant with its constituent members shall be jointly responsible to perform the obligations of such contract.

### 1.3 SUBMISSION OF EXPRESSION OF INTEREST (EOI)

#### 1.3.1 Sealing and Marking

1. The Applicant shall seal the one original and one copy of the completed EOI in separate envelopes, duly marking the envelopes as “Original” and “Copy”. These envelopes shall then be sealed in an outer envelope and marked as “Expression of Interest”. The inner as well as outer envelope should clearly mention the title of consulting Job. The envelopes should also indicate the name and address of the Applicant.

2. The inner and the outer envelopes shall be addressed to:

   - The Secretary
   - Water and Energy Commission Secretariat
   - Singh Durbar, Kathmandu
   - Tel: 4211422, Fax: 4211425

#### 1.3.2 Deadline for Submission

1. The completed EOI document must be submitted to WECS at the address specified in section 1.3.1 before 12:00 hr Nepal Standard Time (NST) **within 16th day from the date of first publication of this notice.**
2. The completed EOI documents received by WECS after the deadline set forth in section 1.3.2 (1) shall be considered late and shall be summarily rejected and returned un-opened.

3. If the deadline specified herein falls on a government holiday, the deadline shall be extended automatically to the next working day at the same hour.

1.3.3 Withdrawal of EOI document
An Applicant shall not be permitted to withdraw the EOI Application that has been submitted to WECS.

1.4 PUBLIC OPENING OF SUBMITTED EOI DOCUMENT
The completed EOI documents received by the due date and within the time specified in clause 1.3.2 (1) will be opened at 14.00 hrs NST on the last date of submission of EOI document in the presence of the applicants or their authorized representatives whosoever wish to attend. Absence of the applicants or their authorized representative(s), however, shall not obstruct or prevent the opening of the EOI in any way. Applicants’ each designated representative must bring a letter from the applicant stating that he/she is authorized to represent the applicant for the public opening of the EOI document. Applicants or their authorized representatives who are present at the time of opening shall sign in a register evidencing their presence.

During the opening, an authorized representative of WECS will read out the names of the applicants who have submitted the completed EOI document and then will open the submitted EOI envelopes.

1.5 PREPARATION OF THE EOI DOCUMENT
Detailed procedure for preparation of EOI documents is given in section – 2.

1.6 EVALUATION PROCESS
WECS will carry out evaluation of the submitted EOI documents based on the eligibility and evaluation criteria approved by WECS and listed in this document. Anything not mentioned in this document regarding the EOI process shall be governed by the prevailing Public Procurement Act and Rule of Nepal.

The evaluation of EOI documents will be done in two stages (i) Screening of EOI Application of all firms for eligibility; and (ii) Evaluation of EOI document of eligible firms.

i) Screening of EOI Application of all firms for eligibility
The basic criteria for the eligibility of applicants are as follows:

A. Eligibility Requirement
**EOI Document for Preparation of River Training Manual for Nepal**

| i | Notarized Copy of Valid Registration Certificate |
| ii | Notarized Copy of VAT Certificate |
| iii | Notarized Copy of Income Tax Clearance/Submission Certificate for FY 072/73 |
| iv | Self Declaration as per clause 40 – 2 (e) of Public Procurement Rule, 2064 mentioning their eligibility, non-conflict of interest, non receipt of any punishment while doing consulting business and litigation history (if any) |

**Note:**

(a) In case of Joint Venture, each member of the JV shall submit the above eligibility documents.

(b) The total number of consulting firms including the lead firms should not exceed a maximum of three in a joint venture.

(c) The same firm is not allowed to enter into more than one Joint Venture.

(d) In addition, in case of Joint Venture, following documents should be provided

| i | Joint Venture Agreement of consulting firms duly signed by authorized signatories & stamped with company seal of each member of joint venture & clearly mentioning name of the lead firm, name of JV partners, role and responsibility of each member, share percentage of each members, name of the authorized signatories. The original signature of authorized representatives & stamp of companies should be in each page of JV agreement. The digital signature or digital stamp shall not be accepted. (In any case, the firms are not allowed to enter into more than one joint venture for same job). |
| ii | Power of attorney of authorized signatories of JV agreement from their respective firm with signature & stamp for each member of JV. Such Power of attorney of authorized signatories of JV agreement shall have been issued by executive head of organization such as Managing Director, CEO or Chairperson, etc. The digital signature or digital stamp shall not be accepted. |
| iii | The minimum share percentage of the lead firm should be at least 40% and that of other JV partners should be at least 20%. |
| iv | Power of attorney to lead firm by JV partners |
| v | Documents showing that the lead firm has an Average Annual Turnover of at least NRs. 10.0 millions on average in the best three fiscal years among last five consecutive fiscal years. |

If a consulting firm or any member in the joint venture fails to submit the above documents or does not meet any of the above mentioned criteria, the consulting firm/their JV will be considered as non-eligible and will NOT be considered for further evaluation.
(ii) Evaluation of EOI document of eligible firms

In case of a JV, the evaluation will be done in cumulative basis. However, cumulative basis will not be applied for financial capability of the firm in presenting the minimum average annual turnover (NRs. 10 Millions) as the lead firm shall have an Average Annual Turnover of at least NRs. 10.0 millions on average in the best three fiscal years among last five consecutive fiscal years as stated above in the eligibility criteria.

