



Government of Nepal  
**National Disaster Risk Reduction and Management Authority**  
**Earthquake Housing Reconstruction Project (EHRP)**  
Project Implementation Unit (PIU)  
Singhadurbar, Kathmandu

## **REQUEST FOR EXPRESSIONS OF INTEREST**

### **Nepal**

### **Earthquake Housing Reconstruction Project (EHRP)**

**Credit No.:** NP-65300

**Assignment Title:** *Hiring a firm for establishment of online monitoring system for LDRF*

**Reference No.:** NP-NDRRMA-311294-CS-CQS

The National Disaster Risk Reduction and Management Authority, Singhadurbar, Kathmandu has received financing from the World Bank toward the cost of the Earthquake Housing Reconstruction Project (EHRP) and intends to apply part of the proceeds for consulting services.

The consulting services (“the Services”) include Hiring a firm Establishment of Online Monitoring System for LDRF as mentioned in Terms of Reference. Overall duration for this activity will be six (6) months. Commencement of the work will be approximately January, 2023 and will be ensuring full consistency with the TOR attached to in this REOI.

The Terms of Reference (TOR) for the primary procurement stage for the assignment are attached to this request for expressions of interest.

The National Disaster Risk Reduction and Management Authority, Singhadurbar, Kathmandu, now invites eligible consulting firms (“Consultants”) to indicate their interest in providing the Services. Interested Consultants should provide information demonstrating that they have the required qualifications and relevant experience to perform the Services. The shortlisting criteria are: attached with this request for expression of interest.

**Key Experts will not be evaluated at the shortlisting stage. This consulting service is not applicable for non-profit organization (such as NGOs/NPOs)**

The consulting firm securing highest marks after evaluation will be shortlisted for submission of technical and financial proposal. Furthermore, all procedures of selection of consultant shall be carried out under Consultant's Qualification Based Selection (CQS) method of World Bank.



The attention of interested Consultants is drawn to Section III, paragraphs, 3.14, 3.16, and 3.17 of the World Bank's "Procurement Regulations for IPF Borrowers" July 2016 (Revised in November, 2017) ("Procurement Regulations"), setting forth the World Bank's policy on conflict of interest.

In addition, please refer to the following specific information on conflict of interest related to this assignment:

Consultants shall not be hired for any assignment that would be in conflict with their prior or current obligations to other clients, or that may place them in a position of being unable to carry out the assignment in the best interests of the Borrower. Without limitation on the generality of the foregoing, Consultants shall not be hired under the circumstances set forth below:

- a. a firm that has been engaged by the Borrower to provide Goods, Works, or Non-consulting Services for a project (or an affiliate that directly or indirectly controls, is controlled by, or is under common control with that firm), shall be disqualified from providing Consulting Services resulting from, or directly related to, those Goods, Works, or Non-consulting Services. This provision does not apply to the various firms (Consultants, contractors, or suppliers), which together are performing the contractor's obligations under a turnkey or design and build contract;
- b. a firm that has been engaged by the Borrower to provide Consulting Services for the preparation or implementation of a project (or an affiliate that directly or indirectly controls, is controlled by, or is under common control with that Consulting firm), shall be disqualified from subsequently providing Goods, Works, or Non-consulting Services resulting from, or directly related to those Consulting Services. This provision does not apply to the various firms (Consultants, contractors, or suppliers), which together are performing the contractor's obligations under a turnkey or design and build contract;
- c. neither a Consultant (including personnel and sub-consultants), nor an affiliate (that directly or indirectly controls, is controlled by, or is under common control with that Consultant), shall be hired for any assignment that, by its nature, creates a conflict of interest with another assignment of the Consultant;
- d. Consultants (including their experts and other personnel, and sub-consultants), that have a close business or family relationship with a professional staff of the Borrower, or of the project implementing agency, or of a recipient of a part of the Bank's financing, or any other party representing or acting on behalf of the Borrower, that is directly or indirectly involved in any part of:
  - i. the preparation of the TOR for the assignment;
  - ii. the selection process for the contract; or
  - iii. the supervision of the contract, may not be awarded a contract, unless the conflict stemming from this relationship has been resolved in a manner acceptable to the Bank throughout the selection process and the execution of the contract.



