

# 05. (I) Enriched document "LifeWatch ERIC Strategy towards expanding membership"

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# **Description**

This document provides an update of the document presented in the ninth GA meeting and it responds to the Recommendation 11\_GA9: "Recommends the EB to further enrich the presented document: '17. (I) LifeWatch ERIC Strategy to expand Membership' in order to facilitate the EU and international strategies and priorities. Also, to take account that the expansion of membership is likely to be bound with interest from the scientific communities, where advocacy for the use of LW can be seen as a dimension of the science-policy interface".

# **Action required**

The GA members are kindly requested to take note and make comments and suggestions.



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# 1. Introduction

LifeWatch ERIC Strategy towards expanding membership responds to the need to increase its membership towards its sustainability. Also, it attempts to maximize LW ERIC impact in the overall scientific community gathering more members to its common goal.

The Strategy has been designed in order to answer the following five strategy questions to guarantee its success: "Who we want to reach", "What a member will receive", "Why a member should join", "How a member will be reached" and 'Where to take future efforts".

The Strategy targets all the potential new members to join LifeWatch ERIC independently of their nature (e.g. EU Member States (MSs), non EU countries, International Organizations, etc). This is "Who we want to reach".

The Key Messages to be delivered are covered by the questions "What a member will receive" and "Why a member should join". "How a member will be reached" is tackled with Landscape Analysis, Entry Paths, Classification and priorization and Action Plan per Country Type/ country. "Where to take future efforts" is answered through "Monitorization and Reporting".

This document sets the main principles to be taken each time a new member to join LifeWatch ERIC is approached. These two entities are henceforward named as "parties". Any new member to join LW ERIC is the "incoming party", whereas LW ERIC is the "receiving party". The document is from now on named as "Expanding Membership Strategy" or "Strategy" for simplicity. The Strategy ensures an approach which is both



harmonized with the Statutes of LifeWatch ERIC and synchronized so that all potential elements in LifeWatch ERIC can be mobilized in order to make the strategy efficient and productive.

# 2. Objectives

The objectives of this Strategy are:

- To get a clear vision of the willingness of potential members to join LW ERIC to feed in the business plan towards LW ERIC sustainability.
- · To optimize the tactics to approach each targeted member.
- To build a transparent tool to report to the GA on the advancements towards expanding LW ERIC Membership.
- To base the relationship between a new member and LifeWatch ERIC (LW ERIC) Research Infrastructure (RI) on the basis of a pragmatic, beneficial and commonly shared collaboration, with tangible results which have a profound effect to the relevant scientific communities associated with both parties of this relationship.
- To get feedback from the approach process in order to improve the data, tools and services available through LW ERIC.

# 3. Key Messages

A potential new member will be interested to know which benefits it will receive in order to decide if it should join LW ERIC. The Key messages are:

- LW ERIC increase the scientific excellence and efficacy of research:
  - Allows academic scientists from a member country to access a wide catalog of data and services.
  - Scientists from member countries also benefit from a suite of specialized training events, along with funding for R&D awards, fellowships and internships.



- LW ERIC provide a European research infrastructure for sharing biodiversity and ecosystem research data by applying disruptive technology (LifeBlock), which helps the scientists to:
  - Make their data FAIR
  - Annotate their data by following the standards of LW ERIC and tranform their data to machin-to-machine readable format. Once they do so, their data receive international visibility
  - Contribute to the catalogs and ontologies used in LW ERIC
  - Increase the reuse of their data
  - Join forces and share expertise and technology among data service providers
  - Participate in the environmental science data part of the European Open Science Cloud.
- The Participating Member States may deploy their data and analytic services on the technical composability layer of LW ERIC (Tesseract) and therefore combine their services with any other already deployed in the infrastructure. This provides imense opportunities for their services to be used by thousands of new users and therefore, have access to communities they never had before.
- By participating in LW ERIC, member countries can coordinate their research infrastructure and plan for development of future technologies by creating their "trading zones" of common investment with LW ERIC and with any of the participating States.
- The Members contribute to the establishment of the Strategic Working Plan of LW ERIC and so parts of their own plans can be supported by LW ERIC.
- The country annual membership fee is set according to a tiered model which is based on the GDP of the country.

