

ELIXIR

# International Strategy

2025-28



# ELIXIR International Strategy 2025–28

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## Executive summary

The ELIXIR International Strategy is a comprehensive framework to guide ELIXIR's engagement and collaborations beyond Europe, focusing on global visibility, strategic partnerships and shaping policy development. It aims to increase the recognition of ELIXIR's flagship resources, enhance bioinformatics services through collaborations with international initiatives and actively contribute to shaping global open science and open data policies. The strategy aligns with international research infrastructure agendas, emphasising FAIR (Findable, Accessible, Interoperable, Reusable) data practices and the crucial role of research infrastructures (RIs) in addressing global challenges.

The strategy outlines ELIXIR's engagement plans with countries and regions, as well as with other global organisations. It also provides examples of ELIXIR's collaborative efforts with international initiatives, illustrating its commitment to building a cohesive global ecosystem for life sciences data.

## About ELIXIR

The growing complexity and volume of life science data present global challenges. These include managing diverse datasets from advanced technologies, integrating and making data accessible to scientists, finding the right tools for analysis and ensuring access to computing resources, training and expertise. Addressing these issues requires coordinated, cross-border networks of experts with strong technical skills.

By uniting leading life science organisations, ELIXIR helps manage and safeguard the growing volume of data being generated by publicly funded research. It coordinates, integrates and sustains bioinformatics resources across Europe, and enables users in academia and industry across the world to freely access services and resources for their research.

ELIXIR is an intergovernmental organisation with, as of May 2025, 21 Member countries, three Observer countries and the European Molecular Biology Laboratory (EMBL). It is a distributed research infrastructure, with a Hub acting as the coordinating secretariat, and Nodes representing the national bioinformatics networks in each of its Members. EMBL's European Bioinformatics Institute (EMBL-EBI) acts as the ELIXIR Node for the EMBL.

## ELIXIR: An International Perspective

### Mission

ELIXIR's mission internationally is to foster global collaboration, inclusivity and trust in bioinformatics by connecting bioinformaticians, institutions and communities across ELIXIR Nodes with counterparts worldwide. We aim to advance open science, promote FAIR data practices and facilitate knowledge exchange and capacity building through strategic partnerships with relevant international stakeholders. This will, in turn, help address ELIXIR's overall mission – to enable scientists to access and analyse life science data.

ELIXIR also aims to empower its Nodes to engage effectively with international collaborators, funders and policymakers, in line with the ambition in [ELIXIR's Scientific Programme 2024–2028](#) to “equip staff with the skills and knowledge to confidently demonstrate the performance and impact of their work to national and international funders and policymakers”.

### Vision

ELIXIR's vision is a functioning global life science data ecosystem where users, regardless of their location, can benefit from and contribute to ELIXIR's services. Those running bioinformatics services and infrastructures across all world regions are better connected to each other, reducing fragmentation and improving data interoperability globally. Funders and policymakers, in turn, recognise the importance of these global efforts and ELIXIR's contribution.

The International Strategy sets out the activities ELIXIR will undertake to realise this vision.

### Ownership of the International Strategy

The ELIXIR Hub leads the coordination of ELIXIR's International Strategy; however, its successful implementation relies fundamentally on the contributions of the ELIXIR Nodes. They run services that are widely used by the international research community, collaborate directly with global organisations to address shared challenges — such as data management and training — and organise events like workshops, hackathons, and conferences that bring together scientists from around the world. ELIXIR's International Strategy complements the international initiatives and engagement efforts of ELIXIR Nodes, enhancing their impact, fostering synergies and avoiding duplication.

## Objectives

ELIXIR's International Strategy objectives are listed below and the Implementation Plan is described in detail as of page 15 in the document. The mechanisms for engagement that are available to ELIXIR Nodes to support activities and priority areas highlighted in this strategy are detailed on page 12.