Consultants may associate with other firms to enhance their qualifications, but should indicate clearly whether the association is in the form of a joint venture and/or a sub-consultancy. In the case of a joint venture, all the partners in the joint venture shall be jointly and severally liable for the entire contract, if selected.

A Consultant will be selected in **Consultant's Qualification based method** described in the Procurement Regulations and to be specifically set out in the Request for Proposals.

Interested eligible consultants may obtain further information and detail Terms of Reference (ToR) free of cost at the address below during **office hours on or before December 16, 2022** or can be downloaded from NDRRMA website [www.bipad.gov.np](http://www.bipad.gov.np).

Expressions of interest must be delivered in a written form to the Project Director, Earthquake Housing Reconstruction Project (EHRP), Project Implementation Unit (PIU), Singhadurbar, Kathmandu, Nepal (Tel: +977 1 4211202, E-mail: [ehrp.piu@gmail.com](mailto:ehrp.piu@gmail.com)) by **on or before 12:00 hours, December 18, 2022**.

**Expression of Interest must be in sealed hard copy/s and must be delivered by hand within the time. NDRRMA will not be responsible if the sealed Expression of Interest is not delivered due to any reasons in NDRRMA office within the given time.**

National Disaster Risk Reduction and Management Authority  
Attn: Project Director  
Singhadurbar, Kathmandu, Nepal  
Tel: +977-01-4211202  
E-mail: [ehrp.piu@gmail.com](mailto:ehrp.piu@gmail.com)



## 2. Instructions for submission of Expression of Interest

1. Expression of Interest may be submitted by a sole firm or a joint venture of consulting firms and the maximum number of partners in JV shall be limited to three.
2. Interested consultants must provide information indicating that they are qualified to perform the services (descriptions, organization and employee and of the firm or company, description of assignments of similar nature completed in the last 7 years and their location, experience in similar conditions and general qualifications).
3. This expression of interest is open to all eligible consulting firms.
4. A Consultant will be selected in accordance with the Consultant's Qualification based Selection Method as specified in World Bank Procurement Regulations, July, 2016 (revised in November, 2107)
5. Expression of Interest should contain following information:
  - (i) A covering letter addressed to the representative of the client on the official letter head of company duly signed by authorized signatory.
  - (ii) Applicants shall provide the following information in the respective formats given in the EOI document:
    - EOI Form: Letter of Application (Form 1)
    - EOI Form: Applicant's Information (Form 2)
    - EOI Form: Work Experience Details (Form 3(A), 3(B) & 3(C))
    - EOI Form: Capacity Details (Form 4)
6. Applicants may submit additional information with their application but shortlisting will be based on the evaluation of information requested and included in the formats provided in the EOI document.
7. The Expression of Interest (EOI) document must be duly completed and submitted in sealed envelope and should be clearly marked as "EOI Application for Short-listing for the *Hiring of a firm for establishment of online monitoring system for LDRF*". The Envelope should also clearly indicate the name and address of the Applicant. No electronic proposal will be received.
8. The completed EOI document must be submitted on or before the date and address mentioned in the "Request for Expression of Interest". In case the submission falls on public holiday the submission can be made on the next working day. Any EOI Document received after the closing time for submission of proposals shall not be considered for evaluation.



### 3. Evaluation of Consultant's EOI Application

Consultant's EOI application which meets the eligibility criteria will be ranked on the basis of the Ranking Criteria.

Eligibility & Completeness Test	Compliance
Copy of registration of the consulting firm	
VAT/PAN registration certificate	
Tax clearance certificate for FY 2078/79 or evidence of Time Extension for FY 2078/79	
Letter of Declaration that no de-barred from Government of Nepal as well as World Bank	
EOI Form 1: Letter of Application	
EOI Form 2: Applicant's Information Form	
EOI Form 3: Consulting Firm Experience	
EOI Form 4: Capacity	

