Terms of Reference: Linked Open Data Web Developer

Background
This web developer consultancy is for an individual consultant. The duration is 7 months from 1-June. The consultant will report to an Information Management Officer in the Information Services Section for the Office for the Coordination of Humanitarian Affairs (OCHA) in Geneva, Switzerland. Pay will be commensurate with experience of the chosen consultant.

The consultant will provide support in the development of web-based tools necessary for the Humanitarian Exchange Language (HXL) project (http://hxl.humanitarianresponse.info).

Duties
In consultation with OCHA and other relevant HXL stakeholders, the contractor will:

- Coordinate with the volunteer technical community to further the development of the Excel to HXL data translation tool (HXLator).
- Assess the needs, define the scope and build HXL approval workflow tools to support cluster-level cleaning and approval of submitted HXL datasets. A prototype will be built, tested in the field and revised based on field testing outcomes.
- Assess the needs, define the scope and build a Humanitarian Data Browser which provides intuitive access to data in the HXL triple store through fixed and custom queries and outputs data in tabular formats and as graphs, maps, and other relevant visualizations as well as downloadable files. A prototype will be built, tested in the field and revised based on field testing outcomes.
- Assess the needs, define the scope and build a dashboard tool which provides real-time summary visualizations of data in the HXL triple store. A prototype will be built, tested in the field and revised based on field testing outcomes.
- Other duties as required.

Deliverables
- Specification documents
  - o HXLator
  - o HXL Data Browser
  - o HXL Data Dashboard
- Prototype web-based tools linked to the HXL triple store
  - o HXLator
  - o HXL Data Browser
  - o HXL Data Dashboard
- Mechanism for tracking feedback during field testing of the prototypes
- Revised versions of each tool based on issues identified during field testing
  - o HXLator
  - o HXL Data Browser
  - o HXL Data Dashboard

Competencies

Technological Experience and Awareness: Experience developing websites using PHP and Javascript with a database backend; experience developing web-based mapping applications, experience with RDF triple-stores and SPARQL; web development project design experience; experience in development of extensions for MS Excel desirable.

Professionalism: Knowledge and understanding of theories, concepts and approaches relevant to the collection and management of information web-based environments. Ability to identify issues, analyze and participate in the resolution of issues/problems. Ability to conduct data collection and processing using various methods; Ability to apply judgment in the context of assignments given, plan own work and manage conflicting priorities. Shows pride in work and in achievements; demonstrates professional competence and mastery of subject matter; is conscientious and efficient in meeting commitments, observing deadlines and achieving results; is motivated by professional rather than personal concerns; shows persistence when faced with difficult problems or challenges; remains calm in stressful situations. Takes responsibility for incorporating gender perspectives and ensuring the equal participation of women and men in all areas of work.

Communication: Speaks and writes clearly and effectively; listens to others, correctly interprets messages from others and responds appropriately; asks questions to clarify, and exhibits interest in having two-way communication; tailors language, tone, style and format to match audience; demonstrates openness in sharing information and keeping people informed.

Teamwork: Works collaboratively with colleagues to achieve organizational goals; solicits input by genuinely valuing others' ideas and expertise; is willing to learn from others; places team agenda before personal agenda; supports and acts in accordance with final group decision, even when such decisions may not entirely reflect own position; shares credit for team accomplishments and accepts joint responsibility for team shortcomings.

Creativity: Actively seeks to improve GIS and SDI services; offers new and different options to solve problems or meet client needs; promotes and persuades others to consider new ideas; takes calculated risks on new and unusual ideas; thinks "outside the box"; takes an interest in new ideas and new ways of doing things; is not bound by current thinking or traditional approaches.

Client Orientation: Considers all those to whom services are provided to be "clients" and seeks to see things from clients' point of view; establishes and maintains productive partnerships with clients by gaining their trust and respect; identifies clients' needs and matches them to appropriate solutions; monitors ongoing developments inside and outside the clients' environment to keep informed and anticipate problems; keeps clients informed of progress or setbacks in projects; meets timeline for delivery of products or services to client.

Education
University degree or equivalent in information systems.

Work Experience
Minimum of 5 years of progressively responsible relevant professional experience

Language
Fluency in oral and written English is essential