

**Request for Expression of Interest (Eoi)**  
**INDIA**  
**UNDER WORLD BANK AIDED NCRMP-II**  
**OF**  
**NATIONAL DISASTER MANAGEMENT AUTHORITY (NDMA)**  
**CREDIT No. IDA-5693-IN**  
**Selection of Consultant for Designing a National Seismic Risk Mitigation**  
**Programme (NSRMP)**

**Reference No.IN-NDMA-40266-CS-QCBS**

**Date: 22 December, 2017**

The Government of India has received financing from the World Bank toward the cost of the National Cyclone Risk Mitigation Project-II and intends to apply part of the proceeds for consulting services on the subject mentioned above.

**2.** The objective is to design a National Seismic Risk Mitigation Programme (NSRMP) assisting four earthquake prone States & NDMA. This will encompass earthquake related activities that will strengthen risk assessment capabilities, raising public awareness, strengthening of building codes, and land-use regulations, piloting retrofitting of critical infrastructure etc.

**3.** The NSRMP is envisaged to have the following components-

**A.** Enhancing Earthquake Emergency Response Capacity and Early Warning System

**B.** Multi-hazard Risk Mitigation of Infrastructure

**C.** Technical Assistance to Improve Disaster Risk Management

**D.** Project Management & Implementation Support.

**4.** The objective of the NSRMP is to reduce vulnerability of communities and their assets to natural disaster by taking appropriate mitigating measures and to strengthen the capacity of National and State entities to effectively plan for and respond to earthquakes.

**5.** PMU, NDMA will help in getting data from other Government Departments, if required. The Consultant will have to interact with all stakeholders.

**6.** In this connection, the Consultant is to recommend step by step mechanism encompassing mitigation measures for Project States, drafting Detailed Project Reports(DPRs) for four States of Assam, Manipur, Himachal Pradesh & Uttarakhand, preparing investment proposals, appraisal document, all necessary operation and supporting documents like Procurement, Financial, Environmental & Social Management Framework, MIS manuals, bidding documents etc. pertaining to project

management and recommending measures to increase mass awareness about seismic activities. The Terms of Reference (ToR) is available at [www.ncrmp.gov.in](http://www.ncrmp.gov.in) , NDMA website [www.ndma.gov.in](http://www.ndma.gov.in) and <https://eprocure.gov.in/epublish/app> for further details.

**7.** The Project Monitoring Unit (PMU), NDMA now invites EoI from eligible consulting firms for providing the services. Interested Consultants should provide information demonstrating they have the required qualifications and relevant experience to perform the Services (in form of brochures, description of similar assignments, past experience in similar services, availability of appropriate skills among staff etc.). The shortlisting criteria are:-

i. The organization shall furnish details of relevant Earthquake/Disaster Management assignments undertaken during the last five years. Certified copies of orders received and completion certificates for these projects must be submitted.

ii. The organization shall furnish information regarding the year wise annual turnover for the last five years (i.e. FY 2012-2017). A certificate to this effect from a Chartered Accountant, in original, must be submitted.

iii. The Consulting firms should demonstrate that they have enough capacity (including Personnel) in handling similar assignment by providing organizational structure and details of technical resource.

Expressions of interest (EOI) should contain all relevant information but not limited to:

- Introductory letter on letter head (with complete contact details – name of contact person, mailing address, telephone, fax, email etc.) explaining how the firm is best to deliver the task.
- Organization profile.
- Two years annual report (Yr 2012 and Yr 2013) and past 3 years audited financial statements with minimum turnover of INR 15.00 Cr or equivalent.
- Short note on the similar projects implemented by the Consultancy Firm pertaining to the shortlisting criteria.
- The EOI should contain sufficient supporting document to substantiate the claim of the Consultant towards their qualification as per the shortlisting criteria.

The attention of interested Consultants is drawn to paragraph 1.9 of the World Bank's Guidelines: Selection and Employment of Consultants [under IBRD Loans and IDA Credits & Grants] by World Bank Borrowers January 2011 ("Consultant Guidelines"), setting forth the World Bank's policy on conflict of interest.

**8.** Consultants may associate with other firms in the form of a joint venture or a sub-consultant to enhance their qualifications. Such association must be clearly stated as either sub-consultant or JV in the EoI.

9. The Eols will be evaluated and shortlisted for Request for Proposal (RfP) stage.

A consulting firm will be selected in accordance with Quality Cost Based System (QCBS) method set out in the World Bank Consultants guidelines. Further information can be obtained at the address below during office hours between 1000hrs to 1500hrs.