The three main objectives of the ELIXIR International Strategy are the following:

<b>Objective 1</b>	Increase awareness of how ELIXIR's flagship resources enable and support research communities internationally.
<b>Objective 2</b>	Enhance ELIXIR's services through strategic collaborations with international bioinformatics-related initiatives and organisations
<b>Objective 3</b>	Reinforce ELIXIR's global impact by collaboratively shaping international open science and open data policy developments

## About the International Strategy

ELIXIR's International Strategy provides a framework for ELIXIR's collaborations beyond Europe. It defines how ELIXIR will engage with international initiatives and collaborate with regions worldwide to address life science data challenges on a global scale. This strategy positions ELIXIR as a key player in shaping the global life sciences data landscape, advancing collaboration and supporting scientific discovery for the benefit of society.

The strategy builds on existing frameworks like the [Brno Declaration on Research Infrastructures](#) (2022) and the [Brisbane Statement](#) (2024) from the International Conference on Research infrastructures (ICRI). The Brno Declaration emphasises the critical role of RIs in fostering global partnerships and aligning with international research agendas, advocating for open science and open data practices to address pressing global challenges. The Brisbane Statement furthermore highlights the importance of RIs in driving technological advancements and international collaboration, particularly in areas like health, food security and climate adaptation. These declarations provide a strategic framework and context to the activities described in ELIXIR's International Strategy.

Due to the rapidly evolving life sciences sector and the global scope of our work and a desire to link directly to the implementation of the ELIXIR Scientific Programme 2024-2028, the current International Strategy has been updated to replace the previous version developed during the ELIXIR-EXCELERATE project and published in 2019.

## Target audiences

### ELIXIR's International Strategy stakeholders:

1. **International users** of ELIXIR services;
2. **ELIXIR Nodes**;
3. **Collaborators**: Global bioinformatics-related initiatives, research infrastructures and organisations;
4. **Funders and policymakers**.

### International users of ELIXIR services

ELIXIR's services and resources are designed to support the global research community. Most of our services are freely accessible to bioinformaticians and researchers worldwide, ensuring they can benefit from cutting-edge tools and infrastructure, regardless of location. ELIXIR's services support shared goals of improving data management, training and research workflows for the common good.

### Examples of ELIXIR's services and resources with global impact

**Galaxy:** The [Galaxy Network](#) is a global research infrastructure that supports researchers through collaborations among diverse providers worldwide. Its development relies on partnerships to enhance tools, workflows and resources for the broader research community. The ELIXIR Galaxy Community supports the use and advancement of Galaxy by streamlining data import, promoting shared tools and workflows, and enhancing training opportunities.

**Research Data Management toolkit (RDMkit):** The [RDMkit](#) is a global resource developed by ELIXIR with regular contributions from international partners, including the United States of America's National Institutes of Health (NIH) Office for Data Science Strategy (ODSS). It promotes consistent data management practices across countries and disciplines, making it easier for scientists to collaborate and share data globally.

**ELIXIR's Training e-Support System (TeSS):** [TeSS](#) collects, disseminates and organises information about bioinformatics training provided by ELIXIR Nodes and third-party providers, making them available globally. It provides a growing catalogue of materials for global trainers and trainees to identify relevant training events and resources to perform specific, guided analysis tasks via customised training workflows. TeSS is recognised and used by some of our international collaborators, such as the Global Organisation for Bioinformatics Learning, Education and Training (GOBLET) and Australian Biocommons.

## ELIXIR Nodes

ELIXIR fosters active engagement between its Nodes and international partners to strengthen ties with regions beyond Europe. Collaboration is supported through mechanisms such as staff exchanges, which help advance the implementation of FAIR data principles, enhance knowledge exchange, and promote data sharing and interoperability across the global life sciences landscape (**see Mechanisms for engagement, page 12**).