EOI Evaluation Criteria	Minimum Requirements	Score
<b>Experience</b>		
General Experience of consulting firm	<p><i>each consulting firm of sole or JV application should have at least five (5) years of general experience and three (3) years of general experience for other partners in case of JV</i></p> <p><i>General Experience list (3A) should be filled.</i></p> <p><i>Submit all the experiences with evidences regarding IT related projects</i></p>	20
Specific experience and Similar Nature of Works related experiences of consulting firm within last 7 years.	<p><i>Highly <b>preferable</b> having experience in successful completion of project in multi-lateral organization (WB, ADB, UN Agencies etc.)</i></p>	60
	<p><i>Submit all the experiences with evidences regarding platform development, system development, website development or any IT related development works</i></p>	



<b>Capacity</b>		
Financial Capacity	<i>Average Annual Turnover should be NRs. 4,000,000/- (average of best 3 years among last 7 years) where lead partner should have at least 40% of it.</i>	20

Minimum score to pass: 60 marks

#### **4. EOI Forms & Formats**

Form 1: Letter of Application

Form 2: Applicant's information

Form 3: Experience (*General, Specific and Geographical*)

Form 4: Capacity



## Letter of Application

*(Letterhead paper of the Applicant or partner responsible for a joint venture, including full postal address, telephone no., fax and email address)*

Date: .....

To,

Full Name of Client: \_\_\_\_\_

Full Address of Client: \_\_\_\_\_

Telephone No.: \_\_\_\_\_

Fax No.: \_\_\_\_\_

Email Address: \_\_\_\_\_

Sir/Madam,

1. Being duly authorized to represent and act on behalf of (hereinafter "the Applicant"), and having reviewed and fully understood all the short-listing information provided, the undersigned hereby apply to be short-listed by [Insert name of Client] as Consultant for {Insert brief description of Work/Services}.
2. Attached to this letter are photocopies of original documents defining:
  - a) the Applicant's legal status;
  - b) the principal place of business;
3. [Insert name of Client] and its authorized representatives are hereby authorized to verify the statements, documents, and information submitted in connection with this application. This Letter of Application will also serve as authorization to any individual or authorized representative of any institution referred to in the supporting information, to provide such information deemed necessary and requested by you to verify statements and information provided in this application, or with regard to the resources, experience, and competence of the Applicant.
4. [Insert name of Client] and its authorized representatives are authorized to contact any of the signatories to this letter for any further information.1
5. All further communication concerning this Application should be addressed to the following person,

[Person]

\_\_\_\_\_



[Company]

[Address]

[Phone, Fax, Email]

6. We declare that, we have no conflict of interest in the proposed procurement proceedings and we have not been punished for an offense relating to the concerned profession or business and our Company/firm has not been declared ineligible.
7. We further confirm that, if any of our experts is engaged to prepare the TOR for any ensuing assignment resulting from our work product under this assignment, our firm, JV member or sub-consultant, and the expert(s) will be disqualified from short-listing and participation in the assignment.
8. The undersigned declares that the statements made and the information provided in the duly completed application is complete, true and correct in every detail.

Signed \_\_\_\_\_ :

Name \_\_\_\_\_ :

For and on behalf of (name of Applicant or partner of a joint venture):





## **Applicant's Information Form**

*(In case of joint venture of two or more firms to be filled separately for each constituent member)*

1. Name of Firm/Company:
2. Type of Constitution (*Partnership/ Pvt. Ltd/Public Ltd*)
3. Date of Registration / Commencement of Business (*Please specify*):
4. Country of Registration:
5. Registered Office/Place of Business:
6. Telephone No; Fax No; E-Mail Address
7. Name of Authorized Contact Person / Designation/ Address/Telephone:
8. Name of Authorized Local Agent /Address/Telephone:
9. Consultant's Organization:
10. Total number of staff:
11. Number of regular professional staff:

***(Provide Company Profile with description of the background and organization of the Consultant and, if applicable, for each joint venture partner for this assignment.)***



## Experience

### 3(A). General Work Experience

*(Details of assignments undertaken. Each consultant or member of a JV must fill in this form.)*

**Note: Supportive experience letter of organization should be mandatorily attached with this.**

S. N.	Name of assignment	Location	Value of Contract	Year Completed	Client	Description of work carried out
1.						
2.						
3.						
4.						
5.						
6.						
7.						



