

PROJECT INFORMATION, OUTLINE SCOPE OF SERVICES AND EVALUATION CRITERIA FOR SHORTLISTING OF CONSULTING FIRMS

1. PROJECT INFORMATION

Introduction:

Upper Arun Hydroelectric Project (UAHEP) is a peaking Run-of-River type hydroelectric Project. The project site was identified during the master plan study of Koshi River Water Resources Development in 1985. The reconnaissance study of the Project was conducted by the Nepal Electricity Authority (NEA) in summer of 1986. In 1987, the first phase of the feasibility was carried out by Morrison Knudsen Engineers (MKE). The Joint Venture of Morrison Knudsen Corporation, Lahmeyer International, Tokyo Electric Power Services Co. and NEPECON completed the Feasibility Study Phase II in December 1991 under the financing services provided by UNDP.

NEA also intends to develop Ikhuwa Khola Hydropower Project (IKHPP) of 30 MW as an integral component of Upper Arun hydroelectric project, which is expected to produce about 181.74 GWh annual energy. The feasibility Study of this project is being carried out by Department of Electricity Development using local consulting firms. The study has already produced a feasibility report of the project. As per the report, this Project is a run-of-river type (RoR) project located in vicinity of the UAHEP Project area.

Upper Arun Hydroelectric Project (UAHEP)

Location and Access:

The Project is located at Sankhuwasabha District, Eastern Development Region along the Arun River in Nepal. The project area is situated between 87°20'00" and 87°30'00" East and Latitude 27°38'24" and 27°48'09" North. The proposed dam site is located in a narrow gorge about 350 m upstream of the confluence of the Arun River with Chepuwa Khola in Chepuwa Village. The powerhouse lies in Hatiya Village, near the confluence of Arun River with Leksuwa Khola.

The Project is located approximately 700 km east of Kathmandu and approximately 335 km north of Biratnagar. No motorable access is available to the project area at present. The nearest road head to the project is at Num Bazaar, the dam site of Arun III HEP. The road from Arun 3 damsite to the Upper Arun powerhouse site is about 23.4 km, which is under construction under North-South Koshi Road Project of Department of Roads. This part of the road is expected to be constructed to the extent of gravel road (all weather road) in near future. Furthermore, access road of about 24.0 km including a road tunnel of 1.7 km and a bridge across the Arun River will be required to reach the dam site of the project.

Salient Features:

The salient features of the Project based on the Feasibility Study Phase II, 1991 are as follows. These details will be revisited in the detailed design phase and may be adjusted.

Type of the project	:	Peaking Run-of-River
River	:	Arun River
Total Catchment Area (at headworks)	:	25,700 sq km (25,335 in Tibet)
Average Flow	:	200 m ³ /s
Firm flow (95%)	:	58.7 m ³ /s
Probable Maximum Flood (PMF)	:	4000 m ³ /s
Glacial Lakes Outburst Flood (GLOF)	:	6900 m ³ /s
Dam	:	Radial Gated 37m high Concrete Weir.
Radial Gates	:	3 nos each 12 m W X 22 m H
Gross Storage Volume	:	760 x 10 ³ m ³
Active Storage Volume	:	440 x 10 ³ m ³
Design Head	:	492 m
Design discharge	:	78.8 m ³ /s
Full Supply Level	:	1598 masl
Minimum Operating Level	:	1588 masl
Normal Tailwater Level	:	1089 masl
Intake Sill Level	:	1583 masl
Desanding Basin	:	Three caverns 128 m long, 24 m wide and approximately 32 m high, each housing two settling basin
Headrace Tunnel	:	Length = 7840 m, diameter = 5.5 m
Surge shaft	:	Height = 91 m, Diameter = 18 m, simple circular
Vertical shaft	:	Height = 454 m, Diameter = 2.8 m, steel lined
Penstock	:	Length = 60 m, Diameter = 2.8 m, steel lined
Powerhouse Type	:	Underground
Turbines	:	Four units of pelton turbines
Installed Capacity	:	335 MW (4 x 83.75 MW)
Annual Firm Energy	:	2,050 GWh
Tailrace Tunnel	:	Length = 850 m, Area 50 sq.m, Horseshoe type
Access Road	:	Total 24.0 km from powerhouse site including a road tunnel of 1.7 km.