### ELIXIR Communities collaborate across Nodes to advance global efforts

One of the key ways Nodes collaborate is through ELIXIR's Communities, which bring together experts and external organisations (as Community partners) to work on specific scientific or technological themes in life sciences. These Communities drive the development of standards, services and training – bridging expertise across institutions and countries. For example, the ELIXIR 3D-BioInfo Community, focused on structural bioinformatics, promotes tools and standards for 3D analysis, supported by global experts. Collaboration areas are diverse, ranging from technical platforms like Galaxy to applied fields, such as metabolomics, and broader scientific domains, including biodiversity.

### Collaborators (global bioinformatics-related initiatives, RIs and organisations)

ELIXIR provides bioinformatics infrastructure to support the development of scalable global infrastructure and coordinate data sharing in the life sciences. Its mission includes making data openly accessible, in collaboration with international organisations and partners (**see section Current strategic partnerships, page 8**). Through collaboration in joint international events, conferences and establishing strategic partnerships, ELIXIR supports global efforts in life science data sharing.

### Examples of global collaborators

**Research Data Alliance (RDA):** The [RDA](#) is a global forum that promotes open scientific data sharing across disciplines. ELIXIR contributes to RDA initiatives by collaborating with RDA experts to address challenges such as data interoperability, the sustainability of data identifiers and secure data access. By connecting ELIXIR members with relevant RDA working and interest groups, this collaboration strengthens global efforts in building robust data infrastructures and advancing life science data services.

**The Global Biodata Coalition (GBC):** The [GBC](#) is an international initiative that unites research funders to coordinate, manage and secure sustainable financial support for critical biodata resources essential to global life sciences research.

The GBC builds on ELIXIR's approach to identifying key data resources. While ELIXIR designates critical European resources as Core Data Resources (CDR), the GBC extends this framework globally by identifying Global Core Biodata Resources (GCBRs). ELIXIR's

rigorous selection and evaluation process for European resources complements the GBC's efforts to recognise and support essential biodata infrastructure worldwide.

**The Global Organisation for Bioinformatics Learning, Education and Training (GOBLET):** [GOBLET](#)'s mission is to provide a global, sustainable support and networking infrastructure for bioinformatics trainers and trainees. ELIXIR has a [Joint Training Strategy](#) with GOBLET to strengthen international training links. Some of the most recent joint achievements and outcomes are the ELIXIR-GOBLET Train-the-Trainer courses and a joint community of instructors, as well as publishing professional guides, built on the Train-the-Trainer modules concept.

### Funders and policymakers

ELIXIR maintains proactive and consistent engagement with global policy stakeholders to influence and support the development of policies that align with open science and data management best practices. These contributions take many forms, including drafting policy briefs and position papers, responding to consultations, delivering expert presentations, participating in meetings, and serving on international advisory and expert groups.

ELIXIR builds on its current successes and efforts to encourage funding bodies to increasingly reference – and in some cases, recommend – ELIXIR resources in their open science and open data policies and beneficiaries guidelines. This reflects the growing recognition of ELIXIR's role in shaping and supporting global RIs. In this context, ELIXIR will continue to infrastructures. In this context, ELIXIR will continue to advance its designation ELIXIR's as an RI of Global Interest by the Group of Senior Officials (GSOs) on global RIs of the Group of Seven (G7).

Examples of the organisations ELIXIR will continue to engage with in this process are:

- UNESCO
- World Health Organisation (WHO)
- Organisation for Economic Development and Cooperation (OECD)
- G7 Global Senior Officials
- National governments and funding bodies

### Current strategic partnerships

Recognising bioinformatics as a global science that benefits from international collaboration, ELIXIR has established partnerships with international initiatives and national data infrastructures beyond Europe. These partnerships focus on collaborations that offer mutual benefits and align with shared objectives, such as promoting open science principles.



## **Deepening the relationship with the USA's NIH**

ELIXIR has cultivated and sustained a strong relationship with the ODSS at the NIH. In 2024, this collaboration was formalised through a [Memorandum of Agreement](#) (MoA), marking seven years of successful cooperation between the two entities.