The criteria for the evaluation of EOI documents are as follows:

<table>
<thead>
<tr>
<th>S. N</th>
<th>Description</th>
<th>Weightage</th>
<th>Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Financial Capability of the Firm</td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>I</td>
<td>Average Annual Turn Over of best three fiscal years among last five consecutive fiscal years (in NRs.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a</td>
<td>More than 15.0 Million</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>b</td>
<td>More than 12.5 Million and less or equal to 15.0 Million</td>
<td>80%</td>
<td></td>
</tr>
<tr>
<td>c</td>
<td>More or equal to 10.0 Million and less or equal to 12.5 Million</td>
<td>60%</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>Proposed key Personnel/Professionals (Minimum Qualification and Experience as specified in the TOR)</td>
<td></td>
<td>15</td>
</tr>
<tr>
<td>C</td>
<td>General Work Experience of the Firm in the last seven Years in the Area of Water Resources Development (Each task or project shall have the contract value of at least NRs. 1 million)</td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>a</td>
<td>More than 3 tasks or projects</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>b</td>
<td>3 tasks or projects</td>
<td>80%</td>
<td></td>
</tr>
<tr>
<td>c</td>
<td>2 tasks or projects</td>
<td>70%</td>
<td></td>
</tr>
<tr>
<td>d</td>
<td>At least 1 task or project</td>
<td>60%</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>Specific Work experience of the firm in the Last seven Years (Not counting the works under C)</td>
<td></td>
<td>45</td>
</tr>
<tr>
<td>I</td>
<td>Experience in study &amp; research related works on preparation of Manual and Design Guidelines of Infrastructure Development (River Training, Disaster Management,</td>
<td></td>
<td></td>
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</tbody>
</table>
## I. Irrigation, Hydropower, Water Supply, Road, etc. (Each task or project shall have the contract value of at least NRs. 1 million)

<table>
<thead>
<tr>
<th></th>
<th>More than 3 tasks or projects</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>3 tasks or projects</td>
<td>80%</td>
</tr>
<tr>
<td>b</td>
<td>2 tasks or projects</td>
<td>70%</td>
</tr>
<tr>
<td>c</td>
<td>At least 1 task or project</td>
<td>60%</td>
</tr>
</tbody>
</table>

## II. Experience in Planning and Design of Flood Control and Management Related Works (Each task or project shall have the contract value of at least NRs. 1 million)

<table>
<thead>
<tr>
<th></th>
<th>More than 3 tasks or projects</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>3 tasks or projects</td>
<td>80%</td>
</tr>
<tr>
<td>b</td>
<td>2 tasks or projects</td>
<td>70%</td>
</tr>
<tr>
<td>c</td>
<td>At least 1 task or project</td>
<td>60%</td>
</tr>
</tbody>
</table>

**Total Marks**: 100.00

**Note:**

a) i. The relevant figures/numbers of each member of the joint venture shall be added together to calculate cumulative figures/numbers of the joint venture’s for the purpose of evaluation.

ii. In the event of any discrepancy between the original and the copy, the original shall govern.

iii. The Consultant must make (put) the original signature of authorized representative and stamp of company **on each printed side of every page of EOI document(s)**.

b) The experience of the firm should be supported with the evidence/proof of experience/completion certificates. The experience/completion certificates shall contain the project size, consulting service amount and date of completion of the assignment. The experience of the firm without evidence/proof or experience certificate will not be considered for evaluation.

c) i. Marks will be given only to the key professionals to be deployed for the study.

ii. If the qualification and experience of the key personnel does not meet the minimum requirements as specified in the TOR, such personnel will not be considered for evaluation.
List of Key Personnel/Professionals

Professionals in the following areas of expertise are proposed for the job. Details of the qualification, experience and responsibilities of key experts are provided in TOR.

<table>
<thead>
<tr>
<th>SN</th>
<th>Designation</th>
<th>Required No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Team leader (River Engineer)</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Flood Control Experts</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>Sediment Management Expert</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Hydrologist</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Geologist</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Disaster Management Expert</td>
<td>1</td>
</tr>
</tbody>
</table>

1.6.1 Screening of EOI Applications

In this stage, screening/eligibility verification of received EOI documents will be done based on approved eligibility criteria. Each Consultant must 'pass' each and every criterion of eligibility. Any Consultant not complying or full filling with any one of these eligibility criteria will be disqualified from further evaluation.

1.6.2 Evaluation of EOI Documents

In second stage, the EOI document of eligible firms (Consultants determined "Pass" in Stage I), will be further evaluated based on (i) Financial Capability of Firm, (ii) Qualification and Experience of the proposed Key Professional/Personnel (iii) General Work Experience of the Firm and (iv) Specific Work Experience of the Firm.

Applicants obtaining at least 60% marks in the EOI evaluation process shall be considered as qualified firms. Only top six out of such qualified firms will be allowed to participate in RFP process.

1.6.3 Clarification during Evaluation by WECS

1. During the evaluation, WECS may request the Applicant for necessary clarifications or substantiation of the information furnished. The Applicant shall furnish the necessary clarifications expeditiously by post/courier/fax/e-mail or by any other means of communication to WECS at the address given in Clause - 1.2.1.

2. If the Applicant fails to provide timely clarification or substantiation of the information furnished, WECS may declare such Applicant as non-responsive and reject his/her document.
1.6.4 **Rejection of EOI Document of Applicant**

1. WECS reserves the right to accept or reject any or all EOI proposals with or without giving any reason whatsoever and is not liable for any losses to Applicants due to such rejection.

2. Furnishing of false or wrong information, document or evidence by any firm or joint venture may result in rejection of the EOI document of the firm or their joint ventures. In addition in such cases, legal action shall be taken as per prevailing law.

1.7 **NOTICE OF RESULT OF EVALUATION**

All applicants irrespective of the qualified or non-qualified and short listed or non-shortlisted will be notified in writing the result of evaluation of qualification in due course of time. Applicants listed in the short-list will be considered as qualified firm and will be invited to participate in the Request for Proposal process.

1.8 **TERMS OF REFERENCE (TOR)**

TOR is provided in Annex-1 of this EOI document.
2. PREPARATION OF EOI APPLICATION

The EOI document shall be structured in accordance with the outlines given in the EOI form and must contain accurate and complete information as requested in the EOI form. The EOI document shall have no interlineations or overwriting, except as necessary to correct errors made by the Consulting Firm itself. Any such correction must be initialed by the person authorized to sign the application and stamped with the firm’s seal.