Ikhuwa Khola Hydropower Project (IKHPP)

Location and Access:

IKHPP is located at Sankhuwasabha District, Eastern Development Region in Nepal. Ikhuwa Khola HPP is a Run-of-the-river type project. The Project Area ranges from 27° 35' 07" N to 27° 37' 12" N and 87° 21' 16" E to 87° 25' 07" E. Most of the Project Area lies in Pawa Khola VDC. The intake of the Project also lies in Pawa Khola VDC about 43 km North West from Khandbari, the district headquarters of Sankhuwasabha District. Khandbari is accessible by road. A seasonal

road follows from Khadbari to Num Bazar. The intake site can be reached by means of main foot trails from Num Bazar (Num VDC). The approximate latitude and longitude of intake site is about 27 ° 36'08" N and 87 ° 24'35" E respectively. This Project is located approximately 8.0 km downstream from the powerhouse of Upper Arun HEP. Around 2.0 km of project road and a bridge over the Arun River is required to access the powerhouse of Ikhuwa Khola HEP from the under construction road heading towards Barun Bazaar from Num . Project road of about 12 km will be required to access the headwork site from the powerhouse location.

Salient Features:

The salient features of the Project based on the Feasibility Study Report of DoED are as follows:

Type of the project	:	Run-of-River
River	:	Ikhuwa River
Total Catchment Area (at headworks)	:	127.6 sq km
Average Flow	:	7.52 m ³ /s
Flood Flow(100 years return period)	:	346 m ³ /s
Diversion Weir	:	Non gated overflow Concrete Weir.
Design discharge	:	6.02 m ³ /s (Q40)
Crest Elevation of Weir	:	1493.0 masl
High Flood Level	:	1496.8 masl
Crest Length	:	28.0 m
Diversion weir height	:	Maximum 6.0m
Intake Sill Level	:	1491.3masl
Intake Water Level	:	1493.0 masl
No of Intake Gates	:	2 numbers (3m x 1.7 m)
Intake Length	:	10.0 m
Intake Velocity	:	0.68 m/s
Desanding Basin	:	Double Chamber with continuous flushing L= 56.0 m, W =8.0 m, H =4.0 m
Conveyance System		
Canal-1 Covered Concrete lined	:	L= 20.0 m, W=2.5 m, H= 2 m; S= 1: 1000
Canal-2 Rectangle.covered concrete lined		
Headrace Tunnel	:	Inverted D; L=3620.0 m, W= 2.5, H= 2.5m
Forebay (Rect Concrete Lined)	:	WL: 1487.30 masl, L=58m, W=10m H=4.0m
Penstock Pipe steel lined	:	Length = 1651 m, Diameter = 1.4 m,
Powerhouse Type	:	Surface Typed (L=35m, W=20m, H=28m)
Turbines	:	Vertical axis - Pelton
Installed Capacity	:	30 MW (2 x 15 MW)
Annual Firm Energy	:	181.74GWh

2. OUTLINED SCOPE OF SERVICES

The scope of work consist of undertaking and completing the Environment and Social Impact Assessment (ESIA), Cumulative Impact Assessment (CIA) and Social Planning Studies (SPS) of Upper Arun Hydroelectric Project (UAHEP), Ikhuwa Khola Hydroelectric Project (IKHPP), various ancillary activities related to each hydroelectric component, and the required access roads and transmission line from the powerhouses of UAHEP and IKHP to the proposed substation of Koshi Corridor Transmission Line at Tumlingtar (hereafter called as 'Project'). Such studies shall be accomplished in accordance with relevant laws and policies of the Government of Nepal (GoN) and the safeguard policies of the World Bank. The assignment will be carried out in synchronization with the engineering design assignments for UAHEP and IKHPP which will be contracted separately.

Principal scope shall include, but not be limited to the following;

Task 1: Environmental and Social Screening and Scoping

The consultant shall prepare, the following

- i) ESIA Scoping document covering the project description, definition of Project Area of Influence, and description of Environmental and Social Impact Zones, and environmental and social issues.
- ii) ESIA TOR / outlines for each environmental and social assessment and planning study to be carried out under subsequent tasks of the consultancy, reflecting the feedback received from stakeholder consultations as well as NEA, the World Bank, and the International Panel of Experts, and submitted for approval by the concerned ministries.
- iii) A detailed work plan for carrying out the assessments.
Such reports/studies shall be prepared on the basis of the initial site visits, stakeholder consultations from local to central level in accordance with the national legal requirement.