The agreement will further develop the relationship between ELIXIR and the NIH ODSS through joint activities such as participation in international conferences, technical workshops and the facilitation and sponsorship of study visits or secondments between expert staff. A key focus will be promoting research data management best practices – including outreach in both the USA and Europe – and collaborating on tools like the RDMkit and FAIR Cookbook.

## **Building on strong links with the Australian BioCommons**

The collaboration between ELIXIR and the Australian BioCommons improves open access to resources aimed at understanding the molecular basis of life. The partnership, which began with the original Collaboration Strategy in 2020, is a cooperative approach to achieve the improved interoperability of RIs on a global level.

In 2023, ELIXIR and the Australian BioCommons renewed the [Collaboration Strategy](#), acknowledging significant mutual benefits in areas such as tools, computing and training. Notable outputs in the area of tools and workflows have included the joint improvement of the Galaxy bioinformatics data analysis ecosystem, as well as improved documentation, training materials and user feedback, and facilitated usage and dissemination of [WorkflowHub](#), a registry for describing, sharing and publishing scientific computational workflows, globally. In the training domain, the partnership has enabled productive exchanges of best practices between the BioCommons and ELIXIR training teams, and established Australian outposts for the BioHackathon Europe in 2022, 2023 and 2024.

## **The Global Alliance for Genomics and Health (GA4GH)**

The [GA4GH](#) is an international not-for-profit alliance advancing human health through the responsible sharing of genomic and health-related data. In 2017, the ELIXIR::GA4GH strategic [partnership](#) was formed and then formalised in 2019. It focuses on enhancing collaboration to develop interoperable standards and policies, particularly for genomic data sharing in Europe.

This partnership ensures alignment between European and international efforts, preventing data silos and promoting equitable access to genomic resources. ELIXIR's 2024–28 Scientific Programme and ELIXIR's current international strategy aim to continue this work, with a focus on demonstrating standards for use cases like rare diseases, aligning the strategic roadmaps of ELIXIR and GA4GH, and addressing gaps in genomic data workflows, such as federated analysis.

## Strategic areas for collaboration in the ELIXIR Scientific Programme 2024–28

The challenges of coordinating biological data transcends national borders. Addressing critical global issues – such as advancing human health and well-being, ensuring sustainable crop production and combating climate change – requires collaboration among experts from around the world. ELIXIR's Scientific Programme 2024–28 provides a strategic framework for all the scientific, technical and capacity-building activities. It highlights ELIXIR's priorities across four interconnected tiers: Science, Technology, Nodes and People. A further section – *Partnerships: Strengthening Collaborations beyond Europe* – describes how ELIXIR will partner with key initiatives globally to help implement the activities of the Programme. The International Strategy describes those activities in more depth, setting out the implementation plan to ensure the activities of the ELIXIR Scientific Programme 2024–28 take place in the correct global setting and that partners in ELIXIR Nodes and their global counterparts have the mechanisms and tools to collaborate effectively.

The global context is a key transversal theme that relates to all areas of the Programme.

### Science tier

ELIXIR will continue to fulfil its mission of enabling scientists worldwide to access and analyse life science data, across key priority areas, namely **Cellular and Molecular Research, Biodiversity, Food Security and Pathogens** and **Human Data and Translational Research**.

One prominent example of this commitment is ELIXIR's work on advancing federated infrastructure models, such as the Federated European Genome-Phenome Archive ([FEGA](#)). Coordinated by EMBL-EBI and the Centre for Genomic Regulation (CRG) in Spain, FEGA connects life science data repositories and computational resources across Europe – and potentially beyond. This model facilitates shared access to datasets and services without requiring physical centralisation, allowing institutions to retain control over their data while contributing to a globally accessible network.

Beyond Europe, countries such as Australia and Canada are already developing, or exploring, similar federated infrastructures. Notably, Canada joined the FEGA in March 2025, marking an important step towards expanding this model beyond Europe. ELIXIR is well-positioned to support these efforts by sharing best practices and the valuable experience gained through the European model.