### 3(B). Specific Experience

#### Details of similar assignments undertaken in the previous seven years

*(In case of joint venture of two or more firms to be filled separately for each constituent member)*

Assignment name:	Approx. value of the contract (in current NRs; US\$ or Euro) <sup>2</sup> :
Country: Location within country:	Duration of assignment (months):
Name of Client:	Total No. of person-months of the assignment:
Address:	Approx. value of the services provided by your firm under the contract (in current NRs; US\$ or Euro):
Start date (month/year): Completion date (month/year):	No. of professional person-months provided by the joint venture partners or the Sub-Consultants:
Name of joint venture partner or sub-Consultants, if any:	Narrative description of Project:
Description of actual services provided in the assignment:  <b>Note: Provide highlight on similar services provided by the consultant as required by the EOI assignment. Supportive experience letter of organization should be mandatorily attached with this.</b>	

Firm's Name: \_\_\_\_\_  
\_\_\_\_\_



### 3(C). Geographic Experience

#### Experience of working in similar geographic region or country

*(In case of joint venture of two or more firms to be filled separately for each constituent member)*

<b>No</b>	<b>Name of the Project</b>	<b>Location (Country/Organizati on)</b>	<b>Execution Year and Duration</b>
1.			
2.			
3.			
4.			
5.			
6.			
7.			



**1. CAPACITY**

**4(A). Financial Capacity**

*(In case of joint venture of two or more firms to be filled separately for each constituent member)*

<b>Annual Turnover</b>	
<b>Year</b>	<b>Amount Currency</b>

- **Average Annual Turnover of Best of 3 Fiscal Year  
Of Last 7 Fiscal Years**

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*(Note: Supporting documents for Average Turnover should be submitted for the above.)*



Government of Nepal  
**National Disaster Risk Reduction and Management Authority**  
**Earthquake Housing Reconstruction Project Second Additional Financing**  
**(EHRPAF2)**  
Project Implementation Unit (PIU)  
Singh Durbar, Kathmandu, Nepal

**Terms of Reference**

**For**

**DRF Monitoring and Evaluation Web-based Platform**

December, 2022



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## 1. INTRODUCTION

Nepal is one of the most disasters prone countries affected by multiple recurrent hazards. Every year, the country suffers from substantial loss of human lives and property damage due to natural and non-natural disasters. In the last 45 years (1971 to 2015), more than 40,000 people have lost their life due to disasters. This number is more than two persons losing lives every day. In addition to the high rate of casualties in the period mentioned above, more than 75,000 people have been injured, and about 3,000,000 have been affected. These disasters have become a severe burden to the people and the community all over Nepal. In the majority of the districts of Nepal, disasters occur recurrently, where more than 90 % of the population are at high risk of death due to two or more two types of disasters

A 7.8 Mw earthquake struck the country on 25 April 2015 affecting over 40 out of 75 districts in the Western, Eastern, and Central regions. A maximum intensity level of IX (MMI) was estimated in areas near the epicenter. Hundreds of aftershocks occurred, including a 7.3 Mw earthquake on 12 May 2015 which have caused further damage to the infrastructure and casualties. out of which 9,313 were classrooms. The number of students enrolled in the collapsed classrooms was 184,778. This prompts the urgent need for the country to assess the educational infrastructure nationwide and take timely corrective actions to avoid human casualties from the disaster. Critical findings of SIDA led to upscale the activities and conducted Structural Integrity Assessment (SIA) across the whole country.

Nepal's apex institution to manage disaster risk reduction, the National Disaster Risk Reduction and Management Authority (NDRRMA) was established on 16 December 2019 under the Ministry of Home Affairs, along with the appointment of its Chief Executive. The primary responsibility of NDRRMA is to operate and manage activities related to disaster management effectively. NDRRMA functions under direct oversight and control of and as secretariat to Council headed by Prime minister and Executive Committee headed by the Home Minister. NDRRMA performs the functions and duties relating to disaster risk reduction and management in coordination with the Council, Executive Committee, concerned ministries, and other agencies of the Government of Nepal.

### **Need of Disaster Resilience Framework Monitoring & Evaluation**

Monitoring and evaluation have become an increasingly important tool in the design, execution, and management of development project/program/organization. Given the global financial situation, stakeholders are demanding the results be produced to show how the projects has impacted the community it is serving.

In any project it is critical and important to examine the activities, its input, outcomes and results produced for project progress tracking. Progress generally can be physical and financial.

