

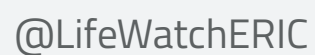
LIFEWATCH ERIC

FACT SHEET FOR THE SCIENTIFIC COMMUNITY

LifeWatch ERIC provides scientists and researchers access to biodiversity and ecosystem data, services and research products to derive evidence-based knowledge for scientific and policy purposes.

MISSION

LifeWatch ERIC aims to accelerate the research effort of the scientific community by delivering a state-of-the-art e-science research infrastructure on biodiversity and ecosystems.



--> Netherlands

The **Virtual Laboratory and Innovations Centre** coordinates and manages the requirements and needs analysis, the design and implementation of the scientific case studies and the products of the LifeWatch ERIC Virtual Laboratories.

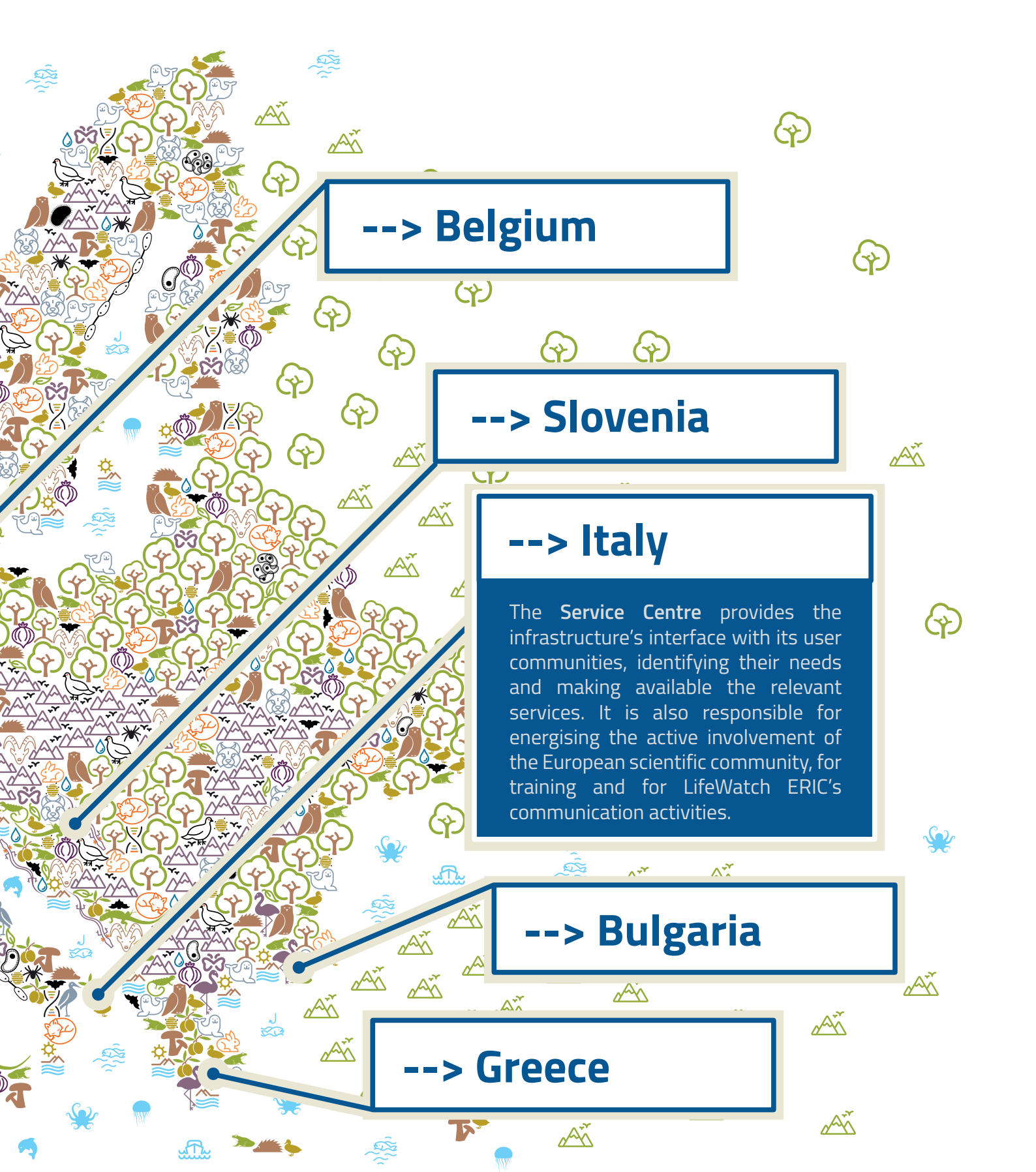
--> Spain

The **Statutory Seat** and the **ICT e-Infrastructure Technical Offices** jointly assist the functioning of the infrastructure, the former being the coordinator of all legal, administrative and institutional activities, and the latter responsible for managing the distributed ICT e-Infrastructure operations and implementation.