10. Expression of Interest must be delivered either by e-mail or in hard copy to the address given below on or before January 15, 2018 by 1700hrs.

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11. For further details Terms of Reference (ToR) may be referred as follows.

**National Disaster Management Authority  
Consulting Services for Designing a  
National Seismic Risk Mitigation Programme (NSRMP)**

**Terms of Reference**

**Introduction & Background**

During 2011, Govt. of India, Ministry of Home Affairs, launched a National Cyclone Risk Mitigation Project – I (NCRMP-I) in Andhra Pradesh and Odisha with an objective to protect the vulnerable coastal communities from frequent cyclones and minimize loss of lives and assets through multiple mitigating measures. Subsequently, during 2015, NCRMP-II was launched in six other coastal States viz. Goa, Gujarat, Maharashtra, Karnataka, Kerala and West Bengal.

2. One of the agreed components under NCRMP-II is about Design of a National Seismic Risk Mitigation Programme (NSRMP) as a futuristic step and funds have been demarcated for this purpose. Accordingly, PMU, NDMA has now decided to hire a Consultant firm for preparing: Investment Proposals, Detailed Project Reports, Project

Appraisal Document etc. for Earthquakes, formulating implementation arrangements and preparing necessary documentation such as environment and social assessment, operation manual, bidding documents etc. required for proposing potential financing from multilateral institutions particularly the World Bank.

3. 58.6% of Indian land mass is prone to earthquake (Zone III, IV and V). Unpredictability of earthquake hazard, vulnerability of structures/infrastructure along with lack of preparedness combined with poor local emergency response capacity leads to disasters.

4. Proposed NSRMP is to be designed with a view to address the earthquake risk in the country. In the first phase, the implementation of the project will be in high risk States of Assam, Manipur, Himachal Pradesh and Uttarakhand. Subsequently, Phase-II will include remaining earthquake prone States/UTs.

### **Aims & Objectives of NSRMP**

5. The objective of the NSRMP is to reduce vulnerability of communities and their assets to natural disaster by taking appropriate mitigating measures and to strengthen the capacity of National and State entities to effectively plan for and respond to earthquakes.

### **States involved in NSRMP**

6. The following four high risk States have been included in the Phase-I of the project:

- a. Assam
- b. Manipur
- c. Himachal Pradesh
- d. Uttarakhand

7. Other States/UTs, prone to earthquake, will be included in subsequent phases.

8. Components of NSRMP:-

- Component A- Enhancing Emergency Response Capacity
- Component B- Multi-Hazard Risk Mitigation of Infrastructure
- Component C- Technical Assistance to Improve Disaster Risk Management.
- Component D- Project Management, Monitoring and Implementation Support.

**Component A: Enhancing Emergency Response Capacity (To be implemented by participating States)**

9. The objective of this component is to enhance the emergency response capacity of local governments and other agencies involved in disaster response in highly earthquake hazard prone areas.

10. This component will focus on:

- a. Upgrading existing and providing additional search and rescue equipment for: State Disaster Response Forces, Fire & Emergency Services and other emergency/first responders.
- b. Training and capacity building programme for emergency/first responders.
- c. Installation of Earthquake Early Warning Alert System based on latest technology, allowing people and systems to take actions to protect lives and property and also to alert the emergency response system.
- d. Augment the disaster risk management capacities of the communities.

**Component B- Multi-Hazard Risk Mitigation of Infrastructure (To be implemented by States)**

11. This component will focus on reducing structural risk from critical infrastructure and public buildings to protect communities, assets and emergency response capabilities and could include:

- a. Retrofitting of selected critical infrastructure such as: schools, offices, hospitals, transport terminals, data centres, emergency installations, etc.
- b. Retrofitting and/or constructing evacuation roads, bridges, landing strips and helipads and multi-hazard shelters.
- c. Constructing small Technology Demonstration Units of critical infrastructure such as schools, hospitals etc.

**Component C-Technical Assistance to improve Disaster Risk Reduction/ Management with Emphasis on Earthquake Risk**

12. The objective of this component is to improve the capacity of States to manage the risks associated with their risk profile. It would include development of a policy and platform to share and use information for risk management, detailed vulnerability assessment, setting up of accreditation programmes for engineers, architects, mason and construction workers etc.