In the present context of digital world, monitoring and evaluation should be considered not only in a way of traditional format of regularly visiting project site, gathering data and generating information and reflections but also through developing a web-based system that can function as an excellent tool to capture large number of project activities in one place, analysis them and





produce output results as needed at time. Hence, NDRRMA as focal and specialized institution in DRRM, there is need to develop a system that provides wider picture of local government, provincial and federal government initiatives on Local Disaster Resilient Framework (LDRF) in line with the propose National Disaster Resilience Framework (NDRF).

NDRRMA has received credit from the International Development Association (IDA), World Bank to implement EHRP (P155969, 6530-NP) with an objective to enhance Nepal's ability to improve long-term disaster resilience. Hence as part of improving disaster resilience NDRRMA is hiring a consulting firm to prepare an above- mentioned web-based platform.

## 2. OBJECTIVE OF THE CONSULTANCY SERVICES

The main objective of the consultancy service is to develop a system that provides continuous monitor of LDRF activities, its progress including a critical review of the LDRF and their interpretation, to minimize any deviation of the project from initial plan.

- i) To develop a clear, concise and comprehensive **DRF Monitoring and Evaluation Web-based Platform** for local, provincial and federal level that can guide, evaluate and coordinated national/local disaster risk reduction activity, inline with the proposed national disaster resilience framework to achieve resilient Nepal by 2030..
- ii) To help facilitate comprehensive analysis of disaster risks reduction intervention at local level across the country.
- iii) To create monitoring evaluation and analysis methodology.
- iv) To develop a plan and design reporting templates.

## 3. SCOPE OF WORK

The selected firm will carry out the following activities under this consultancy:

- i) study and prepare a technical document with recommendation for the DRF monitoring solution.
- ii) develop a platform in open source, freely adopting newer technical solution.
- iii) data inputs and reporting module should be compatible with Bipad Portal platform reports;
- iv) admin panel should be single-sign on via Bipad Portal Admin Portal;
- v) backend and API should be developed with in Bipad Portal backend and it is required to use same database;
- vi) data visualization tool should be developed separately independent react app which will call Bipad Portal API to fetch data for visualization—the domain should be developed within subdomain of NDRRMA;
- vii) output should support informed decision-making at Federal and Local levels of the government;
- viii) reports should be downloadable and exportable in relevant format(s) Excel, CSV, PDF.



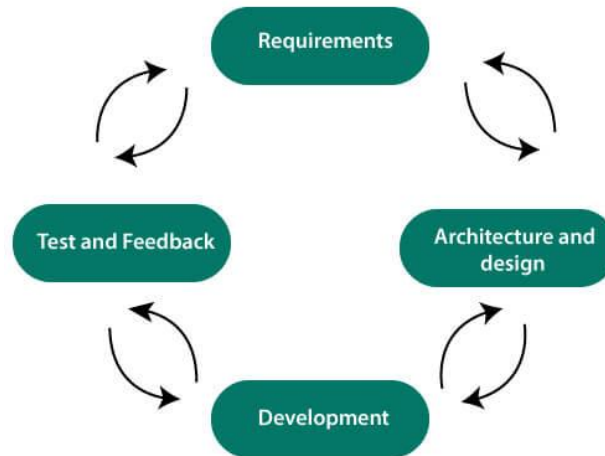
While performing the task, the following technical requirements need to be maintained:

