

## Terms of Reference

### Short Term Consultant – GIS Specialist

<b>Organisation</b>	Coalition for Disaster Resilient Infrastructure (CDRI)
<b>Job posting date</b>	24/10/2020
<b>Location</b>	New Delhi, India
<b>Grade</b>	Short Term Consultant
<b>Salary and benefits</b>	INR 0.75 to 1.00 lakhs per month consolidated (salary and designation will be offered commensurate with experience and qualifications)
<b>Contract</b>	Short Term Contract (6 months), , National Hire
<b>Occupational groups</b>	GIS, Disaster management, infrastructure, risk analysis
<b>Last date of application</b>	31/10/2020 till 11:59pm

#### Background:

The Coalition for Disaster Resilient Infrastructure (CDRI) is a multi-stakeholder global partnership of national governments, UN agencies and programmes, multilateral development banks and financing mechanisms, the private sector, and academic and knowledge institutions. It aims to address the challenges of building resilience into infrastructure systems and development associated with it. The vision, mission, goal and objectives of the CDRI are explicitly linked to the post-2015 development agendas. The Coalition will also contribute to the resilience of the global infrastructure systems in an increasingly interconnected world. The outcome of such collaboration would be aimed at building resilient economies and resilient people through cross-sector commitments at all levels towards adaptation and resilience with concrete outcomes that will bring resilience action to global scale.

The CDRI will support countries to upgrade their systems for ensuring disaster and climate resilience of existing and future infrastructure. It seeks to rapidly expand the development of and retrofit resilient infrastructure to respond to the Sustainable Development Goals (SDGs) objectives of expanding universal access to basic services, enabling prosperity, and decent work. CDRI envisions enabling measurable reduction in infrastructure losses from disasters including extreme climate events.

The Government of India has established a Society in New Delhi to act as the Secretariat of CDRI. The Secretariat functions under the direction of the international Governing Council and implements the programs of CDRI. This position is being advertised for Short Term Contract of 6 months.

#### Objective of this position:

Under the Strategic Priority 2: Research and Knowledge Management, CDRI aims to create and operate a GIS-database related to disasters, hazards, exposure, risk, infrastructure, and resilience. Majority of these GIS data will be collated from secondary sources of scientific organizations (hazard information), research organizations, government departments and Line Ministries of India as well as countries participating in the assessments. Significant amount of GIS data will also be generated in the research projects undertaken by CDRI. CDRI also plans to make this GIS-database accessible in a controlled way for future research. An ideal candidate for the position would be self-sufficient to conceptualise, design, implement, operate, and maintain this GIS-database. Further, the candidate

will also possess skill and experience to coordinate, collaborate, negotiate, and follow up with international and national organizations, government departments and ministries, to acquire available GIS-database. Reporting to the Lead Specialist/Director (Research and Knowledge Management), CDRI, the incumbent will be solely responsible all aspects of GIS-database creation and operation at CDRI.

#### **Role and Responsibilities:**

- Conceptualise, design, implement, curate, operate and monitor all GIS related activities at CDRI including GIS-database and geo-processing models.
- Identify relevant repository of GIS-databases among international organizations, government departments and ministries, and collaborate with them to obtain these databases.
- Undertake GIS mapping, analysis, data capture, data management and geo-processing.
- Develop and perform research methods and analytics for synthesis of GIS applications to produce maps, figures, and tables to support other activities of CDRI, publications, web content.
- Ensure alignment, data validation and quality control of GIS work undertaken at CDRI and its contractors.
- Analyse data acquired from aircrafts, satellites, or ground-based platforms, using statistical analysis software, or GIS.
- Automate data administrative tasks such as reporting, publishing, and quality assurance.
- Develop an interactive application platform to support usage of available data for research on disaster resilient infrastructure.
- Build and expand the in-house GIS capabilities of CDRI.
- Any other tasks as directed by CDRI.

#### **Competencies:**

##### Essential:

- Knowledge and experience in overall aspects of GIS Software, GIS database creation, analytics, and modelling modules.
- Working knowledge of designing and operating flood models, hydrological models, and/or other satellite image analysis.
- Good understanding of conceptualizing and designing various analytical modules, automation, and quality control measures required in GIS-database.
- Knowledge and experience in working with various GIS tools
- Ability to collaborate, coordinate, and negotiate with various international, governmental departments and ministries to acquire/mirror GIS databases.
- Ensure confidentiality and security of GIS-database.

##### Desirable:

- Experience of working within disaster management/geotechnical/environmental disciplines/Risk and hazard analytics, GIS image processing.

- Proven experience in strategizing, developing, and implementing GIS-based research projects in the infrastructure, disaster, or resilience context.
- Computer programming language relevant for developing interactive platforms to support external research on the GIS-database created by CDRI.

**Qualifications:**

Educational Criteria:

Master Degree in Geographical Information System, Remote sensing, or related field. Relevant higher education may be considered in lieu of experience at sole discretion of CDRI.

Experience Criteria:

Minimum 5 years of overall experience in the relevant field with reputed state level/national level institutions.

**Reporting Line:**

The incumbent shall report to Lead Specialist/Director (Research and Knowledge Management) or similar authorities.

**Language Proficiency:**

- Fluency in English.
- Knowledge of language of a CDRI Partner country will be an asset.

**How to Apply:**

If you have experience of working in a similar capacity and want to make an active and lasting contribution in a global initiative spearheaded by India, please apply through the **online application form only** on or before the last date.

Application Process: Online application form will be available at [www.cdri.world](http://www.cdri.world) from 24<sup>th</sup> Oct 2020.

CDRI is committed to achieving workforce diversity in terms of gender, nationality, and culture. Individuals with disabilities are equally encouraged to apply. All applications will be treated with strict confidence.

CDRI has ZERO Tolerance on sexual exploitation and abuse, any kind of harassment including sexual harassment and gender / racial discrimination. Any selection therefore will be subject to satisfactory reference and background check.

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