13. Activities proposed under this component could include:

- a. Preparing a model bill for National Council of Professional Engineers (NCPE).
- b. Strengthening/Establishing Seismic research and development program across country including setting up a centre of excellence.
- c. Curriculum revision for introduction of Earthquake Engineering topics in Engineering, and Architecture education.
- d. Formulation and implementation of Techno-legal Regime for structural design reviews, implementation monitoring and licensing of professionals.

- e. Documenting, improving and encouraging Traditional Earthquake Resistant Construction.
- f. Sensitization programmes for communities
- g. Training & Capacity Building for Engineers, Architects and Masons; and Municipal and State bodies
- h. Large scale information, education and communication (IEC) through audio-visual and print materials
- i. Home owners Guide to Earthquake Safety

## **Component D Project Management & Monitoring**

**14.** This could include program implementation, monitoring and evaluations, staff capacity building and training; and design, documentation, quality monitoring, project management support to the participating States and the PMU, NDMA.

### **Objective of the Assignment for the Consultant**

**15.** The present assignment is to support formulation, appraisal and implementation of NSRMP. The specific objectives for the proposed Project Consultant are as follows:

- a. To support the PMU, NDMA in preparing and appraising the Projects.
- b. To assist the State entities in formulating the investment program and preparing implementation ready proposals/projects with full detailing including social and environmental assessments.
- c. To provide technical assistance and training to States on technical, financial safeguards and fiduciary aspects.

### **Scope of Work**

#### **A. Project preparation**

**16.** The scope of work will include working on components A, B & C for 04 States namely Assam, Manipur, Himachal Pradesh and Uttarakhand, and NDMA.

**17.** The Role of the Consultant would broadly comprise planning, preparing Detailed Project Report (DPR) and other supporting documents for NSRMP and inter-alia would broadly comprise preparing the following:

- a. Inception report
- b. Investment plans for all components
- c. Outline and detailed implementation arrangement structure and ToRs for specific positions
- d. Detailed project reports for at least 50% (priority) investments - Phase I investments
- e. Procurement documents for the proposed investments and consultancies
- f. Procurement strategy assessment and plan

- g. Financial Management Manual
- h. Environmental & Social Management Framework,
- i. Results Framework
- j. Project Management and MIS tool
- k. Environment and Social Screening and Assessment Reports with Environment Management Plan and Social Management Plan and EIA/RAPs where necessary
- l. Project Operation Manual
- m. Project Appraisal Document
- n. IEC and Communication strategy and package

The consultant will also help coordinate with various stake holders such as – MHA, MoUD, DEA, IMD, NIDM, NDRF, SDRFs, Fire Cell – MHA, Fire & Emergency Services, IITs, BIS, State Disaster Management Authorities, Academic/Technical Institutions, etc.

## **B. Scoping of Component A, B and C**

**18.** Undertake in-depth analysis and consultations with the State to arrive at the scoping and investment for Component A: Enhancing Emergency Response Capacity, Component B: Multi-hazard Risk Mitigation Infrastructure & Component C: Technical Assistance to Improve Disaster Risk Management.

**19.** Identification of investment proposals across Component A, B and C. The list includes but is not limited to the following:

- a. Retrofitting for critical infrastructure and buildings
- b. Earthquake risk mitigation and preparedness measures including emergency shelters, landing strips/ helipads on safe grounds for evacuation and enhancing Search and Rescue capacity
- c. Upgradation requirements (human resources, equipment, training needs) of SDRF, and the State/City level Fire & Emergency Services to meet search and rescue standards
- d. Development of Alert System for Earthquakes in India and recommend technology options and feasibility of the options for both regional and local earthquake alert system (*system to alert citizens and institutions immediately on the onset of the event and not forecasting the earthquake event*)
- e. Detail out the existing status of all activities highlighted in Component C and propose implementation plan for – national and state level seismic policy formulation, national probabilistic seismic hazard mapping, institutional strengthening, code enhancement and implementation, training and capacity building of professionals and building construction sector, public awareness and outreach
- f. Identify all Technical Assistance (TA) support, scope the Request for Proposals (RFPs) and investments in terms of concept plan, physical work, detailed engineering plan and bidding documents
- g. Meet to the DEA Project Readiness Checklist for Projects aided by Multi-lateral Financing Institutions (MFIs)

- h. Preparation of Detailed Project Reports for at least 50% contracts for civil works (*risk mitigation infrastructure*); and DPRs for remaining components (*DPRs will include safeguard assessments*). Documents should be in the 'Ready for Bid' stage (*Note: for the balance 50%, State Project Implementation Units will be encouraged to prepare the DPRs*)