Looking ahead, we will continue to build on our successful collaboration with the GA4GH to further integrate health-related initiatives. At the same time, we will work to strengthen relationships with key global biodiversity data infrastructures, including the

Global Biodiversity Information Facility (GBIF), to foster broader international collaboration and interoperability.

For further information, see **Current strategic partnerships (page 8)**.

### Technology tier

The core goal of ELIXIR's Technology tier is to support federated data management and analytics for life sciences. Central to this is Life Science Login ([LS Login](#)), a federated Authentication and Authorisation Infrastructure ([AAI](#)) developed by ELIXIR over several years. Built on common standards and implemented in collaboration with 12 international life science research infrastructures, LS Login now supports thousands of users and services. It enables researchers worldwide to securely access data and services using their institutional or community credentials, with fine-grained access control. A key example of its implementation is the [ELIXIR Beacon Network](#), which uses LS Login to operate a three-tier access system for genomic data – balancing open data sharing with privacy and security.

For further information, see **Examples of ELIXIR's services and resources with global impact (page 6)**.

### Node tier

As a distributed infrastructure, ELIXIR's Nodes form the backbone of its operations. How Nodes function – their sustainability governance and capacity-building efforts – offers an ideal model for other regions, such as Latin America and Africa, seeking to establish distributed infrastructures to strengthen their scientific communities, particularly in bioinformatics. ELIXIR will work with the Nodes to promote sharing of best practices, supporting the growth of national and regional bioinformatics initiatives in other regions, fostering global collaboration and inspiring similar efforts worldwide.

### People tier

Building human capital – users, management, operations, technical and scientific expertise – is essential to sustaining ELIXIR's services and maximising its impact on global science and society. As infrastructures grow larger and more complex, ELIXIR will support the People tier by fostering connections with training organisations such as GOBLET and other global networks. We will continue advocating for the professionalisation of RI roles and ensuring their integration into the global scientific landscape.

Lessons learned from improving operations will inform policy-level discussions, and ELIXIR will play an active role in shaping these dialogues to enhance RI effectiveness on a global scale.

## Mechanisms for engagement

ELIXIR employs different instruments to support, foster and strengthen partnerships globally. These instruments provide mechanisms for ELIXIR Nodes to connect and collaborate with international partners.

**ELIXIR's (International) Staff Exchange:** Our Staff Exchange programme enables Node members to travel to and collaborate directly with partners on projects beyond Europe. This hands-on knowledge exchange strengthens cross-border relationships. Examples of previous international Staff Exchanges to other regions include exchanges with Node members to Brazil, Australia and the USA.

### Staff Exchange examples

- **ELIXIR training team builds bioinformatics links with [Brazil](#):** In June 2023, ELIXIR Portugal and Switzerland collaborated with Brazilian organisations on FAIR data training, strengthening international ties and fostering future partnerships.
- **One-month ELIXIR team visit to [Australia](#):** In 2023, 14 ELIXIR experts collaborated with the Australian BioCommons at the Galaxy Community Conference, fostering international partnerships, advancing Galaxy technical capabilities and deepening ties between Europe and Australia.
- **National Cancer Institutes (NCI), [USA](#):** In 2023, ELIXIR and the National Cancer Institutes strengthened their collaboration through a five-month staff exchange, fostering knowledge-sharing on federated learning, trusted research environments and FAIR data principles, strengthening ties between Europe and the USA.

**ELIXIR's Travel Grant:** The Travel Grant scheme provides financial support for Node members to attend regional and international events or conferences aligned with the priorities set out in ELIXIR's Scientific Programme.

**Collaboration Strategies / Memoranda of Understanding:** To support its mission to strengthen partnerships, ELIXIR formalises partnerships with a small number of strategically important international infrastructures and initiatives through Memoranda of Understanding (MoUs) and Collaboration Strategies. Examples include ELIXIR's partnerships with the Australian BioCommons and the NIH ODSS.