# 4. Landscape Analysis

The first step towards the Strategy to expand LW ERIC Membership will be an analysis of the landscape of the Member States that has joined another ERICs. This will reveal their willingness to become members of this type of infrastructures. It may help to find whether they have budget for theses activities or not. Also, if they are familiar or not with Research Infrastructures will guide on the type of efforts that will be needed. It will also help to identify some entry paths (see step 2 of the Strategy).



# 5. Entry Paths

Entry paths are the ways to approach potential Members. They can be classified between hot entries or cold entries. Hot entry paths refer to approaches from a certain person from LW ERIC which is known to the key person in the candidate member, while cold entries should be used when there is no person from LW ERIC known to the key person of the potential member. Different types of strategies should be used for hot and entry paths. Although hot approaches, are more successful for some potential members a combination from hot and cold could be suitable.

Entry paths can also be classified depending on the level were the approach is done: for example the top-down model can be used when the contact is initiated at the high political level, while bottom-up refers to upscale the contact by mobilizing the scientific community. Both the bottom-up and top-down models of approach should be used at a mature stage of contact in order to ensure that the process synchronizes the activity carried out at the scientific community level (thereafter referred to as "community") and at the major stakeholder (e.g. Research Institutes, Academia, Private Sector, Regions, Ministries, etc.) level of the incoming party.

#### Hot Entry Paths:

- · Introduction by other ERIC
- · Introduction by GA Members
- · Introduction by personal connections of the LW ERIC personnel
- Introduction through common participation to a project, event, initiative, organization, etc.
- · Introduction by the researchers of the candidate member
- · etc

#### Cold Entry Paths:

- Candidate member country authorities (e.g. Ministries, Embassies, etc.) Organization of an event/mission/initiative
- · Introduction by the researchers of the candidate member
- · Introduction through participation to a common event/projects/initiative/etc.
- etc.

# 6. Classification and prioritization

By segmenting the potential member countries into distinct groups based on explicit criteria,



it is possible to approach them more efficiently. The two criteria that have been chosen are:

- Political interest
- Funding available

\*It is assumed that there is a scientific community interest in all member countries.

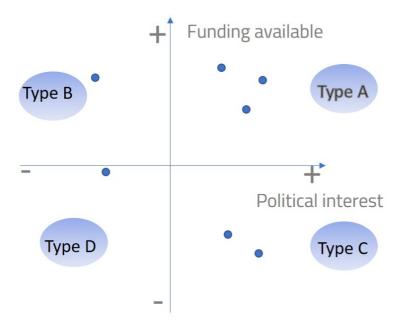
Once the criteria has been applied via screening as described in the previous sections, the countries can be divided into four categories (see figure below):

**Type A.** Political Interest and Funding Available

Type B. No Political Interest, Funding Available

**Type C.** Political Interest, Funding no Available

**Type D**. No Political Interest, No Funding Available



This classification leads to the priotarization of the candidate member countries to approach: type A > type B > type C > type D.

Another benefit of performing this exercise is that the main barriers will be analyzed in order to find common solutions.



# 7. Action Plans

The Strategy builds on lessons learned during the design and initiation steps of the RI development.

For the implementation of this Strategy, a factsheet will be developed stressing the benefits of LW ERIC and:

- · LW ERIC in a nutshell
- · How to join as a member and as a observer
- Its benefits
- · Responsibilities of the members
- · Financial commitments towards a common budget
- · National Nodes
- · LW ERIC Policies to be followed
- · Templates for formal request
- · View our current members

Also, a dedicated page from the webpage will be available on how to join LW ERIC welcoming interest from new member countries, both within Europe and further afield.

The communities need to be involved right from the start of the involvement of their country and not only during or, worse, by the end of the process. Their needs, advantages and disadvantages should be taken into account right from the start of the approach;

Without a well organized and continuously informed community, especially of the incoming party, confusion may prevail and shut down the entire process.