### **C. Procurement Management**

- Developing Procurement Manual including procurement strategy as per World Bank Guidelines
- Provide training, support and advise to implementing units on procurement functions
- Preparing Procurement Documents for activities to be implemented at national and state levels and provide technical/capacity building assistance to project implementing units (PIU) to finalize procurement documents
- Preparing Procurement Plan for complete project

### **D. Financial Management**

- Designing Financial Management system and flow of funds and assist PMU, NDMA in establishing the project level Financial Management System
- Framing detail monitoring and reporting mechanism & auditing requirements
- Integration of the Financial Management System functions with the overall project MIS
- Preparing an overall Investment Plan
- Developing Financial Management Manual
- Provide training, support and advice to implementing units of Financial Management functions

### **E. Environment & Social Framework Management**

- Preparing Environmental & Social Management Framework (ESMF) for the project
- Providing training and information to Project Implementation Units in States on ESMF
- Prepare EA/SA or EIA/SMP/RAP where necessary
- Carrying out Environment and Social Screening and preparing the assessment reports for disclosure
- Developing and disclosure of ESMF document following World Bank requirements

### **G. Management Information System**

- Designing internet based/electronic MIS System for the Project in consultation with subject experts (Procurement Specialist, Financial Management Specialist, Project Management Specialist, Monitoring and Evaluation Specialist, Safeguards Specialist etc.)
- Identifying human resources and IT equipment resources for PMU, NDMA and PIUs



- Prepare technical specifications and procurement documents for MIS hardware/software

### Manpower Requirements

20. The estimated position and timeline considering the scope of work is as follows:

S.No.	Position	Number	Person months
1.	Team Leader  (MBA, preferably with Civil Engineering qualification with at least 20 years' project management experience in similar large scale projects)	01	12
2.	Dy. Team Leader cum State Coordinators (Masters in Earthquake Engineering/Structural Engineering/Engineering Geology/Seismology with at least 15 years' experience in projects (consultancy or construction))	1+4	12x5=60
3.	Structural Engineering Specialist (Masters in Structural/Earthquake Engineering with minimum 10 years' experience in design of seismic retrofitting of public infrastructure (buildings/transport/etc.))	04	10x4=40
4.	Telecommunication/Instrumentation Engineer (Bachelors in Communication/Electronics/Instrumentation/ Similar field with minimum 10 years' experience in development early warning equipment)	01	04
5.	Procurement Specialist (Bachelor's degree with minimum 7 years' relevant experience on preferably in externally funded projects)	01	04
6.	Finance Specialist (M. Com/ICWA with minimum 10 years' relevant experience on World Bank Projects)	01	04
7.	Environmental Specialist (M. Sc. / M. Tech in Environmental Sciences/Engineering with minimum 7 year's relevant experience on externally funded projects)	01	04

8.	Social Specialist (MSW or equivalent with minimum 7 year's relevant experience on externally funded projects)	01	04
9.	MIS/IT Specialist (M Tech./MCA with minimum 7 years' experience)	01	04
10.	Communications Specialist (Master's Degree in Communication or equivalent with 7 years of relevant experience in developing disaster risk management information products for wide range of stakeholders)	01	04
11.	Capacity Development Specialist (Master's Degree in Engineering / MBA with 7 years of experience in capacity building programmes - needs assessment, design and delivery mechanisms)	01	04
	<b>Total</b>	<b>18</b>	<b>144</b>

\* One State co-ordinator and One Structural Engineer will be in each of the four Project States.

Consultants will assess requirement and propose additional personnel requirement (non-key experts) and mobilize as necessary to fulfil the obligations.

### **Deliverables & Time line**

21. The deliverable and the timeline would comprise the following:

<b>S.No.</b>	<b>Deliverables</b>	<b>Timeline</b>
1.	Inception Report	15 days from start date of the contract
2.	Initial Project Scoping Report	2 months from the date of the contract
3.	Project Investment Plan – component wise and state wise and with agreed Project Scope (subproject listing)	4 months from the date of the contract
4.	Environment/Social screening	5 months from the date of the contract

	assessment reports	
5.	DPR for identified 50% of risk mitigation measures with complete environment and social assessment, impact assessment and other required documents	8 months from the date of the contract
6.	Draft ESMF document	9 months from the date of the contract
7.	Project Appraisal Document	9 months from the date of the contract
8.	Web based Project MIS	10 months from the date of the contract
9.	Project Operation Manual	12 months from the date of the contract
10.	Capacity development plan and complete set of ToRs/RfPs/Bidding Documents	12 months from the date of the contract