Task 2: Environmental Assessment and Planning

Under Task 2, the consultant shall prepare the following,

- i) Full ESIA for the Project including the CIA (or four separate ESIA's for the two hydroelectric components, access roads and transmission lines if required under national legislation, each summarizing and annexing the integrated CIA),
- ii) Single Executive Summary covering both hydroelectric components and all associated facilities, in both English and Nepali.

In order to accomplish this task, the consultant shall assemble, evaluate baseline data on relevant environmental and social characteristics of the project area and assess all direct, indirect, induced and cumulative impacts and risk both in short-term and long term resulting from both construction and operation stage activities of the project and propose mitigation measures for each. Such reports shall be prepared and finalized with incorporation of the feedback received during

consultations as well as from NEA, the World Bank and the Independent Panel of Experts, and including documentation of all consultations held.

Task 3: Social Planning

This task covers the social aspects of the project planning and design. Under this task, the consultant shall prepare the following,

- i) Social Assessment Report;
- ii) Resettlement Action Plan (RAP);
- iii) Resettlement Policy Framework;

- iv) Vulnerable Community Development Plan (VCDP) and Indigenous Peoples' Development Plan (IPDP);
- v) Public Health Action Plan;
- vi) Gender Action Plan,
- vii) Downstream Impacts Management Plan,
- viii) Benefit Sharing Plan;
- ix) Public Participation and Consultation Plan (including Inter Agency Coordination);
- x) Communication Strategy and Action Plan and
- xi) Institutional assessment and strengthening plan.

In addition to this, the consultant shall carry out an assessment of the current institutional capacity in view of implementing the social and environmental interventions, management measures and programs related to the project and shall purpose set of interventions including institutional, staffing and budget requirements.

The Consultant is expected to carry out this task in a coordinated manner with the environmental assessment and planning aspects to ensure holistic and integrated analysis. The outputs mentioned above shall also be integrated in summary format into the ESIA(s) and overall Executive Summary. The assignment will comply with relevant laws and policies of the Government of Nepal (GoN), international conventions ratified by the GoN, and the relevant safeguard policies of the World Bank.

3. SHORTLISTING PROCEDURES

Consulting Firms will be selected on the basis of Quality and Cost Based Selection method (QCBS) and the selection will be carried out in two stages. The first stage involves short listing of consulting firms from a long list comprising those firms which have expressed their interest for the services as described in the notice of Invitation for Consulting Services. In the second stage, request for proposals received from those short listed consulting firms are evaluated to select the best consulting firm suitable for the proposed services. Utilities, offering consulting services, will also be considered as consulting firms for the services.

Consulting firms may associate with other firms to enhance their strength in the form of a Joint Venture (JV) or sub-consultancy while submitting EOI.

Experience and Qualification of other firms, whether parent or Subsidiary firm, will not be considered for evaluation. Likewise qualification and experience of the consulting firm associated as a sub-consultancy will not be considered for evaluation for short listing.

The long list will be prepared only of those consulting firms that have submitted Expressions of Interest (EOI) within the required deadline. The evaluation for short listing from this long list will be carried out in three steps.

Details of evaluation criteria for short listing the consulting firms are given below:

Step I: Preliminary Screening of Consulting Firms

In this step, a preliminary screening of the received EOI applications will be carried out. Consulting firms will be evaluated on 'Pass' or 'Fail' basis. Each consulting firm must 'pass' each and every threshold criterion mentioned below for being further evaluation at the next step. Any consulting firm not complying with any of the specified threshold criteria will be disqualified and will not be considered for further evaluation.

A. General Threshold Criteria

- (i) EOI application shall be duly submitted by the last date and time of submission as mentioned in the notice of EOI.
- (ii) Copies of following documents shall be submitted along with the EOI proposal.
 - Certificate(s) of incorporation or Registration of the consulting firm.
 - Financial Statements of the preceding five consecutive fiscal years but not earlier than the year 2010.
 - Company Profile
- (iv) Consulting firms must have been legally registered for **at least ten (10) years** from the last date of submission of EOI;
- (v) Minimum average annual turnover of best three years over the last five years shall be US\$ 1.0 Million. In case of JV, cumulative turnovers of JV partners will be evaluated for this annual turnover criterion.