2.1.1 Documents for EOI

The completed EOI documents to be submitted by Applicants shall comprise of the following documents:

<table>
<thead>
<tr>
<th>Form Type</th>
<th>Description/Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form A</td>
<td>General Information</td>
</tr>
<tr>
<td>Form A-1</td>
<td>Letter of Submission</td>
</tr>
<tr>
<td>Form A-2</td>
<td>Joint Venture Information</td>
</tr>
<tr>
<td></td>
<td>(Attach JV Agreement and Power of Attorney, Share Percentage)</td>
</tr>
<tr>
<td>Form A-3</td>
<td>Self Declaration Form</td>
</tr>
<tr>
<td>Form A-4</td>
<td>Eligibility Documents</td>
</tr>
<tr>
<td></td>
<td>(Attach Registration, VAT, Income Tax Clearance or Income Tax Clearance Submission Certificates)</td>
</tr>
<tr>
<td>Form A-5</td>
<td>Identification of the Consulting Firm</td>
</tr>
<tr>
<td>Form A-6</td>
<td>Financial Capability of the Consulting Firm</td>
</tr>
<tr>
<td></td>
<td>(Attach Audit Reports of last five consecutive fiscal years)</td>
</tr>
<tr>
<td>Form B</td>
<td>General Work Experience of the Firm in the Area of Water Resources Development in last seven years</td>
</tr>
<tr>
<td>Form C</td>
<td>Specific Work Experience of the Firm in last seven years</td>
</tr>
<tr>
<td>Form C-1</td>
<td>Experience in study &amp; research related works on preparation of Manual and Design Guidelines of Infrastructure Development (River Training, Disaster Management, Irrigation, Hydropower, Water Supply, Road, etc.)</td>
</tr>
<tr>
<td>Form C-2</td>
<td>Experience in planning and design of flood control and management related works</td>
</tr>
<tr>
<td>Form C-3</td>
<td>Details of the works stated in Form B, C-1 and C-2</td>
</tr>
<tr>
<td>Form D</td>
<td>Details of Proposed Key Personnel/Professional</td>
</tr>
</tbody>
</table>

Note: The EOI documents should be prepared and submitted in above mentioned sequence providing supporting documents with respective Forms.
2.1.2 General Information

1. The Applicant shall provide a Letter of Submittal with completed forms as provided in the Format Forms A to D in the EOI document. All necessary information shall be presented to demonstrate the firm/joint venture’s eligibility, capability, experience and professionals to be deployed for the study.

2. The Applicant shall enclose notarized copies of registration certificate, VAT certificate, and Tax clearance certificate/Tax clearance submission certificate. The applicants shall also enclose experience certificate or completion certificate, audit report of last seven years and other relevant information.

2.1.3 Information Regarding Technical & Financial Capability of the Consulting Firm

Form A-1: Letter of Submission

The applicant shall submit with the EOI a submittal letter with name and full contact information of the authorized representative. The letter shall be signed by an authorized person of the firm or lead firm in case of joint venture and shall be stamped by the company's seal. The format of submittal letter is given in Form A-1 of the EOI document. The letter shall also include the title of consulting job being applied for.

Form A-2: Joint Venture Information

In case of Joint Venture, the Consultant shall submit duly signed by authorized signatories & stamped with company seal of each member of joint venture & clearly mentioning name of the lead firm, name of JV partners, role and responsibility of each member, share percentage of each members, name of the authorized signatories. The original signature of authorized representatives & stamp of companies should be in each page of JV agreement. The digital signature or digital stamp shall not be accepted. The authorized signatories of JV agreement should hold power of attorney from their respective firm. Such Power of attorney of authorized signatories of JV agreement shall have been issued by executive head of organization such as Managing Director, CEO or Chairperson, etc.

Form A-3: Self Declaration Statement of Consultant

The applicant shall submit a Self Declaration as per clause 40 – 2 (e) of Public Procurement Rule, 2064 mentioning that Consultant is not ineligible to participate in this procurement process, that the Consulting Firm does not have any conflict of interest in the proposed assignment, and that the consulting Firm has not received any punishment while doing consulting business and litigation history (if any) in last seven years. The self declaration letter shall be signed with original signature of an authorized person of the consulting firm and shall be stamped by the company’s seal. The format of the self
declaration letter is given in Form A-3 of this EOI document. In case of JV, each individual Consultant should submit Self Declaration either separately or jointly by signing each member of JV mentioning information requested in Self Declaration.

**Form A-4: Eligibility Documents**

The applicant shall complete form A-4 and submit supporting documents to support the eligibility requirements(s). The supporting documents will be in the form of notarized copies of registration certificate, VAT Certificate and Income Tax Clearance Certificates.

**Form A-5: Identification of the Firm**

The background information of the consulting firm shall be presented in the prescribed Form A-5.

**Form A-6: Financial Capability of the Firm**

The financial capability of the consulting firm shall be presented in the prescribed Form A-6 of this EOI document. The financial status of the Consulting Firm shall be supported with audited reports of last five consecutive fiscal years.

**2.1.4 General and Specific Work Experience of the Firm**

The experience of the firm should be supported with evidence/proof in the form of work completion certificates showing the project size, value of contract, time duration and date of completion of the assignment, as appropriate. The experience of the firm without such evidence/proof will not be considered for evaluation.

**Form B: General Experience of the Firm in the area of Water Resources Development in last seven years**

General Experience of the Firm in the last seven years in the area of Water Resources Development shall be presented in the prescribed Form B. Each task or project shall have the contract value of at least NRs. 1 million

**Form C-1: Experience in study & research related works on preparation of Manual and Design Guidelines of Infrastructure Development**

The relevant Experience in study & research related works on preparation of Manual and Design Guidelines of Infrastructure Development (River Training, Disaster Management, Irrigation, Hydropower, Water Supply, Road, etc.) works in the last seven years shall be presented in the prescribed Form C-1. Each task or project shall have the contract value of at least NRs. 1 million
Form C-2: Experience in planning and design of flood control and management related works

The relevant Experience in planning and design of flood control and management related works in the last seven years shall be presented in the prescribed Form C-3. Each task or project shall have the contract value of at least NRs. 1 million

Form C-3: Details of the works stated in Form B, C-1 and C-2.

