#### **Terms of Reference (ToR)**

# Consultancy Services for Development of Transport Disaster Management Policy and Plan for the State of Himachal Pradesh under World Bank Funded HPSRTP

## 1. Background & Challenges

Himachal Pradesh is one of the most multi-hazard-prone States of India. The State faces various types of natural hazards like geological hazards (earthquake, landslide), hydrological hazards (floods), meteorological hazards (droughts, hailstorms, cloudburst), and climatological hazards (cold waves, avalanches, frosts). Hydro-geological hazards risk will increase over the next few decades because of climate change, disrupting transport systems & services. The existing transport infrastructure is often blocked by landslides and washed-out debris, causing interruptions for a significant time and isolating the rural population from basic services, including access to health facilities for women in labor. Road and other civil infrastructure development aggravate the worsening situation of land degradation and climate change in the Himalayan ranges. Due to weakened, cracked, and destabilized slopes and surfaces, sensitive areas have now become even more susceptible to landslides that could be triggered by earthquake activity, heavy rainfall or snowfall, or inappropriate land uses or infrastructure development. In addition, the communities have comparatively higher vulnerabilities caused by their lack of preparedness. Economic risks are also important since assets are concentrated in hazardous areas subject to floods, landslides, earthquakes, etc. Therefore, it is important to enhance the state of readiness, on a long-term basis, as well as during disaster lead-time. A Transport Disaster Management Policy & Plan will support the state road agencies: to protect the road users/ community from any disaster; to understand the roles & responsibilities of individual state agencies during a disaster and integrate the State Disaster Management Plans with adjacent state DM plans and National level plan (if any).

The World Bank-funded HP State Road Transformation Project (HPSRTP) is a 5-year program being implemented by HPRIDCL with the primary objective of –sustainable landscapes, climate change adaptation, and biodiversity conservation—with livelihoods, gender, and social inclusion besides natural disasters. Transport Disaster Management Policy & Plan must be prepared under the current project. This TOR is seeking to contract a suitable professional consultancy firm to work with the HPRIDCL team to develop a Transport Disaster Management Policy & Plan tailored to the HP State region.

#### **Objectives**

The objective of the consultancy is to prepare a Transport Disaster Management Policy& Plan tailored for the State of HP. A Transport DM Policy & Plan should provide necessary structural & non-structural measures to safeguard the transport infrastructure, systems & services, and communities during a disaster; procedures & guidelines to follow during a disaster emergency.

## 2. Scope of the Study

In consultation with the Project Team, prepare and submit an **Inception Report** which, inter alia, details the methodology /approach to the assignment and a related work implementation plan.

The scope of the study is as described below. The consultant is expected to undertake the following activities and deliver the corresponding outputs to HPRIDCL:

## Task Activities: Prepare a Disaster Management Policy & Plan for Transportation

- a. Provide case studies of 5 best practices across the globe adopted by infrastructure operators, national and local governments with a description of the functions/objectives of a DM Policy and Plan pertaining to Transportation (refer to NDMA Disaster Management Plan 2019). The consultancy is also expected to come up with different ideas/options of DM Policy & Plan for Transportation that can be tailored to HP State.
- b. The Consultant shall provide a review of the existing disaster mitigation framework (if any available) and shall prepare the Transport Disaster Management Policy & Plan. The plan must align with the updated guidelines and latest versions of the Disaster Management Policy & Plan issued by the NDMA.
- c. Undertake a desk review of the project document and other relevant documents in the field of Transport Disaster Management Policy & Plan.
- d. Review the existing transport disaster management plan & policy guidelines, framework, and protocols in HP State at all levels (National, State, and local) to identify gaps, challenges, and opportunities for improvement.
- e. Review, gather & analyze the information on past, current, and planned projects related to the Disaster Management Policy & Plan, including disaster risk management and risk reduction activities pertaining to Transport projects.

