

## TERMS OF REFERENCE FOR ENGINEER

<b>Contract:</b> PPCR/DHM/S/IND-87			
<b>Project</b>	PPCR- BRCH (Building Resilience to Climate Related Hazards)		
<b>Expertise:</b> <b>Engineer :</b>			
<b>Source</b>	National	<b>Category</b>	Independent

### **1. Background:**

Government of Nepal (GoN) has prepared Strategic Program for Climate Resilience (SPCR), which was approved by Climate Investment Fund (CIF). SPCR has identified four projects for investment in Nepal. One of them is the "Pilot Project for Climate Resilience (PPCR) - Building Resilience to Climate-Related Hazards (BRCH). Components A, B and C under BRCH are being implemented by the Department of Hydrology and Meteorology (DHM), Ministry of Energy, Water Resources and Irrigation (MoEWRI). Component D of the BRCH is being implemented by the Ministry of Agriculture and Livestock Development (MoALD). A dedicated Project Management Unit (PMU) has been set up at DHM for the implementation of project components A, B, and C.

The project aims at upgrading hydro-meteorological network, weather forecasting system and flood forecasting system. The process involves acquiring private and/or public land, construction of buildings and establishment and operation of telecommunication systems including radar. Assessment of social and environmental impacts considering the losses of agriculture products, deforestation, loss of natural habitats, impacts on indigenous population, electromagnetic radiation of telecom equipment, security of installations are some of the important social and environmental aspects of the project.

For overall survey, design, cost estimate and construction related works of the DHM BRCH project activities, DHM requires consulting service from individual consultant with the capacity of Civil Engineer.

### **Objective/Purpose of the Assignment:**

The consultant will prepare and provide technical input particularly in civil engineering plan, survey, design, estimating & costing, preparation of tender documents, construction supervision, monitoring and reporting of site activities and progress; and will work closely with the other team members in overall implementation of the project. He will work directly under the guidance and close supervision of the National Project Director/Assistant Project Directors.

### **Scope of Work:**

The incumbent will plan design and manage construction projects, these can be range from hydrological and meteorological stations establishment, upgrading, maintenance and repair to supervision and checking of construction activities including DHM new building. S/he is also responsible to assist contract management works at DHM. S/he will work closely with I) the Project Management Unit (PMU) for the Building Resilience to Climate Related Hazards (BRCH) Project, Department of Hydrology and Meteorology (DHM), II) the Province/Regional/Basins and District

Draft TOR n Estimate of Engineer\_IND-87





level offices of DHM and III) System Integrator IV) Building design and supervision consultant.

**Duties and Responsibilities:**

The Civil Engineer will undertake following tasks under the guidance of National Project Director/Assistant Project Directors and PMU. As per current "Public Procurement Act (First Amendment)-2073, under Sub-Clause 5(ka) 2, the Consultant should be fully responsible for design work, cost estimate, supervision performed by himself :

- Assist Project Management Unit (PMU) in planning, designing, monitoring and supervision of hydrological station, meteorological station and other construction works;
- Lead survey work and design of civil works related to installation of various hydrological and meteorological stations and hydro-met network.
- Undertake regular review of technical documents and support DHM in ensuring quality of construction and civil works related activities.
- Monitor and provide support to the Engineers/hydrologist/Sub-Engineers and meteorologist on detail design, survey, estimating & costing and construction works including contract management works in conformity with the quality, works measurement, record keeping, progress and co-ordinate the work as necessary;
- Assist central to regional basin offices and regional metrological offices in planning, identifying, short-listing, prioritization the activities, if required;
- The consultant shall prepare detail engineering design including structural analysis, cost estimate with necessary specification documents, tender documents etc.
- Specific design, supervision of buildings, cable way, hydrological and hydraulic structures of river training works etc. in different part of Nepal.
- Provide assistance to the PMU/BRCH regarding preparation of bidding documents for procurement of works under civil works contract if required;
- Provide assistance to the project for valuation of land in the process of land purchase/acquisition for the construction of hydro-met station. If required;
- Provide training and guidelines to concerned DHM staff in different technical and awareness aspects including survey, design and implementation.
- Attend and participate in project meetings and give input to the technical/engineering matters at the time of preparing annual plan, trimester and annual progress report;
- Monitor and report project progress through field visits, offer feedback and keep regular communication with related field and central level staff; and
- Accomplish other tasks related to engineering/ technical aspect as per the need of the project assigned by the Project Director or Assistant Project Directors.

## **Required Qualifications:**

### **A. Academic qualifications and training**

- The consultant must have a minimum of Bachelor's Degree in Civil Engineering
- Experience, knowledge/worked in the field level will be an added advantage.
- Training in relevant fields like civil, hydro-meteorological activities will be an advantage.

### **B. Experience**

- a. S/he must have a minimum of 5 (five) years of work experience in civil engineering field. Experience in donor funded projects will be an advantage;
- b. S/he must have acquired experience, knowledge and be familiar with project planning, design, survey, procurement process of the GON and donor funded projects;
- c. Work experience with climate related projects will be preferable.

## **Selection Criteria:**

The consultant shall be selected based on Individual Consultant Selection (IND) Method of the World Bank's Consultant Selection Guidelines-2011. Main criteria for the selection will be relevant work experience and qualifications.

## **6. Duration of Service:**

The consultant will be assigned initially for 13 months and possibilities of further extension, in case of satisfactory performance, if required by the project. The consultant is expected to work full time office hours within Kathmandu valley, except otherwise situation demands travel outside Kathmandu valley within Nepal on project related matters.

**Duty Station:** Kathmandu, Nepal, with frequent field visit as per requirement.

## **Financial Conditions:**

- a. The consultant shall be paid a lump sum amount of remuneration per month, which should include all his/her overheads, social charges and other associated costs including local transportation within Kathmandu valley and insurance premium costs.
- b. The consultant shall be responsible for all taxes and duties including income tax applicable as per Government of Nepal rules and regulations.
- c. In case of travel requirement outside Kathmandu valley and within Nepal for project related



assignments, consultant shall be paid travel expenses and hotel expenses on actual basis and suitably determined subsistence allowance to cover all other costs.

#### 10. Output/Reporting Requirements:

The consultant will report to the Project Director. In addition to the regular tasks, the consultant should be responsible for providing /preparing following documents and reports during assigned period.

- i. Input on Trimester/Yearly Implementation Progress Report(IPR) as per requirement;
- ii. Prepare Guidelines/Manuals regarding for design, estimate, supervision and monitoring of engineering work per need of the project, if required;
- iii. Proceeding of workshop and training if required; and
- iv. Prepare Bi-monthly implementation progress reports including deliverables with outputs like survey, design, cost estimate, bidding documents etc.

All reports should be in English and in Nepali as necessary.

#### 11. Facilities to be Provided by DHM:

DHM shall provide following facilities to consultant during his tenure of service:

- Office space with computer and furniture
- Email and internet access
- Required office stationary
- Photocopying facilities

**Taxation:** The consultant will be fully responsible for all taxes imposed by Government of Nepal

<b>Places of Assignment:</b>	<b>Days Estimated Dates</b>	Initially for 13 (thirteen months) and possibilities of further extension, in case of satisfactory performance.
TOTAL DAYS (state if Intermittent) Not applicable		