Consulting firms or JV firms not meeting this criterion will not be considered for the next step evaluation.

Notes:

In case of currencies other than US\$, the prevailing exchange rate of twenty eight (28) days prior to the deadline for EOI submission will be used to calculate equivalent US\$.

B. Technical Threshold Criteria

Only the consulting firms' with experience in carrying out Environmental and Social Impact Assessment (ESIA) or Environmental Impact Assessment (EIA) of hydropower projects will be evaluated for shortlisting. Consulting firm must have experience of completion of ESIA or EIA of at least One (1) hydroelectric project of installed capacity of 200 MW or more in the last twenty (20) years preceding from the last date of submission of EOI. For evaluation purpose, studies of the projects completed in the last twenty (20) years preceding from the last date of submission of REOI will be considered.

C. Threshold Criteria for Joint Venture Firms

- (i) The lead partner of the JV must have at least 40% of the share.
- (ii) Each partner of the JV firm shall meet the criteria mentioned in A (ii), and A (iii) above.
- (iii) Each partner of the JV firm shall meet at least any one of the following criteria :
 - Criteria mentioned in B above;
 - Cumulative Impact Assessment (CIA) of projects consisting of hydroelectric project having installed capacity of at least 25 MW, or any other infrastructure development projects.
 - Social Impact Assessment (SIA) or Resettlement Action Plan (RAP) or Vulnerable Community Development Plan (VCDP) or Indigenous People Development Plan (IPDP) studies of hydroelectric projects of installed capacity of 200 MW or more.
 - SIA or VCDP or IPDP studies of any other infrastructure development projects

Only those studies reports of the projects completed in the last twenty (20) years preceding from the last date of submission of EOI will be considered for evaluation

If any partner of the JV doesn't meet at least any one of the criteria, the entire JV will not be considered for evaluation.

- (iv) The combined experience of the JV partners shall meet the Criteria mentioned in B above.
- (v) JV firms shall submit copy of JV Agreement or memorandum of understanding (MOU) of JV Agreement or intention to form JV along with their EOI application.
- (vi) An applicant must not submit more than one (1) EOI application either as a single entity or as a partner in the JV.
- (vii) In case that the JV partners are from different countries, the nationality of the lead partner shall determine the nationality of the group (JV firms). This principle will be applied in determining the firm from developing country as well.

Notes:

- i. *The Consulting firms not complying with the threshold criteria mentioned above in A, B and C will not be considered for further evaluation.*

- ii. *Qualification and experience of the consulting firm associated as sub-consultancy will not be considered for evaluation for short listing.*

Step II: Detailed Evaluation of Consulting Firms

The Consulting firms fulfilling all requirements in the Step I are further evaluated in the Step II. A technical scoring system is adopted to rank these firms in order of merit based on the criteria mentioned below. In Case of JV, the cumulative experience of JV partners shall be considered for the evaluation under Criterion 2 & 3. The maximum overall score that any Consulting firms can obtain is set as 1,000 points, which are distributed as follows:

Criteria 1. Management Competency of Consulting Firm: 100 points

Criteria 2: Specific Experience of Consulting Firms: 600 points

Criteria 3: Geographic Experiences of Consulting Firm: 300 points

Details of evaluation criteria in each category are as follows. Figures given in brackets indicate the maximum score that can be obtained in each category.

Criteria 1. Management Competency of Consulting Firm (Maximum 100 Points/1000)

Management competency of consulting firm will be evaluated based on availability of quality certificate, quality assurance/control plan, organizational strength (Numbers of existing staff in house). In case of JV, only the lead firm will be considered for evaluation under this criterion

The points will be allocated as shown below:

1. Company Quality Certification
2. Quality Assurance / Control Plan of the firm
3. Organizational Strength

Criteria 2: Specific Experience of the Consulting Firm (Maximum 600 points/1000)