**Collaboration through European and external funding:** We can support ELIXIR Nodes in building international partnerships through European-funded programmes and

grants, including those from philanthropic organisations, to foster collaboration with regions worldwide.

**Co-organised international conference sessions:** ELIXIR partners actively co-organise sessions at international conferences and meetings with strategically relevant organisations and initiatives. These sessions provide a platform for showcasing ELIXIR's expertise, engaging with global stakeholders and fostering discussions on key topics in data management, interoperability, and bioinformatics. Some examples include joint sessions in:

- The International Conference of Research Infrastructures (ICRI)
- The BioHackathon (initially inspired by the Biohackathon initiative in Japan)
- The International Society for Computational Biology (ISCB)
- The European Conference on Computational Biology (ECCB)

## Global regional collaboration

### Why collaborate with other regions?

International collaboration is essential to ELIXIR's mission of supporting the global bioinformatics community. While most of its services are open and freely accessible worldwide, there is a growing emphasis on the value of deeper strategic partnerships beyond Europe. Several ELIXIR national Nodes engage with countries beyond Europe at a bilateral level. To optimise the use of resources and maximise efficiency, ELIXIR emphasises the importance of supporting regional-level collaborations with international initiatives and infrastructures for mutual benefit.

ELIXIR will, where relevant, develop formal collaborations with national bioinformatics infrastructures to promote open science principles and strengthen efforts to coordinate life science data internationally.

In this strategy, we have identified the following three priority geographical regions for focused engagement, to complement the pre-existing collaborations with the USA and Australia and to align with international activities under the [ELIXIR-STEERS](#) project, which targets Latin America and Africa. While these regions are the primary focus of new efforts, ELIXIR remains open to and actively welcomes emerging collaborations with other organisations that represent geographical regions (such as ASEAN) and specific countries.

### Collaboration with Africa

Africa is an emerging partner in the global bioinformatics landscape. Efforts to establish a regional RI, such as the [African Bioinformatics Institute](#) (ABI), aim to unite the continent's bioinformatics community and enhance capacity across countries.

Africa hosts several significant initiatives, including the Human Heredity and Health in Africa Bioinformatics Network ([H3ABioNet](#)). This initiative drives collaboration in genomics, health research and data sharing and the African BioGenome Project, a pan-African effort to apply genomics data for the use of biodiversity and agriculture across Africa. The region's expertise in areas like pandemic preparedness and infectious diseases provides key opportunities for collaboration with ELIXIR.

Collaboration with Africa will focus on:

- Supporting the development of bioinformatics infrastructure, in particular the emerging ABI
- Facilitating knowledge exchange in areas of shared scientific and technical interest

### Collaboration with Canada

ELIXIR seeks to deepen its collaboration with Canada, building on years of successful interactions and shared involvement in global initiatives such as GA4GH and various European-funded projects. [Canada's Biomanufacturing and Life Sciences Strategy](#) and the recently launched [Canadian Genomics Strategy](#) align closely with ELIXIR's mission, addressing key topics like pandemic preparedness, data-driven innovation and data accessibility in life sciences. The emergence of the [Canadian Bioinformatics Hub](#) further strengthens this alignment in areas where ELIXIR and Canada can forge strong, mutually beneficial connections such as training.

Genome Canada, a pivotal player in Canada's omics landscape, serves as the country's voice on the global stage. It coordinates a pan-Canadian network of Genome Centres and focuses on strengthening Canada's leadership in global data management, with expertise spanning health, biodiversity, and industrial applications. The mutual areas of interest and strong ties to industry provide a solid foundation for mutually beneficial collaboration.

