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Royal Government of Bhutan
Ministry of Infrastructure and Transport
Department of Surface Transport

MoIT/DoST/DGD/19/2023-2024/235

3rd April 2024

REQUEST FOR EXPRESSION OF INTEREST (REoI)
INDIVIDUAL GEOTECHNICAL AND CLIMATE RESILIENCE SPECIALIST
CONSULTANT

1. The Royal Government of Bhutan has received an Advance from the World Bank towards the cost of preparatory activities for the proposed “**Accelerating Transport and Trade Connectivity in Eastern South Asia (ACCESS)-Bhutan Project**”, to be implemented by the Department of Surface Transport, Ministry of Infrastructure and Transport, Thimphu and intends to apply a part of the proceeds of this Advance for the services of hiring of the Individual Geotechnical and Climate Resilience Specialist Consultant.
2. **Scope of Services:** As a key member of the ACCESS Project Implementation Unit (PIU), the Individual Geotechnical and Climate Resilience Specialist Consultant will perform the following duties/tasks (Terms of Reference):
 - a) Review the available secondary data on climate, topography, geology and seismicity to identify hazard trends, potential hazard locations and solution approaches.
 - b) Review the reports, designs, estimates etc. from other consultancy firms from geotechnical aspects and ensure that the designs have high-quality outputs to ensure a safe foundation of roads and structures.
 - c) Review the designed cut/fill slopes, retaining structures and bridges along road sections from slope stability and climate resilience perspectives.
 - d) Guide, train and support the Employer’s technical staff and consultants on manual and software-based modelling for slope stability and design for lowering of water table, soil nailing, anchoring, rock-netting, and other advanced measures of enhancing slope stability.
 - e) Help to introduce using reinforced earth technology in parts of Bhutan where material for conventional retaining structures is scarce.
 - f) Suggest specific technical interventions, with priority given to nature-based solutions (Bio-Engineering) and adaptive measures along the road corridors, against climate change vulnerabilities.
 - g) Help to identify high-probability locations due to climate change along roads, specifically from toe-cutting by rivers and design appropriate preventive measures.
 - h) Help to identify locations for safe extraction of material from riverbeds and hill slopes for construction of roads.



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- i) Review the technical guidelines and standards used by the Employer on slope stability and climate resilience and, if necessary, suggest policy-level interventions in planning, designing and constructing roads and bridges.
- j) Identify appropriate relevant training opportunities and field visits for the Employer's technical staff.
- k) Any other geotechnical and climate resilient related tasks requested by the employer.
- l) Visit sites to verify if needed or asked by the employer.

Duration: The consultant will be selected for 1 year with intermittent input of 60 days within 12 months. The contract duration may be increased based on the need of the Project and the performance of the consultant.

3. Selection Procedures:

The Department of Surface Transport, Ministry of Infrastructure and Transport, Thimphu now invites eligible applicants to submit an Expression of Interest (EOI) for providing the services. The interested applicants need to provide information demonstrating that he/she has the required qualifications and relevant experience to perform the services. The selection criteria are:

- **Academic Qualification.** Bachelor's degree in civil engineering with a master's degree in geotechnical engineering preferred. A PhD or post-doctoral fellowship on relevant topics will be an advantage.
- **Experience.** Over 15 years experience in road construction, geotechnical investigation, slope stabilization analysis, hazard mapping, and design of stabilization measures for cut slopes as well as measures to protect against toe cutting by rivers. Specific experience in designing and construction stage backstopping of cut-slope stabilization, landslide stabilization, and river erosion control taking account of climate resilience in at least one country other than his/ her country of nationality.
- **Language.** Fluency in written and spoken English.

Applicants are required to submit their EOI, comprising of a CV (including employment history with duties and responsibilities) and a forwarding letter describing briefly the reasons that the applicant considers him/herself best suited to perform the assignment.

The attention of interested Individual Consultants is drawn to paragraphs 3.14, 3.16, and 3.17 of the World Bank's "Procurement Regulations for IPF Borrowers, July 2016" ("Procurement Regulations"), setting forth the World Bank's policy on conflict of interest.

- a) The detailed Terms of Reference (TOR) and other information will be available upon request from the address provided below either through email or in person. ToR is



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available on the website www.moit.gov.bt or can be requested from phuntshor@moit.gov.bt.

- b) The Individual Consultant will be selected following the Selection of Individual Consultant method of the World Bank Procurement Regulations for IPF Borrowers, September 2023.
- c) Expression of Interest needs to be submitted (either through email or in person or by mail) to the following address by 17:00 hours on 19th April 2024. Please clearly mention “Expression of Interest (EOI) for Selection of Individual Geotechnical and Climate Resilience Specialist Consultant in the email’s subject line or on the top of the envelope.
- d) The authority reserves the right to accept or reject any or all EOI without assigning any reason, whatsoever.