Position: GIS Developer/data analyst for risk assessment

Contract type : Consultancy
Reports to: Joint Research Center (JRC)
Duration: 12 months renewable subject to good performance.
Duty Station: ISPRA, Italy

BACKGROUND AND RATIONALE

Context and introduction

The advertised consultancy is to be funded by DFID. NRC/ACAPS is contracting this position. The selected consultant will be hosted by the Joint Research Centre (JRC) of the European Commission in Ispra, Italy. DFID supports the maintenance and further development of the INFORM initiative to meet the needs of the humanitarian and development community. This includes the maintenance of the INFORM Global Risk Index, as well as the further development of additional analysis products under INFORM, including the Global Crisis Severity Index and Dynamic Risk Monitor.

JRC is the technical and scientific lead partner of INFORM and has led the development of INFORM methodology. JRC has a portfolio of risk assessment projects covering technological, man-made and natural disasters. Under the Disaster Risk Management Knowledge Centre (DRMKC) the JRC is developing a system for storing hazard, exposure, vulnerability and coping capacity data for all types of the disasters. Within this environment, JRC is responsible for the continuous maintenance of the INFORM Global Risk Index. To further support the needs of INFORM's partners from humanitarian and development community, JRC will be offering additional technical and scientific support through the development of new INFORM features and related products.

Objectives

The selected consultant will work in the development team in the JRC to further develop the INFORM Global Risk Index to meet the needs of the humanitarian community, based on risk analysis, with specific emphasis on GIS processing of hazard, exposure, vulnerability and coping capacity data.

The consultant will be responsible for the maintenance of INFORM Global Risk Index, as well as supporting methodologies for the development of other INFORM products such as the INFORM Global Crisis Severity Index and INFORM Dynamic Risk Monitor (3-12 months early waning timeframe) at global level.

The results of these pieces of work will be presented in the form of accessible GIS-based risk models, cartographic output, web maps, indicator tables and technical reports.

PURPOSE OF THE CONSULTANCY

Description of Tasks

The consultant will be expected to contribute to and / or lead all the tasks listed below:

- Maintenance of the INFORM GRI and updating it twice per year
- Further development and maintenance of the GCSI aggregation method (model)
- Research on the possible concepts and design of the model for the INFORM Dynamic Risk Monitor (3-12 months early waning timeframe) at global level considering the user needs, the availability of data and the outcomes of sensitivity analysis.

This work will involve:

- Analysis of the integration of different information systems
- Study and design of data analytics systems, according to requirements
- Data analysis and modelling, analysing spatial data using geoprocessing tools and designing digital maps with geographic data and various other data sets:
    - Creation of GIS-based risk models, collect, process and store indicator and GIS data, and calculate risk outputs for countries
    - Creation of modelled outputs, including interactive maps, interactive tables and search/filter facilities for indicators and results
- Constructing composite indicators, statistical analysis and treatments for missing data
- Preparation of technical documentation, evaluation and reporting
- Attending project meetings, including joining missions, to discuss concept and methodology, as well as present the results to users and partners of INFORM

QUALIFICATIONS AND SPECIALIZED KNOWLEDGE/SKILL REQUIRED

- An advanced university Master's Degree or higher in social sciences, statistics, geoinformation science and earth observation, engineering or related field experience.
- Minimum of five to seven years of progressively responsible professional work experience in monitoring and data analysis, particularly with experience on risk assessment models.
- Proven experience in data analysis and report writing to disseminate key data and findings to non-technical audiences.
- Excellent time management and communication skills.

Profile and level

- Disaster Risk Reduction expert
- Data Analyst expert

Knowledge and skills

- Experience with GIS systems
- Experience with risk analysis
- Experience with disaster risk reduction

Essential skills

- Experience with SQL Server
- Experience with Excel advanced procedures
- Capability for modelling service data and reference models;
- Good knowledge of mathematical / statistical concepts
- Knowledge of interoperability technology (e.g. web services, message-oriented middleware, service oriented bus)

Specific expertise
- Good knowledge of modelling tools for risk assessment

General skills
- Capacity to work efficiently in a multi-disciplinary environment.

Language
- Fluency in oral and written communication in English.

WORKPLACE

The consultant will be based in Ispra, Italy. The Consultant shall be ready to undertake national and international travel during the assignment period, if required, to organize and participate in field visits, meetings, events and/or workshop. The travel expenses related to discharge of the duties for the assignment will be reimbursed in accordance with NRC/ACAPS rules and procedures.

How to apply: Interested candidates should submit the following documents via jobs@acaps.org

- Cover Letter describing previous experience in this area and how to ensure they will meet the required deadlines and key milestones.
- **CV and personal history form**
- The documentation of the consultant's business registration

❖ *Please indicate your availability and daily/monthly rate (in EURO) to undertake the terms of reference above (including any relocation cost, if applicable). Applications submitted without a daily/monthly rate will not be considered. Also, please mention the earliest date you can start.*