# Data Engineer

**Vacancy – Terms of reference**

## Job description

**PURPOSE:** The Data Management Engineer position aims to design, develop and maintain systems to integrate and process data, including big data. The candidate will lead and oversee the day-to-day execution of projects that will integrate and/or provide data on demand to a variety of data applications. This person will also actively contribute to the design and delivery of projects/modules, review code and implement best practices to enhance LifeWatch ERIC technology platform.

**JOB TITLE:** Data Management Engineer/Developer

**LOCATION:** ICT-Core premises in Seville, Spain

**POSITION:** Full-Time

**FUNDING RESOURCES:**  Projects Horizon Europe among others.

## Main responsibilities

- Investigate standardised vocabularies, ontologies, and data management procedures relevant to LifeWatch ERIC and participate in international meetings and working groups to contribute to the development of new vocabularies and standards;

- Contribute to the process of harmonisation and standardisation of data, covering the different steps during the full data lifecycle (e.g., data collection, data documentation - metadata-, data integration - repositories, analysis and visualisation) in both domain-specific and cross-domain standards;

- Support the engagement with stakeholders, including researchers, policymakers, and industry partners, in the development of our data infrastructure and tools, ensuring alignment with their needs and priorities;

- Support the development and implementation of Data Management Plans following LifeWatch ERIC and European Commission guidelines;

- Participate and lead sessions to design demos, prototypes and workshops for testing and training with users and other IT associates;

- Ensure that the data FAIRness (Findable, Accessible, Interoperable, Reusable) principles are upheld;

- Contribute to the implementation and continuous improvement of LifeWatch ERIC data management framework;

- Lead efforts in evaluating and adopting emerging technologies and methodologies for data management, including artificial intelligence and machine learning, to improve data processing, analysis, and predictive capabilities in environmental sciences;

- Collaborate with IT and cybersecurity teams to ensure the integrity, security, and privacy of data across the LifeWatch ERIC infrastructure, adhering to the latest standards and best practices in data security;

- Implement quality control and assurance protocols for data management processes to ensure the accuracy, reliability, and credibility of data within the LifeWatch ERIC infrastructure;

- Engage in the development of a comprehensive data policy for LifeWatch ERIC, addressing issues such as data sharing, intellectual property, and ethical considerations in collaboration with legal and policy experts;

# The ideal candidate should meet the following requirements

- A bachelor's degree in Computer Science, Information, Technology or Software Engineering, or relevant training in the field is preferred;

- Minimum 3-year experience as data engineer, developer or similar role;

- Knowledge and experience on environmental sciences data it would be a plus;

- Expertise in semantic data management and a solid understanding of RDF (Resource Description Framework), SPARQL, and APIs for data access and manipulation;

- Experience in designing and developing data pipelines, include ingestion, standardisation, metadata management, business rule curation, data enhancement, and statistical computation against data sources that include relational, XML, JSON, streaming, REST API, and unstructured data;

- Familiarity with standardised vocabularies, ontologies, and data management procedures;

- Knowledge on relational databases and knowledge graph;

- Proficiency in programming languages (e.g., Python, R) and data management tools is desirable;

- Knowledge of GIS (Geographic Information Systems) and remote sensing techniques is a plus;

- Research background and a research-oriented mindset are preferred;

- Proficiency in English (C1 level) is required;

- Proven organisation and communication skills, proactivity, capacity to work in teams and under tight deadlines, in international environments and in multi-language contexts;

- Participation in Framework Programme projects (Horizon 2020, Horizon Europe) is desirable;

- Availability to travel abroad occasionally according to the specific working needs of this position;

- Ability to learn and develop skills as needed to support services outside of this job description.

- High-standard of work ethics.


## The vacancy is subject to the following procedure

- A **short cover letter** and **Curriculum Vitae** [1] **(EUROPASS format and annexes, 4 pages at the most)** shall be written in English and submitted by **15-June-2024**. Please use the form available at this link: **https://zfrmz.eu/KHxMv15EmgLXfczD6kdD**

- The selection process will follow the Employment Policy of LifeWatch ERIC;

- Only shortlisted candidates will be re-contacted. Selected candidates may be called for an interview. Interviews will take place from **15 June 2024 to 30 June 2024**;

- A gross salary between 40.000-50.000 €, based on the qualifications and experience of the candidate, will be offered. Employment will be in Spain, follow Spanish employment law and subject to a 180-day trial (probation) period;

- This position is Full-Time. Her/his main office will be located at the ICT-Core premises in Sevilla, Spain, without prejudice to the establishment of others in the future;

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[1] According to Spanish Privacy Protection Orgánica 3/2018 any resume not mentioning explicitly the following wording: 'I authorise the use of my personal data in accordance with RGDP and Ley Orgánica 3/2018 will be automatically deleted from our database and consequently not taken into consideration.

- Start date in office for the **Data Management Engineer/Developer**: **01 September 2024.**

**LifeWatch ERIC is an equal opportunity employer, and encourages all qualified candidates to apply, regardless of ethnicity, gender, age, national origin, or sexual orientation.**