2.1.5 Details of Key Personnel/Professionals

Form D

The details of proposed Key Personnel/Professionals shall be presented in prescribed Form D.

Note: The firm is requested to provide the information provided in sections 2.1.3, 2.1.4 and 2.1.5 in electronic form (prepared in word or excel) after the opening date of the submitted EOI documents.
FORM A-1

LETTER OF SUBMISSION

[Letterhead of the Applicant, In case of Joint Venture, of the Lead Firm]

Date: ................................

To:
The Secretary
Water and Energy Commission Secretariat
Singha Durbar, Kathmandu, Nepal

Sirs,

Being duly authorized to represent and act on behalf of ……………………………………
……………………………………………………………………………………………………
……………………………………………………………………………………………………
……………………………………………………………………………………………………
………………(hereinafter “the Applicant”), and having reviewed and fully understood all the
information provided in EOI, the undersigned hereby apply for qualification by WECS as a

1. WECS and its authorized representatives are hereby authorized to verify the statements,
documents, and information submitted in connection with the submitted EOI. This Letter
will also serve as authorization to any individual or authorized representative of any
institution referred to in the supporting information, to provide such information deemed
necessary and requested by you to verify statements and information provided in this
EOI, or with regard to the resources, experience, and competence of the Applicant.

2. WECS and its authorized representatives are authorized to contact any of the signatories
to this letter for any further information.

3. This application is made in the full understanding that all decisions by WECS related to
this EOI are final, binding and not subject to review. WECS shall be under no obligation
to inform the Applicant of the reasons for its decisions or actions.

Applicant hereby provides willingness and commitment to abide by all applicable
laws, regulations, and other requirements having the effect of law in the execution of this
EOI, if selected.
5. All further communication concerning this EOI proposal should be addressed to the following person who is authorized to represent and to receive all communication on behalf of the Applicant and its constituents.

[Person & Designation]

[Company]

[Address]

[Phone, Fax, Email]

6. The undersigned declare that the statements made and the information provided in the duly completed EOI proposal are complete, true and correct in every detail.

Signed

Name

Designation

For and on behalf of (Name of Applicant or Lead Firm in the joint venture)
FORM A-2

# JOINT VENTURE INFORMATION

If the EOI is being submitted in Joint Venture, provide the following Joint Venture Information:

<table>
<thead>
<tr>
<th>SN</th>
<th>NAME OF FIRM</th>
<th>Postal Address, TEL, FAX and E-mail</th>
<th>NAME OF CONTACT PERSON</th>
<th>TELPHON E OF CONTACT PERSON</th>
<th>SHARE PERCENTAGE IN JV</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lead Firm:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Partner Firm:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:**

1. A maximum of three (3) firms can form a Joint Venture.

2. In case of a JV, the minimum share percentage of the lead firm should be at least 40% and that of each of the other JV partners should be at least 20%. The lead firm should have an Average Annual Turnover of at least NRs. 10.0 million on average in the best three fiscal years among last five consecutive fiscal years. Also, the lead firm should hold the power of attorney.

**Attachment**

1. Joint Venture Agreement
2. Power of attorney of the signatory (ies)
3. Power of attorney to lead the JV
FORM A-3

SELF DECLARATION FORM

Date:……………. 

To,
The Secretary
Water and Energy Commission Secretariat
Singha Durbar, Kathmandu
Sir,

We undersigned, ……………………………………………………………………………
(name of all Consulting Firm/JV) declare that we are legally eligible to participate in the
procurement process of consulting services for the ....................... (title of consulting
service).

We also declare that we do not have any conflict of interest in the said assignment.

We hereby also declare that we have not received any punishment while doing consulting
business in the last seven years.

Note: (If any member of the consulting Firm is not eligible to participate in procurement
process or has conflict of interest in the said assignment or has received any punishment
while doing consulting business in the last seven years, the same must be clearly mentioned
in this form. Any history of litigation during the last seven years shall also be declared here
along with the relevant verdict.)

(Note: Each Consultant of JV needs to submit Self Declaration either jointly or
individually with original signature and stamp of company together with EOI
document)
**FORM A-4**

**ELIGIBILITY DOCUMENTS**

Fulfillment of Eligibility Requirements

<table>
<thead>
<tr>
<th>Description</th>
<th>Status/Name of Submitted documents and how these are presented in the EOI</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notarized Copy of Valid Registration Certificate (of each member of JV, in case of JV.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notarized Copy of VAT Certificate (of each member of JV, in case of JV.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notarized Copy of Income Tax Clearance Certificate or Submission Certificate for FY 072/73 (of each member of JV, in case of JV.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Declaration (In case of JV, the Consultants should submit Self Declaration either separately or jointly by signing each member of JV mentioning information requested in Self Declaration).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Joint Venture Agreement between the JV Partners duly signed by authorized signatories &amp; stamped with company seal of each member of joint venture &amp; clearly mentioning name of the lead firm, name of JV partners, role and responsibility of each member, share percentage of each members, name of the authorized signatories (in case of a JV)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power of attorney of authorized signatories of JV agreement from their respective firm with signature &amp; stamp for each member of JV (in case of a JV).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power of attorney to lead firm by JV partners (in case of a JV)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*The supporting documents in the form of notarized copies of registration certificate, VAT Certificate and Tax Clearance/Submission Certificates shall be attached here.*

