

GeoNode Product Manager

Terms of Reference (ToR)

The Global Facility for Disaster Reduction and Recovery (GFDRR) is recruiting a Short Term Consultant (STC) to coordinate development of GeoNode open source projects.

Background

GFDRR - The <u>Global Facility for Disaster Reduction and Recovery</u> (GFDRR) is a partnership of the World Bank, United Nations, major donors and recipient countries under the International Strategy for Disaster Reduction (ISDR) system to support the implementation of the Hyogo Framework for Action (HFA). Launched in September 2006, GFDRR provides technical and financial assistance to help disaster-prone countries decrease their vulnerability and adapt to climate change. GFDRR works closely with UN agencies, client governments, World Bank regional offices, and other partners.

Innovation Lab - To meet the needs of a rapidly changing world, the <u>GFDRR Innovation Lab</u> supports the use of science, technology, and open data in promoting new ideas and the development of original tools to empower decision-makers in vulnerable countries to strengthen their resilience. Recent innovations in the field have enabled better access to disaster and climate risk information and a greater capacity to create, manage, and use this information. Innovation Lab activities are designed and implemented in partnership with government institutions and key international and local partners, ensuring that all activities add value in planning, operational, and recovery activities.

OpenDRI - In 2011, GFDRR Innovation Lab launched the <u>Open Data for Resilience Initiative</u> (OpenDRI) to apply the concepts of the global open data movement to the challenges of reducing vulnerability to natural hazards and the impacts of climate change. OpenDRI supports World Bank Regional Disaster Risk Management (DRM) Teams to build capacity and long-term ownership of open data projects with client countries that are tailored to meet specific needs and goals of stakeholders. The OpenDRI team, in partnership with international and national agencies, has developed a suite of complementary activities to support the client governments:

Open data platforms: To increase public access to risk information, OpenDRI engages in
dialogue with governments on the value of open data through working groups, pilot
projects that evolve into long-term locally owned open data projects. OpenDRI provides
technical solutions and assistance for the project implementation through GeoNode, a
free and open source data sharing platform.

- Community mapping and crowdsourcing: To engage communities in the creation of
 accurate and timely data about the rapidly evolving urban and rural environments in the
 place they live, OpenDRI works with governments and local communities to utilize
 simple, collaborative, crowdsourcing mapping tools such as OpenStreetMap.
- Risk visualization and communication: To communicate risk more effectively to decision-makers in planning, preparedness and response activities, OpenDRI works with governments and partners to develop InaSAFE software. By combining data from scientists, local governments and communities, InaSAFE provides insights into the likely effects of disaster events.

Duties and Responsibilities

The consultant will work under supervision of the OpenDRI team leader and in coordination with technical and DRM staff at GFDRR Innovation Lab. While this position will focus specifically on the GeoNode project, it is desirable that candidates will also have practical knowledge with other <u>software projects</u> of the Open Source Geospatial Foundation (OSGeo).

The ideal candidate is a **product manager**, responsible for orchestrating the various activities associated with ensuring that GeoNode-based projects and applications are delivered to the expectations of users' needs. As GFDRR hosts a range of GeoNode instances, both for internal and external use, the consultant will represent the needs of internal staff, DRM colleagues from partner organizations, and government officials from World Bank client countries.

The product manager will be responsible to evaluate the current GeoNode roadmap and interact with the community of developers and stakeholders to set out a vision and implementation plan for the next-generation version of the software. Working with firms hired by GFDRR to develop new features and provide support for GeoNode, the consultant will also ensures an atmosphere of focused collaboration in the interest of driving GeoNode's adoption and success.

Activities for this contract will be organized around the following components:

- Management of GeoNode Development Contracts GFDRR through OpenDRI supports the development of core and custom GeoNode features based on user needs assessments and specific requirements from GeoNode implementations by World Bank clients. In support of these development activities, the consultant will:
 - a. Prepare Terms of Reference (ToR) documents, defining objectives, prioritizing features development, and scope of contracts with external service providers.
 - b. Coordinate work activities with hired service providers.
 - c. Communicate and discuss with the GeoNode community proposed activities and coordinate responsibility of development efforts around core features.
 - d. Report on development progress to OpenDRI team and GeoNode community.

- Participation in GeoNode Community As one of the founding members of the GeoNode project, over the years GFDRR has been actively participating in the community of developers and users. Responsibilities to continue this effort may include:
 - a. Support the organization of annual GeoNode Summit event.
 - b. Facilitate and organize in-person code sprint meetings.
 - c. Participate in mailing lists, GeoNode social media, and Github issues tracker.
 - d. Attend PSC meetings and provide input to roadmap discussions.
- 3. **Design of GeoNode v3 Architecture** At the recent <u>summit in Torino</u>, ideas for core architectural improvements toward GeoNode v3 were discussed. The consultant will be responsible for leading the development roadmap for next-generation GeoNode, and coordinate stakeholder interests in funding the development. In particular:
 - a. Lead developer and user community discussions on GeoNode v3 architecture design and implementation options.
 - b. Draft the foundational architecture of the code-base refactor needed for v3.
 - c. Estimate the level of effort and funding requirements to implement v3, create a ToR document that defines scope of work for development activities.
- 4. Harmonization of Risk Information Platforms In efforts to improve access to risk information and standardization of risk data formats, GFDRR has developed, three platforms <u>ThinkHazard!</u>, <u>Lab's GeoNode</u> and <u>HEV-E</u> all of which rely on GeoNode at their core, for managing and sharing risk data in standard formats. In order to streamline the range of products offered by GFDRR Innovation Lab, the consultant will:
 - a. Work closely with senior Labs management in relation to product design and strategy decisions, providing rapid prototyping/wireframing, and researching technical solutions and feasibility of proposed harmonization plan.
 - b. Ensure alignment with broader standardizations efforts in the field of open data standards (DCAT, Schema.org, etc.) and risk data standards (UN-GGIM, etc.)
- 5. GeoNode Support OpenDRI promotes the use of GeoNode in the context of DRM projects and risk information sharing initiatives in many World Bank client countries. The consultant will be responsible to respond to technical support requests, directly by addressing the issues, or indirectly by facilitating interaction with the community of developers and commercial GeoNode service providers.

Selection Criteria

Key qualifications for this assignment include:

- Product management experience in open source software projects.
- Ability to interact with online communities of different cultures and languages, promoting inclusion and participation of stakeholders towards common roadmap goals.

- Project management skills, including tracking and organizing budgets, iterative and collaborative approaches to product development, communicating with service providers and developers.
- Understanding of modern programming languages and Web frameworks.
- Patient and easily adaptable to suddenly changing priorities.
- Ability to work independently but also a strong team player and motivator
- Fluent in English, good communicator, and able to work in an environment of diverse cultures and timezones.

The initial expected length of this contract is <u>50 days</u>, with potential of extension upon satisfactory performance and availability of funds.

The consultant can be based in Washington DC or work remotely through reliable internet connectivity from any location within time zones UTC-5 and UTC+2.

Applications must be sent by email to cgiovando@worldbank.org