



**coop+**  
Promoting  
collaboration among IIS



# LifeWatch within COOP+

*COOP+ KoM*  
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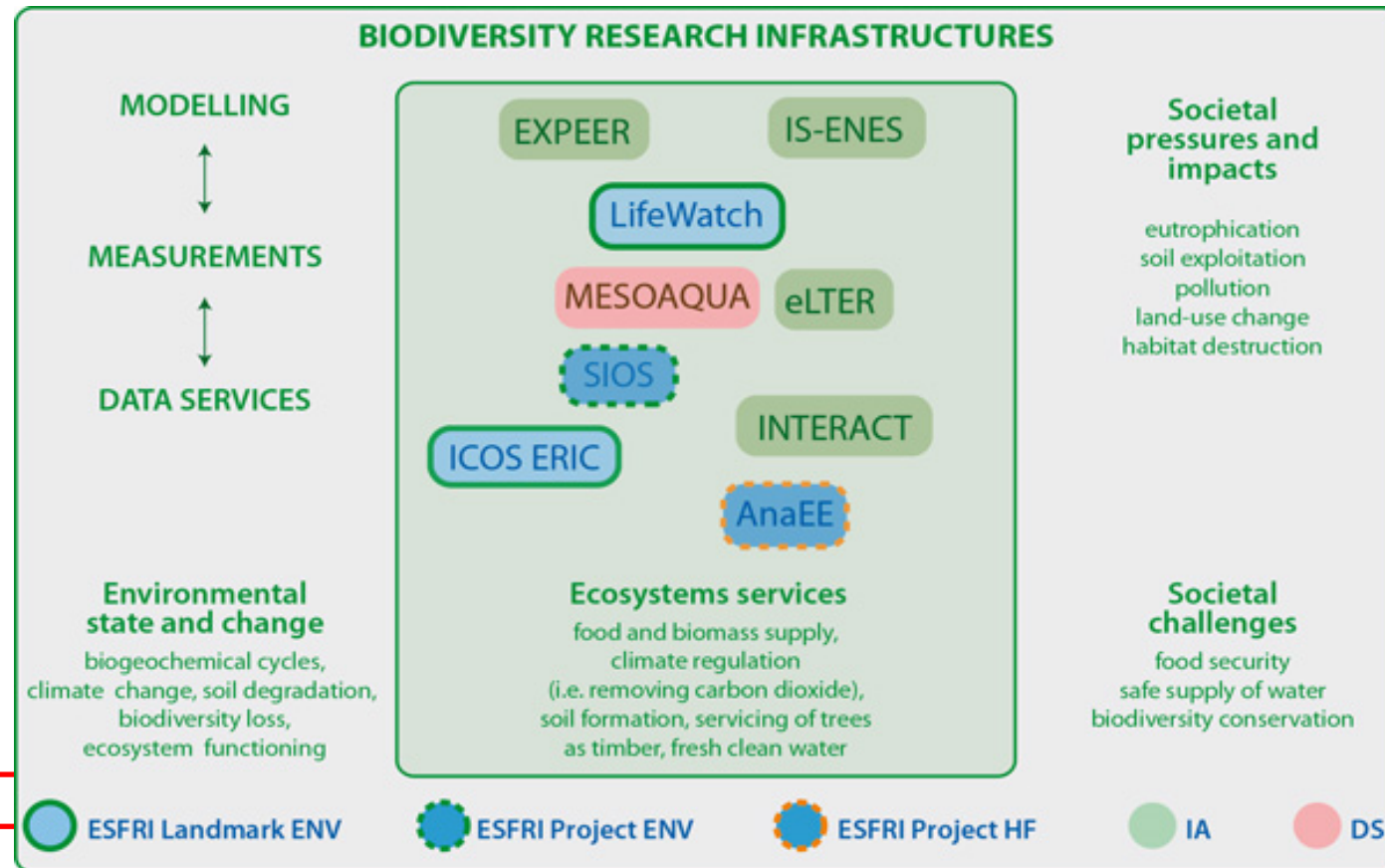
SANTANDER, SPAIN

With input from FJB, FA, JMG-A, DF, FS



# *What is LifeWatch*

- ❁ LifeWatch is an e-science and technology infrastructure for **biodiversity and ecosystem research** to support the scientific community and other users.
- ❁ It is putting in place the infrastructure and information systems necessary to provide an analytical platform for the **modeling and simulation** of both existing and new data on biodiversity to enhance the knowledge of biodiversity functioning and management
- ❁ Example of relevant case studies:
  - ❁ Invasive species
  - ❁ Evolution of wetlands
  - ❁ Evaluating the ecological quality of habitats





*An e-Infrastructure to support research for the protection, management and sustainable use of biodiversity*

