

# Job Description:

## Knowledge Engineer (consultant)

### LAND PORTAL FOUNDATION

The [Land Portal](#) Foundation is seeking a dynamic and highly motivated Knowledge Engineer to join our dynamic open data team in charge of selecting, curating and ingesting different types of land-related data into the Land Portal. The Knowledge Engineer will ensure all data harvested and published by the Land Portal responds to open data standards and FAIR principles. He/She will also contribute to advocacy and capacity building efforts to promote the adoption of such principles by the land community.

The successful candidate will also be welcomed into a small, dedicated and disbursed [team of international professionals](#) that make up the Land Portal. The Land Portal is an inclusive space and we encourage applications from women, and candidates from the Global South.

### Organizational profile

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At the Land Portal, we believe that data and information are powerful tools for achieving our vision of a land governance system that benefits those with the most insecure land rights and the greatest vulnerability to landlessness. However, information sources remain highly fragmented, unstructured, poorly curated and represent a narrow range of perspectives; they continue to be published in ways that do not facilitate maximum discovery, engagement and reuse. Until policy and decision-makers, intermediaries and grassroots groups have access to the data and information they need to make sound decisions, their initiatives will fail to achieve maximum impact.

The Land Portal exists to fill in these gaps, and to nurture a vibrant online platform to inform and engage with partners. We do this by promoting open data and the sharing of best practices and stimulating debate and collaboration both on and offline. We provide a vital bridge for those grappling with complex land governance issues, from researchers and NGOs through to governments and grassroots communities, by connecting people, facilitating dialogue and by mending fragmented information.

Raising awareness of “open data” and the critical role it plays in realizing tenure security for individuals and communities around the world continues to be a great challenge. To this end, we make use of every possible conference, meeting and speaking engagement to promote the concept of “going open,” while recognizing that, given the highly sensitive nature of land data (particularly for vulnerable communities), not everything can or should be made entirely open.

We set out an ambitious new strategy in 2019 to improve the documentation, mapping and monitoring of land governance issues; enrich and inform the global debate on land rights; and democratize access to the land governance “information ecosystem” and improve the flow of data

between diverse actors. The Knowledge Engineer plays an important role in building this information ecosystem.

## Job Description

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The Knowledge Engineer will be responsible for data ingestions and updates in the Land Portal database, which includes bibliographic (publications etc.), statistical, spatial and project datasets. He/She will also contribute to advocating open data standards to our partners and in capacity building efforts.

### Principal Tasks & Responsibilities:

- 1. Keep the Land Portal Database constantly up-to-date and curated by updating statistical, bibliographic, spatial and project data and by checking and correcting any errors;**
- 2. Keep documentation for all importers up-to-date;**
- 3. Ingest new statistical, bibliographic, spatial and project data in the Land Portal database, based on [Land Portal priority themes](#) and in coordination with the specific team members. This includes:**
  - Collaborating with the Knowledge Network Coordinator and Information Management & Advocacy Officer to develop quarterly data plans and prioritize sources for ingestion; assist in communication with data providers and other external parties;
  - Together with the Data Curator, perform preliminary quality checks of the data according to Land Portal's data models for the different data types;
  - Run web-crawlers and/or work with API, JSON and CSV files to harvest data;
  - Work with Python to generate RDF graphs and upload RDF data to Virtuoso and display it in Drupal;
  - For bibliographic data importers, analyze and curate external metadata by running a customized model that assigns Land Portal's themes to each resource. Map external data (metadata models, taxonomies, etc.) to [Land Portal Library's data model](#) and coordinate with the Data Curator to complete any missing metadata before the ingestion;
  - Support the process of migration of the [Land Governance Programme Map & Database](#) to the Land Portal, including the harvesting of project data from the [d-portal](#) (based on the [IATI standard](#)). This will be done in coordination with the Data Curator, Web-Manager and external partners.

## Qualifications and skills

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The successful candidate will be selected against the following:

**Required:**

- University Education (Masters level or higher, or equivalent) in Computer Science, Software Engineering or any other relevant fields;
- Strong programming skills in Python;
- Proven experience in data management and working with RDF graphs (2 to 5 years);
- Strong knowledge about open data, semantic web, linked data, controlled vocabularies and data sharing technologies;
- Ability to understand complex data architecture and the architectures of different digital infrastructures;
- Ability to document the business process model (BMP) and to document tools and script implemented during the assignment;
- Knowledge of Pandas Library;
- Knowledge about data and metadata standards;
- Knowledge of Virtuoso;
- Fluency in English;
- Superior attention to detail;
- Good drafting, communicating and presenting abilities;
- Experience working as part of an international, remote team;
- Disciplined - good at managing time;
- Strong capacity to work in a team, autonomously, and respect tight deadlines.

**Desirable, as a plus:**

- Some knowledge of Drupal content management system;
- Knowledge of land governance related issues and land data;
- Knowledge of other languages besides English

## Personal and Professional Attributes

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- Inclusive and effective communication skills and techniques with an ability to respectfully engage with, and communicate concepts to others;
- High standard of ethics and integrity which inspires trust and confidence;
- Enthusiasm and commitment to sustained effort through diligence and pursuit of high standards;
- Commitment to ongoing personal and professional development which drives best practice;
- Proactively utilizes initiative, innovation and a commitment to continuous improvement;
- Strong collaborative skills which enable effective engagement within a high functioning, cohesive team;
- Ability to employ sound judgement and decision making amongst competing demands;
- Ability to show initiative in planning and developing new ideas and approaches, and to implement and communicate change effectively;
- Problem-solving attitude;
- Diplomacy, team spirit and willingness to take initiative;
- Ability to meet strict deadlines.

## Reporting

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The Knowledge Engineer will report directly to the Land Portal Team Leader and will be accountable to the Board of the Land Portal Foundation. She/he will work under the supervision of the Knowledge Network Coordinator and Land Information Management & Advocacy Officer and will report time spent against the ToRs every month in the Land Portal Foundation's Timesheets; She/he will develop weekly and quarterly work plans in close cooperation with the aforementioned Land Portal team members and will report accordingly.

## Position

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This position is home-based and will be staffed on a part-time (up to 2 days/week) consultancy basis. The official language for this position is English. The consultancy fee will depend on experience and seniority. The consultancy starts with an agreement for one year (including a probationary period for the first three months) and has the option of prolongation for another year.

## How to apply?

Please send your **curriculum vitae (CV)** and a **cover letter** explaining your interests and qualifications (addressed to Laura Meggiolaro, Land Portal Team Leader) no later than **17 June 2022** midnight CET and email your cover letter and CV to [jobs@landportal.info](mailto:jobs@landportal.info).

Include two references for similar work who can be contacted. University references are also accepted.

**Please write "Knowledge Engineer – Job Application" as the subject of the email.**