

Introduction to LifeWatch Thematic Core Services

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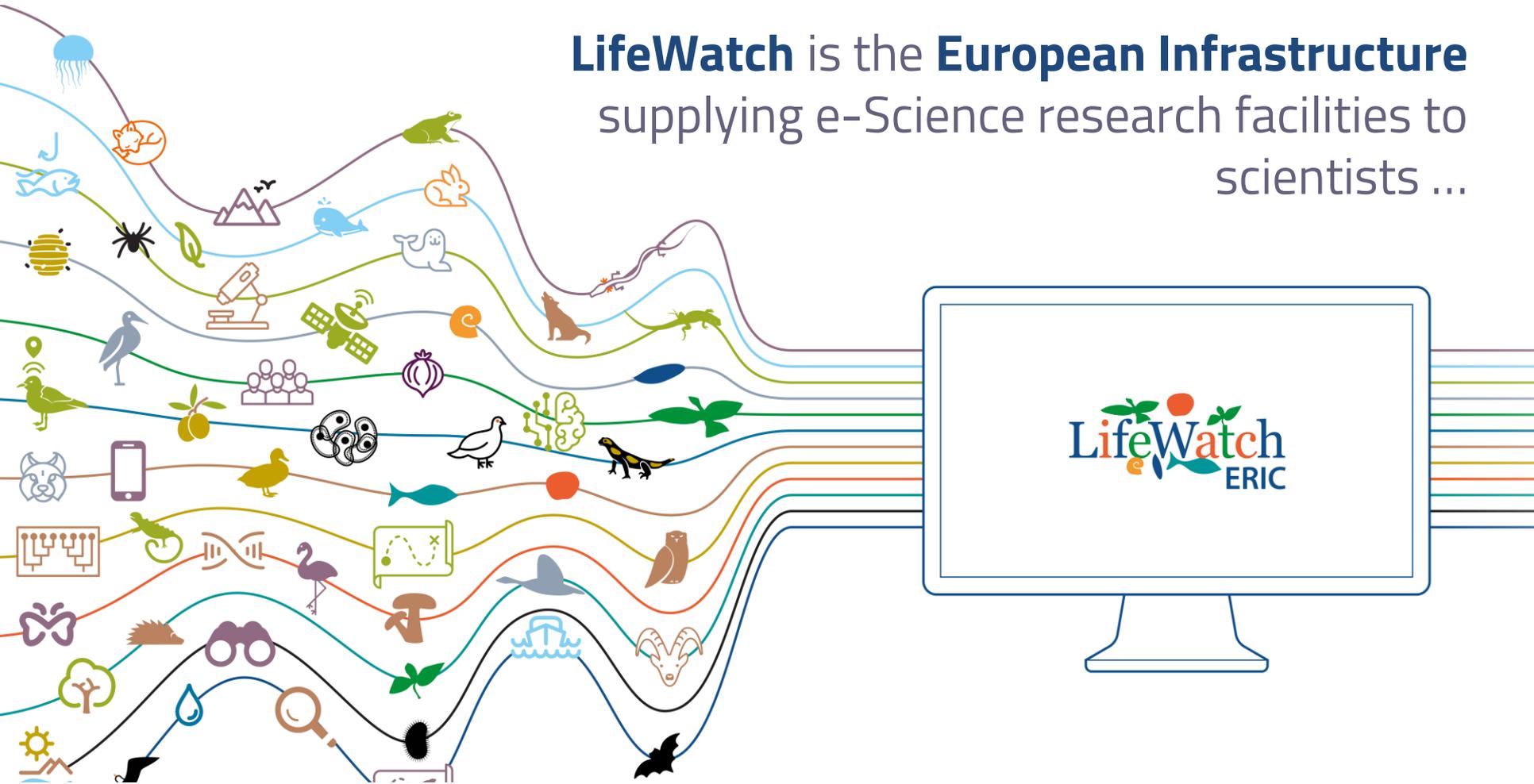
the e-Science European Infrastructure for
Biodiversity & Ecosystem Research