The principle of personalized impacts should be followed when possible. And the following Action Plan per candidate member country type/ per country should be followed:

#### Type A. Political Interest and Funding Available

Invite them to be observers

Candidate member countries may be willing to declare their participation at first but may subsequently appear way more reluctant to pay their fees for various reasons. Political factors (e.g. elections) may substantially delay the entire process and create instability in the relation of the two parties. Should such events occur, the relevant scientific community of both parties should be properly informed and the dialogue between the two parties should be maintained



by all means;

#### Type B. No Political Interest, Funding Available

- Run Attractive Events: One of the most valuable tools towards this process should be the organization of Workshops with both the scientific community and the political authorities at the highest level. The potential of a distributed and virtual RI on Biodiversity and Ecosystem research for the community of the country should be pointed out. Such types of Workshops should be organized in such a way so that members of the community should present their achievements and how LW ERIC should act as a multiplier in order to increase the impact of their achievements. Therefore, the outcome of such Workshops should demonstrate what are the benefits for the scientific community and the country in the event that the country decides to join LW ERIC RI. Finally, such Workshops could, at least partially, be supported by LW ERIC.
- · Ideally, a few senior and well-esteemed by the international community scientists should be initially approached with which the possible steps to develop the approach and its benefits for the relevant community(ies) should be discussed. One of them should take the role of the PI towards the implementation of the RI on the country.
- · Simultaneously, connections with the highest political level (e.g. Ministers) should be sought and meetings should be held to explain the potential benefits and impacts of the LW ERIC to their countries, the regions and locally.
- A young but dynamic scientist should be selected to act as the manager, or "broker" of the entire approach and particularly to deal with the community organization.
   When conditions are favouring, LW ERIC could even support financially the liaison activity of such a person, at least for a certain time period.
- · Connections at least at regional (e.g. governments or governors) and national (ministries) of the incoming party need to be developed during the process;
- There must be a continuous effort to know about internalities in each of the country before the investment is to high in some cases or move faster in some others.
- Customize Communication Channels
- · Gather feedback

#### Type C. Political Interest, Funding no Available



- Invite them to be observers
- Keep them informed
- Cover a Fellowship for a PhD

#### Type D. No Political Interest, No Funding Available

· Customize Communication Channels

#### Other Important overall considerations:

- Some countries try to move their obligation of paying the fees from their shoulders onto the responsible Research Centers and Academia without supporting them with the respective resources. To avoid difficulties resulting of such events LW ERIC should consult other ERICs on which these countries are full members and learn from their experience.
- Without a well organized and continuously informed community, especially of the incoming party, confusion may prevail and shut down the entire process.

In the case in which international organizations or any other similar type of legal entities are approached, the same principles as above apply. The differences here are:

- The highest political level is that of the CEO and/or of the Chair of the General Assembly or Board of Trustees, or any similar body at the highest possible level of the entity;
- In these cases it is easier to develop a more clear platform of collaboration by identifying the unique areas of activities which are unique to each of the parties and those which overlap to avoid confusion. Special attention should be paid to those areas of complementarity or of common development, or "trading zones", which may emerge between the parties and which frequently form the most fruitful areas for scientific, technological and cultural development. These are the areas with the highest potential to boost such collaborations and develop the most advanced data and services to the communities;
- · In those cases in which mature technology exists in both parties, special attention should be paid to avoid duplication and overspending by both parties;



• Events which both parties could attend and collaboratively act should be identified or organized in the case they do not exist.

# 8. Monitorization & Reporting

By the time this Strategy is adopted by the LW ERIC General Assembly, any ongoing approach should be automatically adjusted to the above principles to maximize success.