- f. Key stakeholder identification (general/area-specific) for Transport DM Policy & Plan; Stakeholder role and responsibilities matrix. What is the general workflow from start to finish (documented in the diagram is useful); identify any existing Standard Operating Procedures (SOPs).
- g. Undertake consultative meetings with State/District Agencies, Transport Departments, National/State/District Disaster Management Agency while preparing a Transport DM Policy and Plan. Submit the minutes and review reports to the Client on regular basis.
- h. Refer to the National Disaster Management Plan and the Disaster Management Act.
- i. The Consultant shall develop standard operating procedures and rapid response plans for multihazards.
- j. The Consultant shall identify ideal locations/areas in disaster-prone parts of the state where relief supplies can be pre-positioned for rapid response in the event of disaster in the context of transportation.
- k. The Consultant shall recommend relevant disaster management training for key stakeholders in Disaster Management both in Government and Non-governmental Organizations. The Consultant shall organize at least one such training in each of the four zones of HPPWD i.e Shimla zone, Mandi zone, Hamirpur zone and Kangra zone. All the expenditure incurred on training material and Consultant's key personnel for providing such training shall be borne by consultant itself.
- 1. The consultant shall prepare the Transport Disaster Management Policy and Plan.
- m. The consultant shall review the existing early warning systems for various disasters and provide suggestions for improvements (if any) that can better support the Transport DM Policy and Plan.
- n. Upon prior discussion with HPRIDCL, the developed Transport Disaster Management Plan must be tested as required.
- o. Bibliography should be included in the all the documents.
- p. Transport emergency/evacuation management plan (TEMP) must be developed and integrated with the national/state/district level transport emergency operations center (EOC). Below are the items expected to be included in the TEMP Plan:
  - i. Procedures for mobilizing transportation services and systems for before, during and after hazard impacts.

- ii. Procedures for requisitioning private vehicles/vessels for the use of providing emergency relief in the event of a disaster or emergency inclusive of procedures for assessing and paying compensation.
- iii. Procedures for the safe transport of persons and/or goods via Air/Land before, during and after hazard impacts (e.g. alternative routes-micro & macro itineraries)
- iv. Procedures for the safe transport of hazard/disaster responders via Air/Land to affected site(s).
- v. Procedures for the safe transport of hazard/disaster victims via Air/Land to medical facilities.
- vi. Procedures for the safe transport of hazardous dangerous goods.
- vii. Procedures to apply the use of local taxis, tour busses and ferry boats in the event of evacuation of the residents of any area which is considered desirable in the event of a disaster and/or emergency.
- viii. Procedures for transporting and accounting for community evacuees before and after hazard impacts.
- ix. Procedures for closing and reopening roads/traffic before and after hazard impacts.
- x. Procedures for restoring transportation networks.
- xi. Roles & Responsibilities of different transport/traffic agencies during a disaster.
- xii. Any other areas as further defined and or approved by the NDMA/SDMA.

#### Deliverables:

- i. Deliverable-I Inception Report.
- ii. Deliverable-II Gap Analysis Report & First Draft/Template of Transport Disaster Management Policy & Plan.
- iii. Deliverable-III Second Draft of Transport DM Policy & Plan.
- iv. Deliverables-IV Training & Workshop.
- v. Deliverables-V Final Transport Disaster Management Policy& Plan.
   Report of meetings, exercises, significant events in the process, challenges, lessons learned.

#### 3 Proposed staffing and Qualification

The Consultant is expected to mobilize appropriate number and specialised key experts along with supporting staff to undertake the envisaged activities. Several of the activities under the TOR should be undertaken simultaneously and the consultant is expected to mobilize required resources to meet the delivery schedule and complete the assignment within the contract duration. A list of key personnel and the desired qualification, experience, and credentials to be evaluated at the stage of technical proposals is provided below. Consultants are expected to depute other experts and support staff to meet the study requirements. Firms may associate with other agencies to enhance their qualification and credentials, including local partners to facilitate presence on the ground. Quality and Cost-based Selection (QCBS) method, with 80:20 weightage for technical and financial proposals will be adopted.

Position	Desired Experience			
	• Degree in Civil Engg. or equivalent, with Master's in Disaster risk			
	management/ Environmental studies.			
	More than 15 years of relevant experience in Emergency Response/ Disaster			
Disaster	Management.			
Management	Minimum 5 years of experience in community relations.			
Specialist	Minimum 5 years of experience in Plan Development/Project Management,			
	or a related field.			
	<ul> <li>Experience of working in hilly terrain.</li> </ul>			
	• Experience in externally aided projects.			
	• Degree in Civil Engg. or equivalent, with master's degree in Traffic			
	Engineering/ Transport Planning.			
	• More than 5 years of relevant experience in the transport sector, involving			
Transport	transport infrastructure and services.			
Transport Specialist	• Minimum 2 years of experience working with multiple government/ public			
	transport agencies on transport policy, regulatory, institutional and capacity			
	building aspects is desirable.			
	• Experience of working in hilly terrain.			
	• Experience in externally aided projects.			