Collaboration with Canada will focus on:

- Building on existing collaborations through initiatives like GA4GH and European Union (EU)-funded projects, such as the Genomics Data Infrastructure (GDI) to address shared challenges in life science data management and innovation
- Deepening ties with Genome Canada in areas of mutual interest such as omics data and industry connections
- Share expertise on federated infrastructures such as FEGA

### Collaboration with Latin America and the Caribbean

Latin America and the Caribbean (LAC) is a key region that presents opportunities for international collaboration. Several ELIXIR Nodes support existing links with LAC

bioinformatics communities. Despite the absence of a regional equivalent to the research infrastructure supported by ELIXIR, Latin America is home to vibrant networks and societies. These include, for example, the [Iberoamerican Society of Bioinformatics](#) (SolBio) – a network that connects researchers from Spain and Portugal and fosters collaboration across Latin America – and [Red Iberoamericana de Inteligencia Artificial para Big BioData](#) (RIABIO), which focuses on leveraging Artificial Intelligence (AI) for big data in the life sciences.

ELIXIR's priorities for engagement with LAC will focus on:

- Participating in regional events to strengthen connections and promote ELIXIR's resources
- Supporting capacity building through training and knowledge exchange
- Raising awareness of bioinformatics infrastructure models.
- Engagement with initiatives between LAC and Europe in topics related to data, open science and RIs

In terms of strategic areas of collaboration aligned with ELIXIR's Scientific Programme, LAC countries are key partners in topics including (but not limited to) biodiversity, communicable diseases and capacity building. Strengthening these partnerships through webinars, meetings and joint projects will promote knowledge exchange and drive collaborative solutions that benefit both regions.

## Implementation Plan

The Implementation Plan outlines the activities ELIXIR will undertake to achieve the objectives defined in this strategy. It also provides a framework for monitoring progress and assessing impact to ensure continuous alignment with ELIXIR's strategic goals.

ELIXIR will regularly evaluate and adapt its approach to maintain focus, optimise its resources and address ELIXIR Nodes' needs for meaningful and effective international engagement.

**Objective 1: Increase awareness of how ELIXIR's flagship resources enable and support research communities internationally.**

- Encourage the use of ELIXIR's registries beyond Europe.
- Implement region-specific outreach initiatives to ensure the visibility of ELIXIR's resources aligns with the needs and priorities of diverse global stakeholders.
- Build trust with international research communities through open, transparent dialogue and a demonstrated commitment to collaborative science for the common good..
- Actively engage stakeholders from diverse regions to ensure ELIXIR's resources are accessible, relevant, and impactful by demonstrating how its services



- support local scientific priorities.
- Showcase success stories and case studies to illustrate the global applicability and societal value of ELIXIR's services.
- Continue to promote ELIXIR's CDR through the GBC to reinforce their importance within the broader international data ecosystem.

## Objective 2: **Enhance** ELIXIR's services through strategic collaborations with international bioinformatics-related initiatives and organisations

- Build partnerships founded on trust and mutual benefit by engaging stakeholders early and aligning ELIXIR's goals with those of partner organisations.
- Foster inclusive knowledge exchange and capacity building through region-specific webinars, workshops, and training resources that empower partners to both use and contribute to ELIXIR's services.
- Explore and develop relationships with international funding bodies—such as the Chan Zuckerberg Initiative (CZI) and other charitable organisations—to support shared initiatives and mobility between ELIXIR Nodes and international bioinformatics communities.
- Facilitate participation in EU-funded programmes that promote international collaboration, including the Marie Skłodowska-Curie Actions (MSCA) Staff Exchanges.
- Collaborate with other RIs to share strategies for international engagement and external funding, learning from their models to strengthen ELIXIR's global approach.
- Communicate successful international collaborations by ELIXIR Nodes through the website and outreach materials to increase visibility and inspire further partnerships.

## Objective 3: **Reinforce** ELIXIR's global impact by shaping international open science and open data policy developments

- Engage with international policy bodies and global science forums —such as the OECD, G7 GSO, UN organisations, the RDA, and CODATA-led initiatives like GOSC—to influence the development of open science and data sharing frameworks.
- Develop and share policy position papers that highlight the importance of open science, FAIR data principles, and data interoperability standards.
- Host high-level policy events and workshops that engage policymakers, funders, and researchers, reinforcing ELIXIR's role as a thought leader in open science and data.