In addition, provide the following information

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The total number of consulting firms in joint venture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------------</td>
<td>--</td>
<td></td>
</tr>
<tr>
<td>Share percentage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lead firm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JV partner firm-1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>JV partner firm-2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The Average Annual Turnover in the best three fiscal years among last five consecutive fiscal years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead firm</td>
</tr>
<tr>
<td>JV partner firm-1</td>
</tr>
<tr>
<td>JV partner firm-2</td>
</tr>
</tbody>
</table>
FORM A-5

IDENTIFICATION OF THE CONSULTING FIRM

Full name of the Firm:
Address:

<table>
<thead>
<tr>
<th>Telephone number:</th>
<th>Year of Establishment:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fax number:</td>
<td>Number of Years since establishment:</td>
</tr>
<tr>
<td>E-mail:</td>
<td></td>
</tr>
<tr>
<td>Others:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Corporate Registration:</th>
<th>VAT Registration:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of Registration:</td>
<td>Date of Registration:</td>
</tr>
<tr>
<td>Registration No:</td>
<td>VAT Registration No:</td>
</tr>
<tr>
<td>Date of last renewal:</td>
<td></td>
</tr>
<tr>
<td>Valid up to:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name and address of contact person:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Name and Designation of Contact Person:</td>
<td></td>
</tr>
<tr>
<td>Address:</td>
<td></td>
</tr>
<tr>
<td>Telephone number (Office):</td>
<td></td>
</tr>
<tr>
<td>Telephone number (Residence) :</td>
<td></td>
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<tr>
<td>Mobile no:</td>
<td></td>
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<tr>
<td>Fax:</td>
<td></td>
</tr>
<tr>
<td>Email:</td>
<td></td>
</tr>
</tbody>
</table>

*Note: In case of a JV, provide similar information for each member in the joint venture separately*
FORM A-6

FINANCIAL CAPABILITY OF THE CONSULTING FIRM

Full name of the Consulting Firm:

FINANCIAL STATUS

Turn Over of last five consecutive fiscal years

<table>
<thead>
<tr>
<th>Description</th>
<th>FY</th>
<th>FY</th>
<th>FY</th>
<th>FY</th>
<th>FY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turnover (NRs.)</td>
<td>...</td>
<td>.</td>
<td>.</td>
<td>.</td>
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</tbody>
</table>

Turn Over of best three years

<table>
<thead>
<tr>
<th>Description</th>
<th>FY</th>
<th>FY</th>
<th>FY</th>
<th>Average Annual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turnover (NRs.)</td>
<td>..........</td>
<td>..........</td>
<td>..........</td>
<td></td>
</tr>
</tbody>
</table>

Note:

1. Provide similar information for each member in case of joint venture.
2. Submit Audited Reports of last five consecutive fiscal years to support the above information.
FORM B

GENERAL WORK EXPERIENCE OF THE FIRM IN THE AREA OF WATER RESOURCES DEVELOPMENT (IN THE LAST SEVEN YEARS)

<table>
<thead>
<tr>
<th>S. N.</th>
<th>NAME OF PROJECT</th>
<th>LOCATION</th>
<th>CLIENT</th>
<th>VALUE OF CONTRACT</th>
<th>YEAR OF COMPLETION</th>
<th>DESCRIPTION OF RELEVANT WORK CARRIED OUT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
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<td>2.</td>
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<td>3.</td>
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<tr>
<td>4.</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Note:  
(1) Note: Provide above information for each member in case of a joint venture.  
(2) Details of the work completed by Consulting Firm(s) should be filled in Form C-3.  
(3) Each task or project shall have the contract value of at least NRs. 1 million

Date: Signature & Designation of Applicant: Seal of the Firm
FORM C-1

SPECIFIC WORK EXPERIENCE OF THE FIRM IN STUDY AND RESEARCH RELATED WORKS ON PREPARATION OF MANUAL AND DESIGN GUIDELINES OF INFRASTRUCTURE DEVELOPMENT (RIVER TRAINING, DISASTER MANAGEMENT, IRRIGATION, HYDROPOWER, WATER SUPPLY, ROAD ETC.) (IN THE LAST SEVEN YEARS)

<table>
<thead>
<tr>
<th>S. N.</th>
<th>NAME OF PROJECT</th>
<th>LOCATION</th>
<th>CLIENT</th>
<th>VALUE OF CONTRACT</th>
<th>YEAR OF COMPLETION</th>
<th>DESCRIPTION OF RELEVANT WORK CARRIED OUT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
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<tr>
<td>2.</td>
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<tr>
<td>3.</td>
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<tr>
<td>4.</td>
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</tr>
</tbody>
</table>

**Note:**
(1) Note: Provide above information for each member in case of a joint venture.
(2) Details of the work completed by Consulting Firm(s) should be filled in FormC-3.
(3) Each task or project shall have the contract value of at least NRs. 1 million

Date:      Signature & Designation of Applicant:      Seal of the Firm
# Form C-2

## Specific Work Experience of the Firm in Planning and Design of Flood Control and Management Related Works (in the last seven years)

<table>
<thead>
<tr>
<th>S. N.</th>
<th>Name of Project</th>
<th>Location</th>
<th>Client</th>
<th>Value of Contract</th>
<th>Year of Completion</th>
<th>Description of Relevant Work Carried Out</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>2.</td>
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<tr>
<td>3.</td>
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<tr>
<td>4.</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:**
1. Note: Provide above information for each member in case of a joint venture.
2. Details of the work completed by Consulting Firm(s) should be filled in Form C-3.
3. Each task or project shall have the contract value of at least NRs. 1 million.

Date: [Signature & Designation of Applicant: Seal of the Firm]
FORM C-3

DETAILS OF FORM B, C-1 AND C-2

(DETAILS OF THE WORKS SHOWN IN FORMS B, C-1 AND C-2)

The following information should be provided in the format indicated for each reference project for which your company, either individually as a corporate entity or as a one of the major companies within a consortium was legally contracted.