Position	Desired Experience		
Position  GIS Expert	<ul> <li>Desired Experience</li> <li>Degree in Computer Science, Geography, Surveying, Engineering or related field.</li> <li>More than 10 years of experience in designing digital maps with geographic data and other data sources, producing maps showing the spatial distribution of various kinds of data, converting physical maps into a digital form for computer usage, performing data munging and cleaning to convert data into its desired form, produce reports on geographic data utilizing data visualizations, managing a digital library of geographic maps in various file types. Experience with mapping tools such as QGIS and Carto is desirable.</li> <li>Minimum 5 years of experience in the data mapping for GIS based project.</li> <li>Experience of working in hilly terrain.</li> </ul>		
	Experience in externally aided projects.		

## 4 Study Duration and Schedule

The duration of the consultancy will be 12 months and the services shall be delivered in Himachal Pradesh. The consultant will be required to make their own arrangements for an office and other logistics.

#### 5 Deliverables & schedule of payments

An advance payment of 10% will be paid upon signing the contract agreement and upon submission of Bank guarantee as per provisions of contract. The Advance Payment Bank Guarantee shall remain valid until 28 days after successful completion of services by the Consultant. The remaining payment shall be made upon submission and acceptance of deliverables as detailed below. Each deliverable will be reviewed by the Advisory committee for Himachal Pradesh State Disaster Management Authority notified by Government of HP vide notification number Rev. (DMC)(F)11-29/2011 dated December 27, 2011 (Annexed A) or any such committee as modified from time to time by Government of HP. It will be responsibility of Consultant to interact with committee members for appraisal and approval/vetting of reports.

Deliverables	Deliverable Due Date	% release of payment	% Cumulative
Advance Payment on submission and verification of Bank Guarantee	-	10%	10%
Deliverable-I - Inception Report	30 days	5%	15%
Deliverable-II - Gap Analysis Report & First Draft/Template of Transport Disaster Management Policy & Plan	3 months	20%	35%
Deliverable-III - Second Draft of DM Policy &Plan	6 months	20%	55%
Deliverable-IV - Training & Workshop.	12 months	10%	65%
Deliverable-V – Final Disaster  Management Policy& Plan	Upon delivery of final report	35%	100%

Note:- Fifty (50) percent payment of each deliverable shall be made on submission of report and balance fifty (50) percent on approval/vetting of report by Advisory committee for Himachal Pradesh State Disaster Management Authority notified by Government of HP vide notification number Rev. (DMC)(F)11-29/2011 dated December 27, 2011 (Annexed A) or any such committee as modified from time to time by Government of HP.

#### 6 Reporting Requirements

- a. The consultant will report to Director (Projects)-cum-Chief Engineer for this assignment and work closely with HPSRTP project team and State Disaster Management Agency.
- b. The entire assignment shall be carried out under the overall guidance of the project team. At all steps, the consultant will be required to closely engage and seek inputs from the project team.
- c. The project team will facilitate and lead the discussions with the Govt. of HP or other Govt. agencies on the key aspects to seek their feedback and inputs.
- d. The consultant must organize meetings for data collection and stakeholder consultations on their own. The project team may join some of the consultation meetings.

#### 7 Data, local services, and facilities to be provided by client

The following shall be made available to the consultants.

- a) Access to reports available with HPRIDCL.
- b) The Consultants shall verify the correctness of the data/information provided by the Client/SDMA and satisfy them about the accuracy of data/information /material before these are used. Data/information /material provided to the consultants shall remain the property of the originating agency and shall be provided solely for the purpose of the work to be done under this contract. All such borrowed material shall be returned to the Client upon completion of the assignment.
- c) The consultants shall arrange its own equipment (vehicles, survey equipment, office and computer equipment, telecommunication and document printing and reproduction systems) including office space and furniture required for operational purposes. The consultants shall make own arrangement for travel/stay for performing the assignment.

### 8 Logistic Support

The consultant will manage his/her own logistic support for the completion of this assignment and required cost will be paid as factored in the accepted financial proposal. The consultant must ensure safety of the team to the best of his/her ability at all times, and arrange for insurance of all personnel on the consultancy.

## 9 Supervision

The consultant will undertake the assignment under the coordination and supervision of HPRIDCL/HPPWD authorities. He/ She will be required to give presentations before the World Bank team and attend/incorporate their feedback/observations in the draft/final report.