LifeWatch ERIC in a nutshell

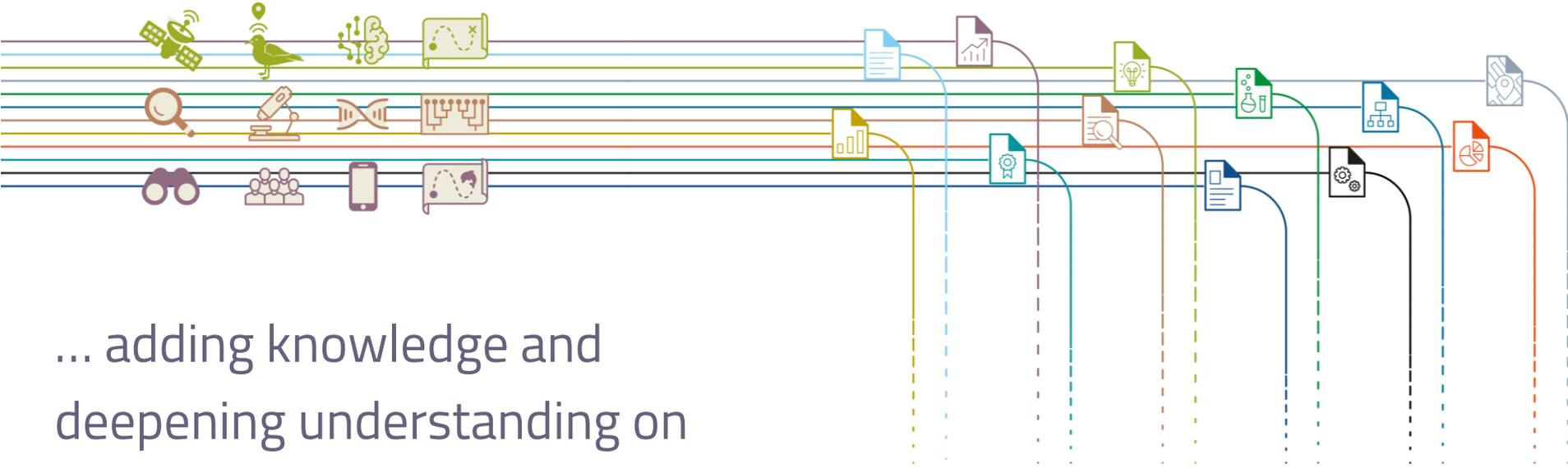


Who we are

LifeWatch is the **European Infrastructure** supplying e-Science research facilities to scientists ...



Who we are

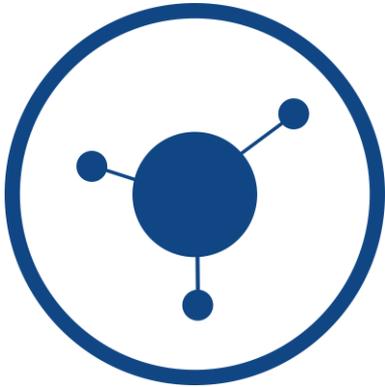


... adding knowledge and deepening understanding on

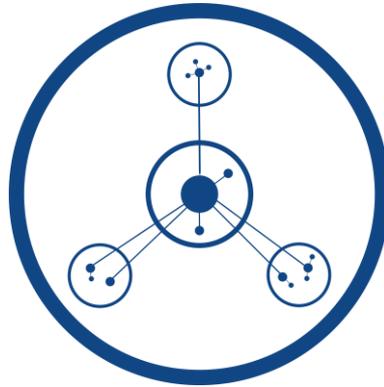
Biodiversity organisation and **Ecosystem** functions and services in **support** of our **societies** to address **key planetary challenges**. ...

Types of Research Infrastructures

Different types of Research Infrastructures:



SINGLE SITED
RESEARCH
INFRASTRUCTURES

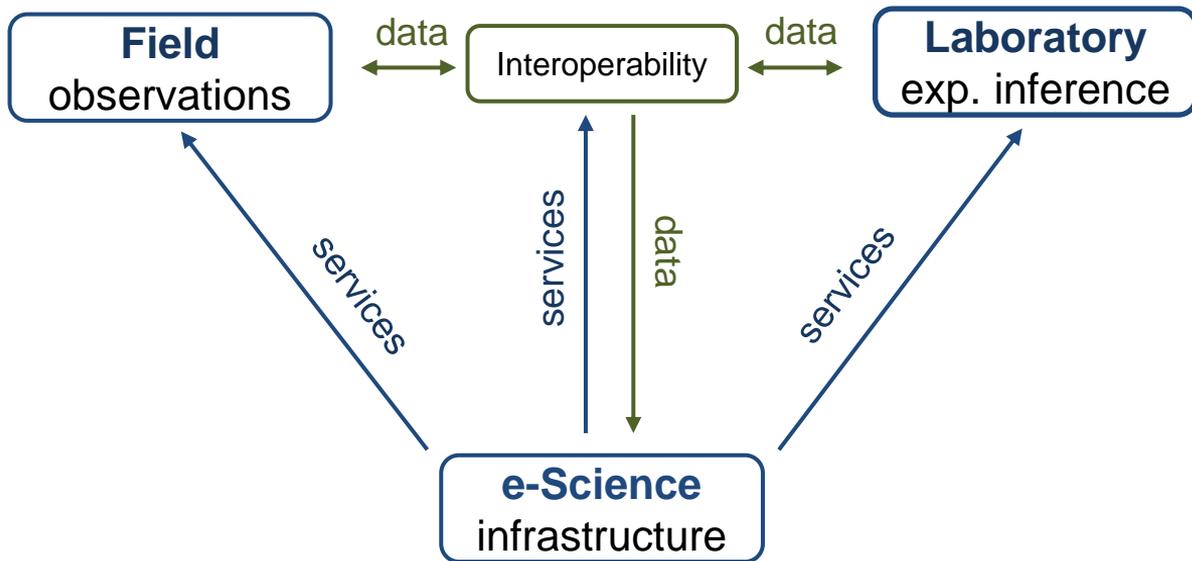


DISTRIBUTED
RESEARCH
INFRASTRUCTURES



E-SCIENCE
RESEARCH
INFRASTRUCTURES

LifeWatch ERIC e-Infrastructure



“Our vision is a scientific e-Infrastructure that supports seamless access, use, re-use and trust of data. In a sense, the physical and technical infrastructure becomes invisible and the **data themselves become the infrastructure** – a valuable asset, on which science, technology, the economy and society can advance.”

e-Infrastructures provide digital-based services and tools for data- and computing-intensive research in virtual and collaborative environments

High-Level Group on Scientific Data

“Riding the Wave: how Europe can gain from the raising tide of scientific data”



LifeWatch ERIC Thematic (& Core) Services

LW Thematic Services

Coordinate Reference
System



**BIODIVERSITY OBSERVATORIES:
DATA MANAGEMENT**



Environmental
Monitoring



**ANIMAL BIOLOGY:
FUNCTIONAL TRAITS**



HABITATS MAPPING



Metagenomics



Modelling



Remote and Smart
Sensing



**BIODIVERSITY RESPONSES TO
CLIMATE CHANGE**



**BIOGEOGRAPHY: SPECIES
DISTRIBUTION**



TAXONOMY



**NATURAL CAPITAL & ONE
HEALTH**



LW Thematic Core Services

Thematic Cores Services (TCS) are meant as a community-tailored integration of expertise, data systems, tools, virtual labs and other research products.

Thematic Core Services (TCS) has been defined to facilitate the work of:

- (a) specialized scientific communities (e.g. taxonomic, biogeographic, animal biology and behaviour, habitat mapping, observatory automations, etc.);
- (b) stakeholders implementing the UN Decade of Oceans (and Restoration), the European Green Deal, the relevant EU Directives, the EU Biodiversity Strategy at global, EU, Regional and national scale);
- (c) practitioners at local scale who're operating biodiversity and ecological observatories. Some examples are cited below.

LW Thematic Core Services: from community-tailored to community-guided

Working groups community-led are established in order to:

- Enhance collaboration both between and within the Common Facilities and Distributed Centres;
- Review and update the mapping of the research needs of the National scientific communities regarding the Thematic Services and highlight construction priorities;
- Promote and coordinate the participation of Distributed Centre research Institutions to HorizonEurope and other European/international projects, on behalf of and in collaboration with LifeWatch ERIC.

TAXONOMY



BIOGEOGRAPHY: SPECIES DISTRIBUTION



HABITATS MAPPING



BIODIVERSITY RESPONSES TO CLIMATE CHANGE



BIODIVERSITY OBSERVATORIES



ANIMAL BIOLOGY: FUNCTIONAL TRAITS



LW Thematic Core Services WGs

from community-tailored to community-guided

Thematic Core Service Working Group organization and functioning:

- The internal organization of every WG is planned to be defined by their participants, with the initial coordination of the Institution that proposed and started the WG constitution process;
- Every WG will be fully supported by the LW ERIC Service Centre with its officers in the different areas of competence and have a dedicated space in the LW Community platform;
- Every WG shall invite key European scientists to contribute to the strategic activities of the Group as members of a small WG Advisory Board;
- WGs are planned to report directly to the LW ERIC Executive Board and shall have a budget for their basic functioning, in addition to the budget which is expected to come from their participation into project on behalf of LW ERIC

Thank you for the attention!

Website: www.lifewatch.eu

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