<table>
<thead>
<tr>
<th>Project Name:</th>
<th>Country:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Location:</td>
<td>Professional Staff Provided by the Company:</td>
</tr>
<tr>
<td>Name of Client:</td>
<td>No. of Staff:</td>
</tr>
<tr>
<td>Approximate value of Services:</td>
<td>N. of Man-months:</td>
</tr>
<tr>
<td>Start Date: (Month/Year)</td>
<td>Completion Date: (Month/Year)</td>
</tr>
<tr>
<td></td>
<td>No. of man-months of Professional Staff provided by Associated Firm(s).</td>
</tr>
<tr>
<td>Name of associated firm(s) if any:</td>
<td></td>
</tr>
<tr>
<td>Name of Senior Staff (Project Director/Coordinator, Team Leader) involved and functions performed:</td>
<td></td>
</tr>
<tr>
<td>Detailed Narrative Description of Project:</td>
<td></td>
</tr>
<tr>
<td>Detailed Description of Actual Services Provided by the Company:</td>
<td></td>
</tr>
</tbody>
</table>
# FORM D

## DETAILS OF KEY PERSONNEL/PROFESSIONALS

<table>
<thead>
<tr>
<th>S. N.</th>
<th>DESIGNATION</th>
<th>NAME</th>
<th>QUALIFICATION (INCLUDING UNIVERSITY &amp; YEAR OF DEGREE OBTAINED AFTER GRADUATION)</th>
<th>FULL TIME/PART TIME</th>
<th>TOTAL YEARS OF EXPERIENCE</th>
<th>PROJECTS CURRENTLY INVOLVED IN</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Team leader (River Engineer)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Flood Control Experts-2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>A)</td>
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</tr>
<tr>
<td></td>
<td>B)</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Sediment Management Expert</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Hydrologist</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Geologist</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Disaster Management Expert</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

**Note:** Duly signed bio-data of personnel must be attached.

Date: __________________________ Signature & Designation of Applicant: __________________________ Seal of the Firm: __________________________
Annex-1

Terms of Reference (TOR)

For

Preparation of River Training Manual for Nepal

January, 2016
Terms of Reference

1. Background

The river system of Nepal, having more than 6000 rivers, drain the entire country towards south into the Ganges. As the topography varies from 64 m in Terai to 8848 m in the Himalaya, the river morphology, precipitation patterns and climate have wide variations. Rivers originating from the Higher Himalayas, Mahabharat Range and Siwaliks have different characteristics. Rugged topography, fragile and young geology and monsoon climate system all combine to produce high rates of runoff, erosion and sedimentation in these river systems. Such instabilities in the river systems make the landscape vulnerable to water-induced disasters such as floods, landslides, slope failures and debris flow. In addition, development activities and human interventions on flood plains carried out without giving serious thoughts about long term consequences have only amplified the water-induced disasters.

Rivers have tendencies to change their planforms and profiles in order to equipoise the interplay of stream power, sediment transport, flow resistance and bed slope. In the process, bank erosion takes place putting a lot of lives and properties in peril. We have another class of flood problem - inundation, which needs a different kind of attention and treatment. In order to get rid of these problems, several ways and means are in practice. However, the results are still far from being satisfactory.

It is observed that there is no uniformity in planning and design of flood control works carried out by different agencies. Many structures are too heavy - and innately uneconomical, but at the same time far from meeting intended objectives for want of appropriate design.

Whether or not it is appropriate to resolve inundation problems with parallel continuous dikes on both sides of a river is another matter of debate. However, the approach is being followed without thinking twice. People inhabiting close to the flooding rivers seem to have no or negligible flood fighting capacity in emergency. They need tips and trainings in doing so. There are ways by which flood problem can be ameliorated without actually implementing anything on the rivers, but that demands little managerial and provisional intervention.

We need a standardized document that guides planning and design of flood control works applicable to the entire country, across various public and private sector agencies, flood affected communities, and the like. The document would also contain flood fighting measures to be adopted by agencies and local communities during emergency and recommendations on flood management.

Against the above backdrop, the Water and Energy Commission Secretariat (WECS) intends to prepare a Manual for River Training Works. However, the scope of the manual shall not be merely limited to river training works, but it shall cover various investigation, planning and design aspects of flood control and management as well. For this purpose, WECS intends to enter into an agreement with a Nepali national consulting firm (the
Consultant) whose services to be rendered are described in detail in the present Terms of Reference.

2. Objectives of the study

The overall objective of the study is thus to prepare a Manual focusing on Flood Control and Management to be referred freely and officially in the investigation, planning and design of river training works, emergency flood control works and preparing and managing flood problems in Nepal.

3. Scope of Work

The Scope of Work of the proposed manual preparation work includes, but does not limit to, the followings:

- Assess present status of flood control works in Nepal;
- Review existing investigation, planning, design and implementation of river channelization and training works adopted by various agencies, including local communities;
- Review existing emergency flood fighting mechanism both at agency level and community level;
- Review existing status of preparedness and flood disaster management;
- Prepare a Manual focusing on Flood Control and Management for Nepal based on the above mentioned review work and by incorporating all the best practices and present day state-of-the-art in the field.


In order to complete the tasks under the above stated Scope of Work, the Consultant shall follow the following procedural steps in which the specific works to be completed are described in more detail:

A. Review Work

The review work consists of:

(i) Literature review; and
(ii) Case studies.

The Consultant shall carry out extensive review of two classes of documents - (a) planning, design, implementation and repair & maintenance methodologies adopted in various flood control works in Nepal; and (b) planning and design related literature including text books, handbooks, manuals, research papers, etc. which are used in Nepal and elsewhere. During the review work, the Consultant shall also take into consideration
the documents, which are recently published and deal with norms, analysis techniques, models, materials used, etc.