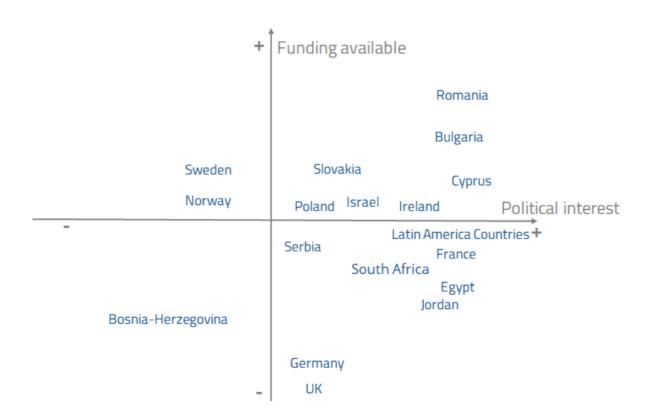
Results of this strategy will be presented annually during the GA meeting.

Targets for December 2021 are:

- Factsheet developed
- Countries classified
- Action plan for 1 country implemented



# Annex I. Country Classification: Political Interest vs Funding available





# Annex II. LW ERIC Factsheet





#### What are Research Infrastructures?

Research Infrastructures are facilities, resources and services that are used by research communities to conduct research and foster innovation in their

fields. They include: major scientific equipment (or sets of instruments), knowledge-based resources such as collections, archives and scientific data, e-Infrastructures, such as data and computing systems and communication networks, and any other tools that are essential to achieve excellence in research and innovation.



### What is an ERIC and what are its advantages?

The European Research Infrastructure Consortium (ERIC) is a specific legal form that facilitates the establishment and operation of Research Infrastructures with European interest. Advantages:

- > A legal capacity recognised in all EU countries;
- > Flexibility to adapt to specific requirements of each infrastructure;
- > A faster process than creating an international organisation;
- > Exemptions from VAT and excise duty.



#### What is LifeWatch ERIC?

**LifeWatch ERIC** is the e-Science and Technology European Infrastructure for Biodiversity and Ecosystem Research

#### the e-Science Biodiversity & Ecosystem European Research Infrastructure



- > Establishes and operates the infrastructure and information systems necessary to mobilise and integrate data and algorithms for biodiversity and ecosystem research, including enhancing understanding, linkages and synergies with other societal challenges such as climate change adaptation and mitigation, and to provide analytical capabilities.
- > Provides access to data collected by science at a global level and offers ICT services, tools, storage capacity and computational power, to transform information into new knowledge;
- > Connects and brings together physical observatories, research centres and scientific communities into a single web space accessible to all; in doing so
- > Offers researchers and stakeholders wherever they are, regardless of their access to funding and facilities, the resources to enact their own innovative scientific approach; and
- > Empowers citizens to engage with science and contribute to their own well-being and survival

LifeWatch ERIC invests in three essential components: open access data, reproducible analytics and mobilised communities.



#### How is LifeWatch ERIC organised?

The core structural components are the three **Common Facilities**, serving the entire ERIC and responsible for the implementation, coordination and man-

agement of all activities:

- > Statutory Seat and ICT e-Infrastructure Technical Office (SSO, ICT-Core), Seville, Spain;
- > Service Centre (SC), Lecce, Italy;
- > <u>Virtual Lab and Innovation Centre</u> (VLIC), Amsterdam The Netherlands

**Distributed Centres** are facilities that are hosted by Member States, and coordinate national contributions to the consortium.





#### Who can become a LifeWatch ERIC Member?

> Member States of the European Union:

- > Associated Countries;
- > Other Third Countries;
- > Intergovernmental Organisations.



### Who are LifeWatch ERIC Members? At present LifeWatch ERIC consists of

seven European Member States: Belgium, Greece, Italy, the Netherlands,

Portugal, Slovenia, Spain.



# What are the benefits of joining LifeWatch ERIC?

> Be part of a highly specialised European Research Infrastructure Consortium;

- > Aggregate and organise national scientific communities working on biodiversity and ecosystems, maximising their visibility and impact;
- > Use the LifeWatch ERIC brand to promote national outcomes and initiatives;
- > Be included in European and national roadmaps and Smart Specialisation Strategies;
- > Have access to dedicated European, national and regional programmes and funding schemes;
- > Have access to technology, innovation and knowledge through collaboration on the development and operation of the e-Infrastructure.