- i) *Server/storage, domain and host:* Availability of the web-platform in NDRRMA server and storage with .gov domain host (proposed), mobile app if any, should be available in NDRRMA Google App Store. The client will be responsible to provide App Store, development server, and location to host and run application.
- ii) *Architecture of system:* The system should strictly follow existing Bipad Portal's architecture and should be developed with open-source platform (Python/Django PostgreSQL SQL, Angular JS), the firm will get the GIT access to Bipad Portal code repository. Reference: [Technical Document](#)
- iii) *Language:* The web-based online information system shall be developed in dual language English and Nepali.
- iv) *Copyright & Data privacy:* All the collected data, information, source codes, and developed application should be copyrighted to the client or the institution designated by the client. Government data privacy policy should be followed.
- v) *Electronic data interchange:* Data should be exchanged between the DRF platform and other systems (Bipad Portal, Local Level Portal etc.) to support the exchange of data, the system must provide and update a rich set of data exchange application programming interfaces (API) as per demand.
- vi) *Backup/Data Archiving and Recovery:* The system should have a built-in data archiving facility to perform archiving and ensure regular data backup. The system should have systematic and effective data backup and recovery techniques.
- vii) *Application security:* The firm should implement end-to-end SSL connections, and the firm should meet security compliance.
- viii) *Data format:* The tool must use and store data in an open format and be interoperable with other standard systems through common international standards as appropriate for specific datasets.
- ix) *Compatibility:* The application should be fully compatible with the 'projects' data server. The platform shall also allow manual feeding of new data or make any modification with different levels of necessary security provisions.
- x) *Incorporation of feedback:* All the final reports shall be submitted upon the incorporation of comments and suggestions provided by client.
- xi) *Support and maintenance:* The consulting firm is responsible for support and maintenance. The firm shall resolve all the bugs and issues in the platform during the warranty period of 1 year after the handover of the platform. The consultant shall resolve issues, including minor changes in filters and formats, without any additional cost.

#### 4. METHODOLOGY

- i) Perform System Requirement Analysis, prepare and submit the System Requirement Analysis report and work plan.
- ii) Develop an interactive, user friendly DRF platform.

- iii) Follow the Agile Software Development Life Cycle (SDLC) model.



- iv) Modular based approach and SCRUM methodology shall be used for the design and development of the system. The vendor shall initially carry out a detailed requirement study including Process Re-engineering wherever possible, which shall result in formulation of further Software Requirement Specification (SRS) document, Software Design document and associated AS-IS and TO-BE workflows.
- v) NDRRMA has already prepared 33 LDRF, the consultancy firm require to complete the entry of these LDRF into the platform prior to the final delivery.
- vi) Further, the consulting firm will provide workshop and training to all the 33 municipalities concern focal person on system operationalization.
- vii) On receiving feedback and suggestions the firm is responsible to update the platform

### **Preliminary structure of DRF Monitoring & Evaluation Platform**

- a. Activities / Plan
- b. Time Frame (Short term/Medium Term/Long term)
  - i. Planned Period (In months)
  - ii. Start Date
  - iii. End Date
- c. Expected Outcome
- d. Responsibility Agency
- e. Supporting Agency
- f. Resource Management
  - i. Internal
  - ii. External
- g. Activity Status
- h. Sectoral Activity Status
- i. Financial Progress
  - i. Internal Fund
    1. Allocate
    2. Expenditure
  - ii. External Fund



1. Allocate
  2. Expenditure
- j. Physical Progress
- i. Activity vs Output
  - ii. Field Observation
    1. Activity Remarks/Progress Remarks
    2. Activity Support Document
    3. Activity Photos
    4. Indicators (Demographic, socio-economic, risk, hazards)
    5. Means of verification
    6. Maps

## 5. DELIVERABLES:

The selected firm will present the deliverables outlined below:

- i) System Requirement Analysis:** Prepare and submit the System Requirement Analysis report and work plan as an inception report.
- ii) Platforms Development:**
  - undertake mock designs (UI and UX) for Web-based DRF Platform to discuss with the client;
  - develop separate dashboards with info-graphics representation for NDRF, LDRF;
  - platform with visual recommendation, for the disaggregated reports, info-graphics and GIS-based reporting, and interactive data visualization;
  - demo final version of the application and inclusion of the final outputs in the web-based platform, with facility to export various reports with different levels of users.
  - API to import/export data with existing Bipad Portal database and Necessary program/modules;
- iii) DRF Platform Trainings and Support:**
  - local level focal person, training and support on the developed DRF Platform.
  - organization and delivery of training sessions and their report;
  - prepare and submit the user's manual of the application, platform, and any other developed tools;
  - participation and supporting cluster meetings/workshops with local governments and handover of data with technical orientation of the whole system;
- iv) Technical Support:**
  - during entry of 33 LDRF and progress updates and monitoring;
  - during post LDRF data representation and visualization;
- v) System Handover:**
  - compile all the physical deliverables, system source code, technical report of DRF Web Platform, and other related resources with GIT access to further develop over the existing system by any other party.