**TYPE:** distributed  
**COORDINATING COUNTRY:** ES  
**PROSPECTIVE MEMBER COUNTRIES:**  
 BE, EL, ES, IT, NL, PT, RO

**PARTICIPANTS:** FI, FR, HU, NO, SE, SI, SK

#### TIMELINE

- ESFRI Roadmap entry: 2006
- Preparation phase: 2008-2011
- Construction phase: 2011-2016
- Operation start: 2016

#### ESTIMATED COSTS

- Capital value: 66 M€
- Operation: 10 M€/year

#### HEADQUARTERS

Statutory Seat: ES  
 Common facilities: ES-IT-NL

#### WEBSITE

<http://www.lifewatch.eu>



## LifeWatch

### e-infrastructure for Biodiversity and Ecosystem Research



#### Description

The e-infrastructure for Biodiversity and Ecosystem Research (LifeWatch) is a distributed RI to advance biodiversity research and to address the big environmental challenges and support knowledge-based strategic solutions to environmental preservation. This mission is achieved by providing access to a multitude of data sets, services and tools enabling the construction and operation of Virtual Research Environments.

#### Activity

LifeWatch is an e-Infrastructure of distributed nature, composed by Common Facilities and other Distributed LifeWatch Centres. Common Facilities are located in Spain (Statutory Seat and the ICT e-Infrastructure Technical Offices), Italy (Service Centre) and The Netherlands (Virtual Laboratories and Innovations Centre).

The Statutory Seat and the ICT e-Infrastructure Technical Offices will jointly assist to the coordination and management of the day-to-day institutional relationships, administrative, legal, and financial issues. Those include, among others, technology transfer, procurement and IPR matters, and the formal agreements with all the external data and e-Services suppliers, and the Service Legal Agreements (SLA) with local, regional, national and international entities, including decision makers and environmental managers. Also, they will coordinate and manage the ICT e-Infrastructure distributed construction, maintenance and deployment operations, including coordination of the design and implementation of e-Services demanded by the Service Centre, the Virtual Laboratories and Innovations Centre,

## ECOSYSTEMS/BIODIVERSITY

-From COOPEUS:

NEON

-Other links

Brazil: LBA/INPA

via ILTER

via GBIF (in particular collaboration with Latin America)

Australia

-Atlas of Living Australia

-BCCVL (through RDA)

-Other ongoing initiatives

Globis-B

## E-INFRA

-From COOPEUS:

DataOne

EarthCube

-Other links

Through EGI:

XSEDE (US)

Brazil (Cloud)

Taiwan

Canada

# *Expectations*

- Networking/Learning/Sharing
- Identify a Global challenge to motivate progress
  - Carbon Cycle/Phenology (in update after COOPEUS)
- Promotion of LifeWatch as key stakeholder
- Realistic understanding of challenges
- Sharing new technical advances
  - Use of Open Science Cloud Framework
  - Deep NN
  - Massive processing of maps
  - Support to Citizen Science
  - Knowledge layer (cf. COOPEUS D6.4)

# *Sources of frustration*

- Difficulties to setup a “real collaborative framework”
- Fragmentation
  - Too many different approaches
  - Limited impact
  - Continuity of Actions



## ❁ LW JRU Spain

- ❁ Globally coordinated by U. Seville
- ❁ Coordination in COOP+ : University of Granada
- ❁ Other engaged/aware centers:
  - IFCA (Coordinating the EGI LW CC), RJB/GBIF.es
  - U.Alcala
  - U.Navarra

## ❁ Exploit EGI LW Competence Center:

- ❁ COOP+ presentation in our last meeting (6<sup>th</sup> April)
- ❁ LW Belgium, LW Greece, LW Portugal, and LW Italy already engaged in different working groups, will share experience/contacts

- ❁ **WP1-Addressing cross-disciplinary Global challenges**
  - Task 1.1 Description of a set of environmental Global Challenges relevant to RIs.
  - Task 1.2 Analysis of relevant challenges
  - Task 1.3 Identification of detailed objectives, spatial and temporal scales, and relevant datasets for a given example of global challenge.
  - Task 1.4 Creation of a conceptual framework to address a given global challenge from a global point of view and from the point of view of RIs.

### ❖ WP2-Global Coordination and Cooperation

(LEAD BY EMSO/INGV)

- Task 2.1 Setup of an Open Multi-lateral Cooperation Board for RIs in the Environment field.
- Task 2.3 Community building

### ❖ WP3-Collaborative Dissemination and Exploitation for RI at Global level

(LEAD BY UHEL)

- Task 3.1 Elaboration of a valued map of stakeholders for RIs at global level

- WP6-Project Management and Communication Activities
  - Task 6.1 Project Coordination
  - **Task 6.2 Contact with EC**