Evaluation under this criterion is based on the experience of consulting firms in Environmental and Social Studies of hydroelectric and other development projects specified below and completed in the last twenty (20) years preceding from the last date of submission of EOI. Evaluation under this criterion will be based on the hydropower projects and other infrastructure development projects in which ESIA/EIA, SIA, CIA, RAP and VCDP/IPDP work has been carried out. The combined experience of the JV partners shall be considered for evaluation. The following is the breakdown of this particular criterion:

- ***ESIA/EIA of hydroelectric project having installed capacity 200 MW or more.***

- ***CIA of projects consisting of hydroelectric project having installed capacity of at least 25 MW and other infrastructure development projects.***
 - a) *CIA of projects consisting of hydroelectric project having installed capacity of at least 25 MW.*
 - b) *CIA of other infrastructure development projects*
- ***RAP studies of hydroelectric projects of installed capacity of 200 MW or more and other infrastructure development projects***
 - a) *RAP studies on hydroelectric project having installed capacity of 200 MW or more.*
 - b) *RAP studies of other infrastructure development projects*
- ***SIA or VCDP or IPDP studies of hydroelectric projects of installed capacity of 200 MW or more and other infrastructure***
 - a) *SIA or VCDP or IPDP studies of hydroelectric projects of installed capacity of 200 MW or more*
 - b) *SIA or VCDP or IPDP studies on other infrastructure development projects*

Criteria 3: Geographical Experiences of Consulting Firm (Maximum 300 Points/1000)

Evaluation under this criterion is based on the experience of consulting firms in Environmental Studies of hydroelectric projects and other infrastructure development projects specified below and completed in the last twenty (20) years preceding from the last date of submission of EOI in the **Asian Region and Himalayan region**. Only the projects in which ESIA/EIA of hydropower projects and CIA, RAP, VCDP or IPDP studies of hydropower or other infrastructure development projects will be considered for the evaluation. The combined experience of the JV partners shall be evaluated.

The following is the breakdown of this particular criterion:

- **ESIA/EIA of hydroelectric projects having installed capacity 200 MW or more in Asian Region and Himalayan region**
 - a) ESIA/EIA of hydroelectric projects having installed capacity 200 MW or more in Himalayan region
 - b) ESIA/EIA of hydroelectric projects having installed capacity 200 MW or more in Asian Region
- **CIA of projects consisting of hydroelectric project having installed capacity of at least 25 MW and other Infrastructure Development Projects in Asian or Himalayan region**
 - a) CIA of projects consisting of hydroelectric project having installed capacity of at least 25 MW in Himalayan Region

- b) CIA of projects consisting of hydroelectric project having installed capacity of at least 25 MW in Asian region
 - c) CIA of projects consisting of other infrastructure Development Projects in Asian Region or Himalayan.
- **SIA/RAP/VCDP/IPDP studies of hydroelectric projects of installed capacity of 200 MW or more and other development projects specified below**
- a) SIA/RAP/VCDP/ICDP of hydroelectric projects having installed capacity of 200 MW or more in Asian Region
 - b) SIA/RAP/VCDP/ICDP of hydroelectric projects having installed capacity of 200 MW or more in Himalayan Region
 - c) SIA/RAP/VCDP/ICDP of infrastructure development Projects in Asian Region or Himalayan region

Step III: Shortlisting of Consulting Firms

The consulting firms or JV firms scoring less than 500 points in total out of 1000 will not be qualified for short listing. For short-listing of the qualified consulting firms, the “World Bank’s Guidelines: Selection and Employment of Consultants under IBRD Loans and IDA Credits & Grants by World Bank Borrowers - January 2011, Revised July 2014 (‘Consultant Guidelines’)” will be followed.

Shortlisted firms will be informed once the “shortlist” has received no-objection of the World Bank and the Request for Proposal (RFP) will be sent to the shortlisted firms to prepare and submit the RFPs to NEA by the deadline to be informed later.

If the consulting firms secure equal points after evaluation, then the shortlisting of those firms will be carried out on the basis of their numbers of projects completed i.e. who have completed more number of projects in order of ESIA/ EIA of Hydroelectric Project, CIA of Hydroelectric Project, SIA of Hydroelectric Project, RAP of Hydroelectric Project, CIA of other infrastructure development projects.

ALL SUBMITALS FROM THE CONSULTING FIRMS SHALL BE IN ENGLISH LANGUAGE