#### What are the rights of LifeWatch ERIC Members?

Members have the right to:

- > Participate and vote in the General Assembly (contributing to the definition of strategic objectives and implementation plans);
- > Access information and services provided by LifeWatch ERIC;
- > Benefit from any other rights mentioned in the <u>Statutes</u> or included in the Implementing Rules.

**Observers** have the right to:

- > Attend the General Assembly without any voting
- > Let their research communities participate in LifeWatch ERIC events, such as workshops, conferences, training courses at preferential rates, space permitting;
- > Let their research communities have access to

support from LifeWatch ERIC in developing relevant systems, processes and services.



#### What are the responsibilities of LifeWatch ERIC Members?

LifeWatch ERIC full Members must:

> Support and facilitate the objectives, tasks and governance of LifeWatch ERIC;

- > Identify a representing entity and maintain a National LifeWatch Support Committee to promote adoption of relevant standards in national resources and tools creation projects;
- > Promote the uptake of services among scientific communities and researchers of different biodiversity-related areas of knowledge, including ecosystem science and bioinformatics, and gather providers' and users' input and feedback;
- > Commit financially towards a common budget: In Cash Contribution (15%) and In Kind Contribution (85%) (see <u>Annex 2</u>);
- > Support any other activity agreed within the framework of LifeWatch ERIC resulting from the <u>Statutes</u> or Implementing Rules;
- > Maintain their membership until the end of the five-year period in force at the moment of their accession.

**Observers** do not have any financial commitment.



# What is the procedure for joining LifeWatch ERIC?

To apply for membership a letter must be written to the Chair of the General Assembly. This letter should be sup-

ported by an Annex in which the applying Member State, Associated Country, Other Third Country or Intergovernmental Organisation must state clearly what they can offer to LifeWatch ERIC and what they expect from it, based on each of its three essential components (open access data, reproducible analytics and mobilised communities).



#### Do you need more information?

Please don't hesitate to get in touch at statutoryseat@lifewatch.eu







# Annex III. Action plan so far implemented for countries

So far four countries have been approached under this strategy:

Israel, Cyprus, Ireland and Poland.

Israel: Both levels of the Research Institutes / Academic Departments (University of Tel Aviv, The George S. Wise Faculty of Life Sciences, Zoology; Israel Oceanographic and Limnological Research) and Ministries (Ministry of Environmental Protection) have been approached by the CEO and CTO. Both well established scientists and young and dynamic ones have been approached, by using links from previous projects. The Ministerial level has been approached during high-level events, such as the ones of the UN. A workshop is to be launched physically as soon as the pandemic will disappear in order to present the ERIC to both levels and try to commit both sides (LW ERIC and the country) towards a common plan of activities.

**Cyprus**: Research Institutes / Academic Departments (University of Cyprus, Department of Biological Sciences) as well as Ministries (Ministry of Agriculture, Rural Development and Environment) have been approached by the CEO. Both well established scientists and young and dynamic ones have been approached, by using links from previous events, projects and other scientific activities. Links of the CEO with the Ministerial authorities have been mobilized to bring them in a virtual event in which the ERIC was presented and questions have been addressed. A plan of action must be agreed between LW ERIC and the country to start its implementation.

**Ireland**: The Research Institutes / Academic Departments (University College of Doublin, School of Biology and Environmental Science) have been approached by the CEO while the Ministerial authorities (Ministry of the Environment, Climate and Communications) by the CTO. Well established scientists have been approached, by using links from previous projects. A visit of CEO and CTO to be paid as soon as the pandemic will disappear in order to present the ERIC to both levels and try to commit both sides (LW ERIC and the country) towards a common plan of activities.

**Poland**: The University of Gdansk and the Institute of Oceanology Polish Academy of Science (IOPAS) have been approached by the CEO. Well established, high profile scientists and young and dynamic ones have been approached, by using links from previous projects. The process will start during the seventh European Coastal Lagoons Symposium in Murcia, Spain. A presentation of LW ERIC will be delivered and the plan of activities will be discussed and agreed with the academic authorities.