--> Portugal

LifeWatch ERIC is composed of 3 Common Facilities hosted in Spain, Italy and the Netherlands. Each of the 8 Member States hosts a Distributed Centre which contribute with expertise and resources to the overarching LifeWatch ERIC infrastructure, enabling it to operate at national, European, and global levels, as a single Research Infrastructure.

To find out more about the structure and roles of each component of the infrastructure visit: <https://www.lifewatch.eu/organisation-governance/>



--> Belgium

--> Slovenia

--> Italy

The **Service Centre** provides the infrastructure's interface with its user communities, identifying their needs and making available the relevant services. It is also responsible for energising the active involvement of the European scientific community, for training and for LifeWatch ERIC's communication activities.

--> Bulgaria

--> Greece

As of 2024, LifeWatch ERIC membership consists of Belgium, Bulgaria, Greece, Italy, Netherlands, Portugal, Slovenia and Spain.

Want to join LifeWatch ERIC?
<https://www.lifewatch.eu/how-to-join/>



BENEFITS FOR THE SCIENTIFIC COMMUNITY

Scientific Excellence

The scientific communities connected to LifeWatch ERIC gain access to disruptive technologies through which they can create knowledge and innovation for the grand challenges of biodiversity and ecosystems to be addressed.

Enhanced Access to Research Resources

Joining LifeWatch ERIC provides member countries with access to vast and diverse biodiversity data repositories, specialised analytical services, customisable workflows,

Virtual Research Environments and other research products, promoting national scientific research and innovation.

Collaboration and Knowledge Sharing

LifeWatch ERIC's network supports scientific collaboration at national, regional and international levels, by connecting researchers from multiple disciplines and domains of science, removing the barriers between them and promoting the resulting knowledge, the synthetic knowledge.



STRENGTHS OF LIFEWATCH ERIC

Recognised European Biodiversity Infrastructure

LifeWatch ERIC is a Landmark European infrastructure under the European Strategy Forum on Research Infrastructures (ESFRI).

Expertise and Innovation

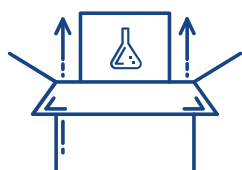
LifeWatch ERIC's team includes engineers and scientists working on specialised digital solutions and applications for biodiversity.

Pioneering Tools and Technologies

LifeWatch ERIC has developed unique middleware solutions and VREs not found in other research infrastructures, enhancing its ability to connect diverse datasets and facilitate interdisciplinary research.

International, European and regional networks of excellence

LifeWatch ERIC participates in over 30 projects and collaborates with other European infrastructures and initiatives, such as the European Open Science Cloud (EOSC).



Invasive Species Management

Scientists can use predictive modeling to analyse data on species invasion in relation to climate change conditions, and their ecological impacts. They use the results to forecast the spread of invasive species and suggest mitigation measures, inform policies for targeted prevention and control measures, minimising economic loss and preserving biodiversity.

Ecosystem Health Monitoring

LifeWatch ERIC's virtual environments allow researchers to model ecosystems in response to various environmental drivers (e.g., pollution and eutrophication, land use changes,

overharvesting, climate change and invasive species). These insights allow policymakers to assess ecosystem health, creating actionable steps for resource allocation, conservation zones, or habitat restoration initiatives.

Climate Resilience Planning

Researchers using LifeWatch ERIC can simulate how ecosystems will respond to different climate scenarios. These models provide policymakers with specific information on potential risks, enabling them to prepare adaptive strategies that support both biodiversity and human communities, such as coastal defense initiatives in vulnerable areas or drought-resistant agriculture.

SOLUTIONS