

## UNESCO Bangkok

### **Call for Proposal (Individual or Organization)** **Dam Safety Specialist**

**Type of Contract:** Contract for Services or Individual Consultant Contract

**Duration:** 1 May – 30 October 2021, tentatively

**Closing date:** 22 April 2021, 18:00 hrs Bangkok Time

The United Nations Educational, Scientific and Cultural Organization (UNESCO) Office in Bangkok, in close consultation with the competent authorities charged with World Heritage safeguarding in Lao PDR, is seeking a contractor to contribute to undertaking a Heritage Impact Assessment (HIA) for the Luang Prabang Hydropower Project.

### **Terms of Reference: Dam Safety Specialist**

#### **Background**

The Luang Prabang Hydropower Project is proposed on the Mekong mainstream about 25 km upstream from the Town of Luang Prabang World Heritage property. It is situated between the two Mekong mainstream projects: the upstream Pak Beng and the downstream Xayaburi projects.

In accordance with Paragraph 174 of the *Operational Guidelines for the Implementation of the World Heritage Convention*, Impact Assessment (IA) must be carried out with a view to ensuring the protection of the World Heritage property's Outstanding Universal Value, as follows:

*Luang Prabang is an outstanding example of the fusion of traditional architecture and Lao urban structures with those built by the European colonial authorities in the 19th and 20th centuries. Its unique, remarkably well-preserved townscape illustrates a key stage in the blending of these two distinct cultural traditions. ...*

*The built heritage of Luang Prabang is in perfect harmony in the natural environment. The sacred Mount Phousi stands at the heart of the historic town built on a peninsula delimited by the Mekong and the Nam Khan. Ceremonies...and Buddhist religious practices perpetuate the sanctity of the place.*

Beyond the potential damage to the World Heritage property, the *Policy Document for the Integration of a Sustainable Development Perspective into the Processes of the World Heritage Convention*, adopted in 2015, emphasizes the role of World Heritage properties to alleviate poverty and enhance sustainable livelihoods of local communities. In the case of Luang Prabang, the potential impacts of the hydropower project may affect environment, fisheries, living conditions and livelihoods of surrounding populations.

The Chairperson of the World Heritage Committee has approved the request from the State Party of Lao PDR for International Assistance under the World Heritage Fund to conduct a Heritage Impact Assessment and risk analysis for the Luang Prabang World Heritage property.

## Assignment

The contractor is requested to carry out the following tasks:

1. Conduct expert review of the design documents and dam design review studies that have been conducted for the Luang Prabang Hydropower Project (including the dam and ancillary structures) and identify outstanding issues to be addressed in the HIA covering from design to construction, operations and maintenance. The review should be conducted within the framework of national and international standards notably the most updated Lao Electric Power Technical Standard (LEPTS), Laos Dam Safety Guidelines and International Commission of Large Dams (ICOLD) guidelines (ie, Bulletin 125, 130, 142, 148 and 156) as well as others, ie US Army Corps of Engineers standards. The review should determine the adequacy of previous studies in addressing, at a minimum:
  - site geology
  - project layout
  - failure modes assessment and downstream impacts
  - design criteria related to flooding, seismic and structural stability
  - dam and reservoir operation (emergency preparedness, dam safety monitoring)
  - dam safety management;
2. Provide guidance on additional analysis that may need to be conducted, particularly with respect to dam safety issues, with specifications on methodology, required data, analysis techniques and relevant benchmarks, per areas identified as above;
3. Provide expert review for this additional analysis in the event that it is conducted;
4. Provide inputs into the scoping report, which will identify the geographic scope of the HIA study, issues to be included/excluded from the HIA study, indication of the potential impacts on the World Heritage property;
5. Provide inputs to HIA and in-country IA specialists to identify and characterize impacts (ie, beneficial, acceptable, acceptable with mitigation, and unacceptable impacts) from the project;
6. Provide inputs to HIA and in-country IA specialists to develop mitigation measures, including avoidance or minimization of impacts, including both structural (ie, civil engineering design) and procedural improvements, such as Emergency Response Planning;
7. Review the draft scoping report and draft HIA report, and provide comments.

### **Deliverables and timeframe** (All deliverables are to be submitted in English)

- By 20 May 2021, the contractor will submit expert review report of existing studies related to Luang Prabang Hydropower Project dam safety with recommendations on additional analysis needed
- By 31 August 2021, the contractor will submit inputs for the HIA report related to dam safety dimensions
- By 30 October 2021, the contractor will submit review of the draft HIA report

**Duty Station and Travel**

Home-based.

**Qualifications, experience and competencies**

- Professional experience in dam design, construction and safety assessments in Southeast Asia, including in Lao PDR
- Familiarity with international standards for dam safety
- Demonstrated international-level expertise in civil engineering related to large structures such as dams

**Application**

Interested companies/individuals are invited to submit to UNESCO Bangkok the application package including

- A cover letter illustrating how the tasks will be carried out
- A detailed organization portfolio/individual CV with examples of relevant work
- A detailed quotation.

Application package is to be sent **no later than 22 April 2021**, 18:00 Bangkok time (GMT +7).

To the attention of:

Chief of Culture unit

UNESCO Bangkok Office

E-mail: [culture.bgk@unesco.org](mailto:culture.bgk@unesco.org)

***Only short-listed companies/individuals will be contacted.***