## 6. TIMEFRAME AND WORK PLAN

The overall period of consulting services shall be of Six (6) months. The consultant should prepare their own time line and work plan based on the scope enlisted in the TOR during the submission of EOI.

SNO	Activity	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
1	<b>System Requirement Analysis:</b> Prepare and submit the System Requirement Analysis report and work plan.						
2	<b>Platforms Development:</b> <ol style="list-style-type: none"> <li>1. undertake mock designs (UI and UX) for Web-based DRF Platform to discuss with the client;</li> <li>2. API to import/export data with existing Bipad Portal database and Necessary program/modules;</li> <li>3. develop separate dashboards with info-graphics representation for NDRF, LDRF;</li> <li>4. platform with visual recommendation, for the disaggregated reports, info-graphics and GIS-based reporting, and interactive data visualization;</li> <li>5. demo final version of the application and inclusion of the final outputs in the web-based</li> </ol>						

	platform, with facility to export various reports with different levels of users.							
3	<p><b>DRF Platform Trainings / Knowledge Transfer:</b></p> <ol style="list-style-type: none"> <li>1. local level focal person, training and support on the developed DRF Platform. Make sure 33 Local level whose LDRF has been completed should be able to update the progress via this DRF platform.</li> <li>2. organization and delivery of training sessions and their report;</li> <li>3. prepare and submit the user's manual of the application, platform, and any other developed tools;</li> <li>4. participation and supporting cluster meetings/workshops with local governments and handover of data with technical orientation of the whole system;</li> </ol>							
4	<p><b>Technical Support:</b></p> <ol style="list-style-type: none"> <li>1. during entry of 33 LDRF and progress updates and monitoring;</li> <li>2. during post LDRF data representation and visualization;</li> </ol>							

5	<b>System Handover:</b> 1. compile all the physical deliverables, system source code, technical report DRF Web Platform, and other related resources with GIT access to further develop over the existing system by any other party							
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## **7. PROCUREMENT METHOD.**

The consulting service shall be procured through Consultant Qualification Selection (CQS) method.

## **8. ADMINISTRATION OF SERVICES**

The Consultant shall be based in NDRRMA PIU office, Kathmandu with necessary visit to project districts. The Consultant's services will be administered and monitored by the Project Director or his authorized representative.

## **9. QUALIFICATION AND EXPERIENCE OF THE FIRM/KEY EXPERTS**

The consulting firm should have at least five years of general experience. The firm should have the specific experience of developing at least 2 web-based application platform.

**The staffing requirements of key personnel and non-key personnel for this assignment shall include a minimum of the following position.**



S N	Personnel	Indicative		Educational Qualification	Experience	Indicative responsibilities
		No	Total Inputs in man months			
1	System Analyst (IT-Lead)	1	2.2	Masters in IT/ICT/Computer engineering/Computer Application	<p>S/he should have relevant skills and exposure in managing Information Technology Projects with the general experience of 10 years and minimum of 8 years of specific experience in managing large scale Enterprise Applications</p> <p>Technology/Project Management Certification, Training, or Specialization will be preferred</p>	<p>The team leader is responsible for communication, planning, and management of the Web-based monitoring and reporting platform development.</p> <p>Communication and coordinate with NDRRMA and the Development Team</p> <p>Evaluate and ensure that the software meets the requirements and objectives of the work</p> <p>Select technology, develop standards, and manage development operations.</p> <p>Formulate project plan and timeline as per the RFP and get the work done within the timeline.</p> <p>Develop and implement a Risk</p>

						<p>management plan for the project</p> <p>Be able to communicate effectively and motivate the team</p> <p>Well versed in architecture development and data management</p> <p>Ensure the quality of the project.</p> <p>Review IT-related reports in coordination with other IT Teams.</p> <p>Take a lead role in IT-related trainings and workshops.</p>
2	Senior. Software Developer /Programmer	2	3.5	Bachelors in IT/ICT/Computer engineering/Computer application	<p>Minimum 5 years general experience and 3 years in specific experience in the field of Software Development and should have specific experience as a <b>software programmer</b> in at least one enterprise-level application.</p> <p>Experience with Open Source MVC framework. Proficiency in Python/Django PostgreSQL/ MySQL, Angular/React JS, and GEO</p>	<p>Designing, building, and testing the platform software. Work with the technical lead to develop the system architecture for web applications.</p> <p>Setup a system development, deployment workflow</p> <p>Create documentation that describes installation procedures, configurations, connections, basic programming logic/coding, and system corrections or updates</p> <p>Develop application modules, follow</p>