Case studies include field studies. Field studies are to be conducted to verify the efficacy, adequacy, appropriateness and effectiveness of the flood control and management works. The Consultant shall take up diverse types of cases - effective and ineffective, costly and cost effective, pertaining to major rivers, namely Koshi, Gandaki, Karnali and Mahakali in Terai and their first order tributaries in the mountains, medium rivers in Terai and in the mountains, debris and sediment disasters, works across different agencies such as Department of Water Induced Disaster Management, Department of Roads, municipalities, etc. The Consultant shall take up at least 15 such cases in the review work. The appropriateness of the detailed work plan for the case studies, necessary fieldwork and aspects delved in shall carry a significant weightage in the evaluation of technical proposal. The Consultant shall prepare and submit the work plan to WECS as a part of the Inception Report and get approval prior to starting any case study including the fieldwork. The relevant staff member(s) from WECS may visit the field during Consultant’s fieldwork for which both the parties shall coordinate. All the costs incurred during the fieldwork for logistics, allowances, transportation, etc. shall be borne by the Consultant.

B. Identification of Problems and Issues

The Consultant shall identify problems and issues from the Review Work. The problems and issues shall cover, but not limit to, the following areas:

i. major causes of flood disasters - bank erosion, inundation and debris flow

ii. changes in the planforms and profiles of rivers

iii. planning & design and implementation of flood control works- design flood, analysis techniques, design equations and methodologies, materials being used, etc.;

iv. phasing of implementation of flood control works, repair & maintenance status;

v. flood forecasting and early warning systems;

vi. emergency flood fighting capabilities of agencies and local communities;

vii. non structural measures such as appropriateness of relevant policies, laws, practices, landuse, etc.

viii. preparedness for flood mitigation, rescue and rehabilitation works, etc.
The Consultant shall carry out initial review work prior to submitting the Inception Report and continue on the work almost throughout the study project. At the end of the Problems and Issues Identification Phase, the Consultant shall submit the Interim Report, which basically shall contain three components:

i. reports on case studies;

ii. identification of problems and issues including their diagnosis; and

iii. future course of action for manual preparation.

C. Report and Manual Preparation

With constantly dealing with the problems and issues, it is anticipated that by the time the Consultant submits Interim Report, its team will have fair idea of the outcome that will be put in the Report and the Manual. As evidenced in the Objectives above, the basic purpose of the entire study project is to prepare a manual, however, the Consultant shall also prepare a separate Report which contains documentation of background materials and exercise as to how contents such as provisions, codes, design methods, equations, charts, etc. of the Manual have been arrived at. Thus the Report shall contain refined and revised contents of the Interim Report, and in addition, logics, derivations, etc. to determine the contents of the Manual. The main River Training Manual which shall have its title – “Flood Control and Management Manual”, shall contain only the provisions, codes, design methods, equations, charts, typical drawings and figures, graphs, etc., which will be in direct forms and for the straightway use by the concerned professionals. Both the Report and the Manual may have a number of annexes as required. The Manual shall contain at least the followings:

i. methods to be adopted in hydrological analyses with respect to various situations of data availability, and frequencies of design floods to be adopted for works of various importance;

ii. methods of hydraulic analysis, including physical and computer modelling for determining hydraulic and other design parameters;

iii. guidelines for planning of river channelization and flood protection works (both erosion and inundation) for an entire river or a river stretch;

iv. prioritization and phasing of implementation of a flood control plan, including annual adjustment in the plan;

v. guidelines for flood cushion in multipurpose reservoir projects;

vi. selection of types of flood control and river training structures and their design, including materials to be used;
vii. analysis and design of debris arresting dams and bed & bank stabilization works in streams and gullies;

viii. guidelines for the use of vegetation in flood and erosion control works, including that to be used in combination with conventional protection works;

ix. repair & maintenance of flood control works;

x. flood forecasting and early warning systems;

xi. methods for emergency flood fighting including provisions of materials needed in presence or absence of construction equipment;

xii. recommendations for non structural measures such as appropriate and relevant policies, laws, practices, landuse, etc.; and

xiii. guidelines for the preparedness for flood mitigation, rescue and rehabilitation works.

The Consultant shall submit the Draft Final Report and the Draft Final Manual to WECS. Upon receiving comments on the two documents from WECS, relevant stakeholder government agencies and a Group of Experts (GoE) and incorporating them in the documents, the Consultant shall submit the final versions of the Report and the Manual. WECS shall coordinate review work on the draft documents.

D. Workshop and Consultation Meeting

Immediately after submission of the Interim Report, the Consultant shall organize a half-day consultative workshop in Kathmandu in which maximum number of participants will be 25 from the stakeholder agencies and WECS. WECS and the Consultant jointly identify the relevant participants of the workshop. The consultation workshop will help the Consultant move through the process of actual manual preparation.

Again after submission of the Draft Final Report and the Draft Final Manual, a residential meeting of GoE will be organized for two days in order to finalize the documents. The maximum number of experts in GoE shall be 15 apart from the Consultant's own team members. The Consultant shall incorporate the changes suggested by the GoE meeting and any other comments from WECS and relevant stakeholder agencies. In case of debatable issues that may rise in the meeting, WECS shall make the final decision.
5. Deliverables

As evidenced above, the Consultant shall submit the following deliverables:

a) Inception Report

The Consultant shall submit an Inception Report in two hard copies and one soft copy within one month from the date of signing the agreement for the consulting services (Agreement). The Inception Report shall contain at least:

- findings of the initial review work;
- refined work schedule for the entire study project including the detailed work schedule for the fieldwork; and
- Staffing schedule.

b) Interim Report

The Consultant shall submit the Interim Report in ten hard copies and one soft copy within six months from the date of signing the Agreement. The Interim Report shall contain at least:

- findings of the continued review work;
- revised work schedule, if any;
- reports on case studies;
- diagnosis of the flood problems and the problems in resolving them;
- approaches to be taken in the Final Report and Manual Preparation; and

c) Final Report and Final Manual

The Consultant shall submit the draft versions of the Final Report and the Final Manual in ten hard copies and one soft copy within nine months from the date of signing the Agreement. The requisite contents of the documents have already specified above.