## **ELIXIR International Strategy**

May 2025

[www.elixir-europe.org](http://www.elixir-europe.org)

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## Annex: List of KPIs and Indicators

We have included a set of KPIs to support the ELIXIR Hub in monitoring the implementation of this strategy. These KPIs are aligned with ELIXIR's existing [indicators](#).

Objectives	Themes	KPIs
Objective 1: Increase awareness of how <b>ELIXIR's flagship resources</b> enable and support research communities internationally.	International usage/adoption of ELIXIR services	<ul style="list-style-type: none"> <li>- Geographical diversity of active international users.</li> <li>- Number of active international users accessing ELIXIR services such as (and not limited to) ELIXIR's Core Data Resources, Deposition Databases, LSLogin, and software management tools such as RDMKit.</li> </ul>
		Number/location of operational <a href="#">ELIXIR Beacons in countries beyond Europe</a>
	Knowledge Exchange - Capacity Building	Number of international participants trained and/or international trainers in ELIXIR-led or co-hosted training events.
		Number of training events conducted/ELIXIR's participation in training events beyond Europe (e.g Global Bioinformatics Education Summit).
		Number of contributions (training materials, workflows, events) from international users in platforms such as ELIXIR's TeSS Portal.
	Global outreach	<ul style="list-style-type: none"> <li>- Number and geographical diversity of international subscribers to ELIXIR newsletters and social media followers.</li> <li>- Number of social media interactions (engagement) originating from outside Europe.</li> </ul>
Objective 2 Enhance <b>ELIXIR's services</b> through strategic collaborations with international bioinformatics-related initiatives and organisations.	Collaborative networks in ELIXIR and globally	Number of international partners in ELIXIR Communities and joint activities.
	Strategic international partnerships	List of current and new collaboration strategies in <a href="#">International collaboration webpage</a> and other such agreements with partners and sibling research infrastructures <b>beyond Europe</b> .

Objectives	Themes	KPIs
		Number of ELIXIR grants (Staff Exchange and Travel grants) awarded to ELIXIR Nodes to support International Collaboration.
		<ul style="list-style-type: none"> <li>- Qualitative assessment of international collaborations via annual reports, news items, etc.</li> <li>- List of activities done within the collaboration between the two organisations.</li> </ul>
		Number of invited international participants and their geographical spread in ELIXIR's flagship events (e.g. All Hands, BioHackathon)
	European funding for International Collaboration	List of EU-funded projects/grants/activities that could support ELIXIR and Research infrastructures to collaborate with International Partners (e.g. MSCA Staff Exchanges).
		Number of non-EU countries participating in EU-funded grants awarded in the name of ELIXIR or in which ELIXIR is a funded partner.
Objective 3: Reinforce <b>ELIXIR's global impact</b> by shaping international policies that promote Open Science and open data	Influencing global Open Science and data policy	Mentions of ELIXIR, its resources, services and key achievements in international open science and open data policy documents ( <a href="#">bottom graph on the impact dashboard website</a> )
		Mentions of guidelines and best practices produced by ELIXIR, or with ELIXIR contribution in global policy (see <a href="#">guidelines on the website</a> )
		Number of views and download statistics of the International Strategy in ELIXIR's Gateway <a href="#">on F1000Research</a> (new version to be released).
	Engagement in international policy discussions	<ul style="list-style-type: none"> <li>- Actions (e.g. policy briefs, position papers, consultation responses, expert group membership, etc) to engage with global policy stakeholders (<a href="#">top graph on the impact dashboard</a>)</li> <li>- Provision of expert advice</li> </ul>
		Participation of ELIXIR staff in exchanges with relevant policy makers in the topics of

Objectives	Themes	KPIs
		Bioinformatics and Research Infrastructures (e.g. ICRI, G7 GSO)
		Presence of ELIXIR experts in relevant thematic/policy committees/organisations/groups (e.g WHO, RDA)