					server	<p>standard coding guidelines and write clean and maintainable codes.</p> <p>Monitor the system and provide technical support in resolving any technical issues</p> <p>Extract data from a variety of relational databases, including SQL, and manipulate, explore data using quantitative, statistical, and visualization tools.</p>
3	Software Developer/Programmer	2	5	Bachelors in IT/ICT/Computer engineering/Computer application	<p>Web Developers shall have a bachelor's degree in computer engineering, Information Technology or Computer Science degree or equivalent, working experience of minimum of 3 years of general experience and 2 years of specific experience in the field of android app development. S/he shall have specific experience as a software programmer in at least one enterprise level web application.</p> <p>Experience with Open</p>	<p>Support in the validation and quality assurance of the collected data Software developers should assist senior developer in the development of DRF web platform, documentation, data analysis, and data presentation/visualization.</p>

					Source MVC framework. Proficiency in Python/Django PostgreSQL/ MySQL, Angular/React JS, and GEO server	
4	GIS Expert	1	1.5	Bachelor in Geomatics engineering, computer Engineering. Information Technology or equivalent.	Professional skill of GIS having minimum of 5 Years of general experience and 3 years of specific experience in the field of GIS implementation. Knowledge of QGIS/Arc GIS and GEO Server is preferable,	Preparation of maps (especially hazard maps)  Standardizes and defines metadata for geographic data.  Creates and implements standards for the quality of the geographic information system.  Performs analysis and interpretation of GIS Data.
<b>Qualification and Responsibilities of Non-Key-experts (shall not use in evaluation)</b>						
5	Designer UI/UX Designer	1	1.5	Bachelors in IT/ICT/Computer engineering/Computer application	Minimum 3 years of general experience and 2 years of specific experience in the fields of UI/UX web app frontend using UI design tools such as Photoshop, Illustrator, and Sketch.  Proficient understanding of android platform, Bootstrap,	Optimize application for maximum speed and scalability  Perform the quality test in the procedure of app development and server configuration.

					HTML5, CSS3, JavaScript, ES6, and ReactJS.	
6	Documentation Officer (IT)	1	1.5	Minimum +2 pass Bachelors in IT/ICT/Computer engineering/Computer network	Experience in office management Minimum 3 years of working experience in the field of documentation for software development and IT consultation	<p>Supports in the administrative works in the consulting office. Prepare systematic documentation of all IT developments in the project.</p> <p>Coordinate with all IT Team and compile all the documents relating to development process, framework used system flowchart, program codes, and other related information.</p> <p>Ensure all codes and modules are well commented on for future reference.</p> <p>Prepare API documentation as necessary.</p> <p>Prepare sufficient technical and user guideline for future system update and the system uses.</p> <p>User Consultation</p>



## **Health & Safety Requirements**

The consulting firm should provide the evidence of implementation of projects considering health and safety protocol defined by Ministry of Health and Population including personal health and safety, COVID – 19 and other communicable diseases protocols.

## **10. ADMINISTRATION OF SERVICES**

The Consultant shall be based in NDRRMA PIU office, Kathmandu with necessary visit to project districts. The Consultant's services will be administered and monitored by the Project Director or his authorized representative.

## **11. MODE OF PAYMENT**

The contract shall be lump-sum. Following payment mode shall be made:

- ✓ 20% of the contract price: After submission and approval of the inception report
- ✓ 20% of the contract price: After presentation of the draft developed DRF web platform and submission and approval of draft reports and annexes
- ✓ 20% of the contract price: After presentation of the final developed DRF web platform and submission and approval of related final reports/annexes, operation manuals and others instructed by IT team leader of NDRRMA.
- ✓ 20% of the contract price: After the entry of 33 LDRF into the platform.
- ✓ 20% of the contract price: After completion of technical support, knowledge transfer and trainings and submission and approval of training manuals and others instructed by IT team leader of NDRRMA.