The Consultant shall prepare and submit the final version of the Report and the Manual in five hard copies and one soft copy. The final version shall have all the relevant comments from WECS and stakeholder agencies and the GoE meeting incorporated.
6. **Staffing requirements**

The tentative requirement of expert manpower is given below. However, the Consultant may propose its own manpower details and engagement schedule.

<table>
<thead>
<tr>
<th>S.N.</th>
<th>Designation</th>
<th>Required No.</th>
<th>Man-month</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Team leader (River Engineer)</td>
<td>1</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>Flood Control Experts</td>
<td>2</td>
<td>12</td>
</tr>
<tr>
<td>3</td>
<td>Sediment Management Expert</td>
<td>1</td>
<td>2.5</td>
</tr>
<tr>
<td>4</td>
<td>Hydrologist</td>
<td>1</td>
<td>2.5</td>
</tr>
<tr>
<td>5</td>
<td>Geologist</td>
<td>1</td>
<td>2.5</td>
</tr>
<tr>
<td>6</td>
<td>Disaster Management Expert</td>
<td>1</td>
<td>1.0</td>
</tr>
</tbody>
</table>

The responsibility of the key experts are, but not limited to, the following:

1. **Team Leader (River Engineer)**

   The team leader shall have substantial experience in flood control and management works. S/he shall have at least a Master's degree in Civil Engineering with emphasis on River Engineering or Water Resources Engineering. S/he shall have a minimum 20 years of professional experience in the respective field with adequate training and work experience preferably in planning and design of flood control and management works. S/he shall be responsible to:

   - take full responsibility for the consulting team, provide overall direction to the team, and coordinate among various experts;
   - carry out extensive consultations with the key stakeholders and obtain suggestions and concurrence with the contents of the study;
   - prepare detailed schedules for the fieldwork and office works;
   - organize meetings and workshop;
   - ensure timely delivery and quality control of the outputs required as per the Scope of Work.

2. **Flood Control Expert**

   The Flood Control Experts shall have a minimum of Master's degree in Civil Engineering with emphasis on Water Resource Engineering/River Engineering/Sediment Transport River Training. They shall have a minimum of 15 years of professional experience with major involvement in analytical works pertaining to river hydraulics, planning and design of river channelization, inundation prevention and anti erosion works, etc. The Flood Control experts shall be the backbone of the study project. They shall be responsible for
• doing most of the fieldwork, diagnostic work and manual preparation work;
• reviewing literature in order to find out the most suitable hydraulic analyses and planning and designs; and
• preparing typical or definition drawings, charts, tables, nomograms and prescribing equations in consultation with the Team Leader and other members of the team.

3. **Geologist**

The Geologist shall have a minimum Master’s degree in geology/engineering geology. S/he shall have a minimum of 15 years of professional experience with major involvement in the study of river morphology, gully erosion and control works, etc. The Geologist shall provide relevant inputs to the Team Leader and the Flood Control Experts.

4. **Hydrologist**

The hydrologist shall have a minimum Master's degree in Civil Engineering with emphasis on Hydrology or Water Resource Engineering. S/he shall have a minimum of 15 years of professional experience with major involvement in hydrological analysis in different infrastructure projects. S/he shall be responsible to:

• review the hydrological analyses being carried out in connection with the flood control work planning and design in Nepal;
• assess efficacy of the methods adopted in the existing practice;
• prescribe methods of hydrological analysis in different cases of data availability;
• prescribe frequencies/return periods for determining design flood magnitudes for structures of different importance; etc.

5. **Sediment Management Expert**

The Sediment Management Expert shall have a minimum of Masters degree in Civil Engineering with emphasis on sediment transport and management or Water Resource Engineering/Development. S/he will have a minimum of 15 years of professional experience with major involvement in sediment related works. S/he shall be responsible to:

• work together with the Team Leader, Flood Control Expert and other team members in providing sediment related inputs in connection with hydraulic modelling, physical as well as computer;
• suggest best ways to channelize a river such as converting a braided river to a single channel meandering one;
• provide sediment related inputs in the design of protection works;
• help or carry out debris arresting structures, riverbed stabilization works such as bed bars; etc.

6. **Disaster Management Expert**

With at least a Masters degree in any subject, preferably flood or any other disaster management, and 15 years of professional experience in the relevant field, the Disaster Management Expert shall be responsible for:

• assessing non structural measures or country's capability such as policies, laws, practices, preparedness, flood forecasting and warning systems, etc. that mitigate flood disasters and help people leave with floods; and

• working together with the Team Leader and Flood Control Experts prepare brief guidelines for the non structural measures to be adopted for flood control and management.

7. **Payment Mode:**

The payment schedule will be as mentioned in the table below.

<table>
<thead>
<tr>
<th>S.N.</th>
<th>Payments</th>
<th>Payment % of total contract amount</th>
<th>Preconditions for payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>First Installment</td>
<td>20</td>
<td>Submission and Approval of Inception Report</td>
</tr>
<tr>
<td>2</td>
<td>Second Installment</td>
<td>25</td>
<td>Submission and Approval of Interim Report</td>
</tr>
<tr>
<td>3</td>
<td>Third Installment</td>
<td>30</td>
<td>Submission and Approval of Draft Report and Draft Manual</td>
</tr>
<tr>
<td>4</td>
<td>Fourth and Final Installment</td>
<td>25</td>
<td>Submission and Approval of the Final Report and Final Manual</td>
</tr>
</tbody>
</table>

8. **Work Schedule:**

The Consultant shall complete the entire study project within a period of 12 months from the date of signing the agreement with WECS. It is the responsibility of the Consultant to plan in detail the work schedule and expert person-months schedule to complete the assigned work within the assigned time frame.