

# GORC Model Adoption for ELIXIR?

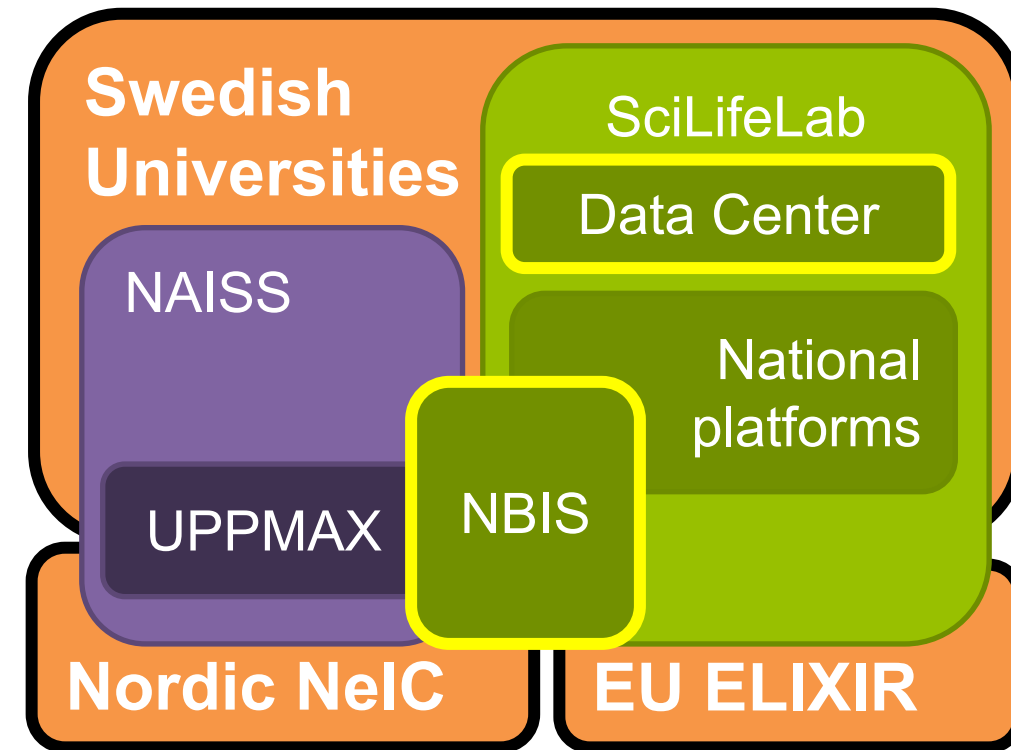
*A pitch for strengthening ELIXIR Nodes, Platforms and Communities using the Global Open Research Commons International Model*

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NBIS – National Bioinformatics Infrastructure Sweden

RDA GORC International Model WG: Recurring meeting, Online  
22 February 2024

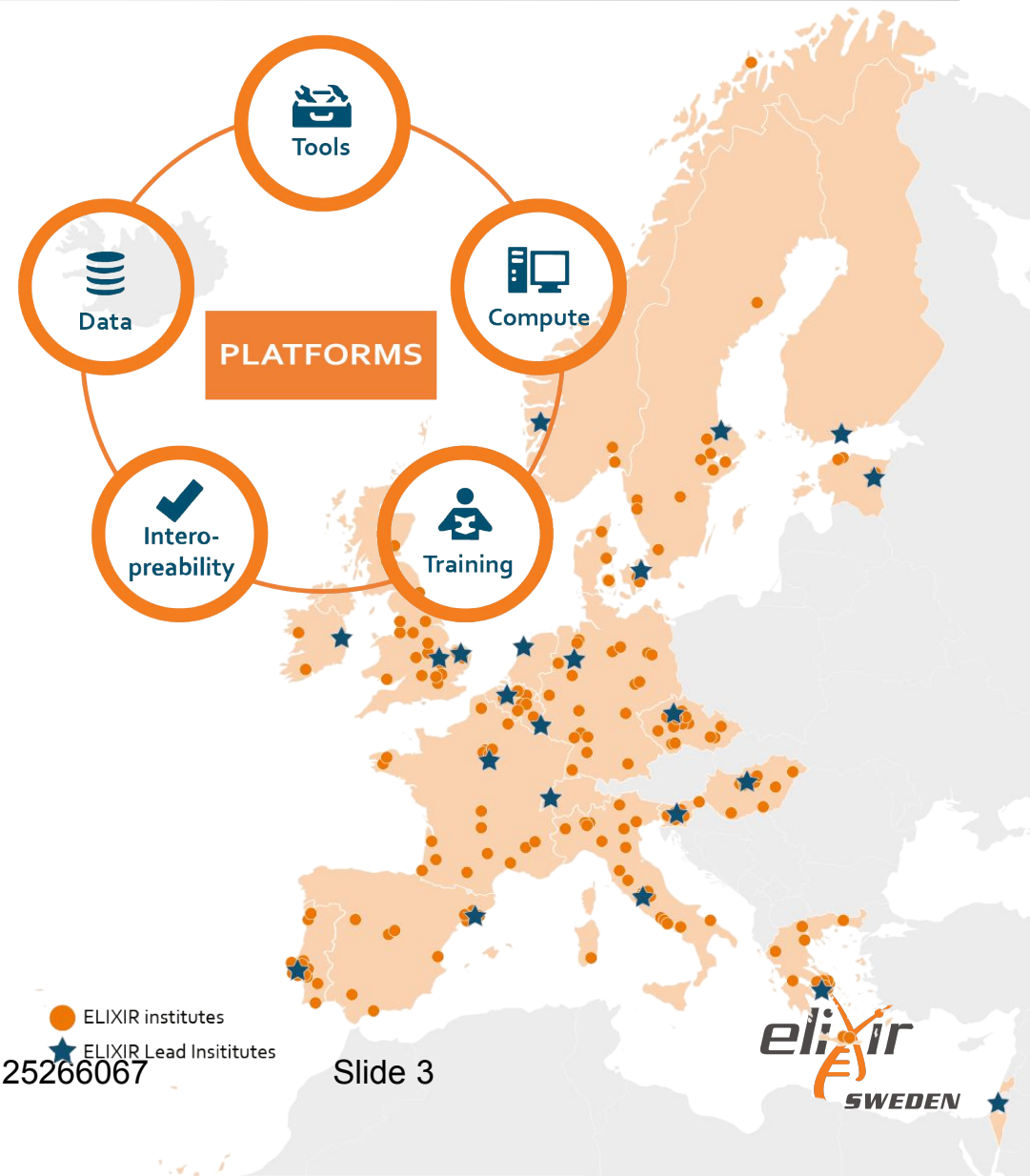


- **NBIS - National Bioinformatics Infrastructure Sweden** has staff at Uppsala University and in 5 other cities
- **ELIXIR Sweden** is a node in a European infrastructure for life science resources
- **Enabling open science** through national, European and global collaborations in Support + Training + Infrastructure
- **Across disciplines** via **RDA** and **EOSC**



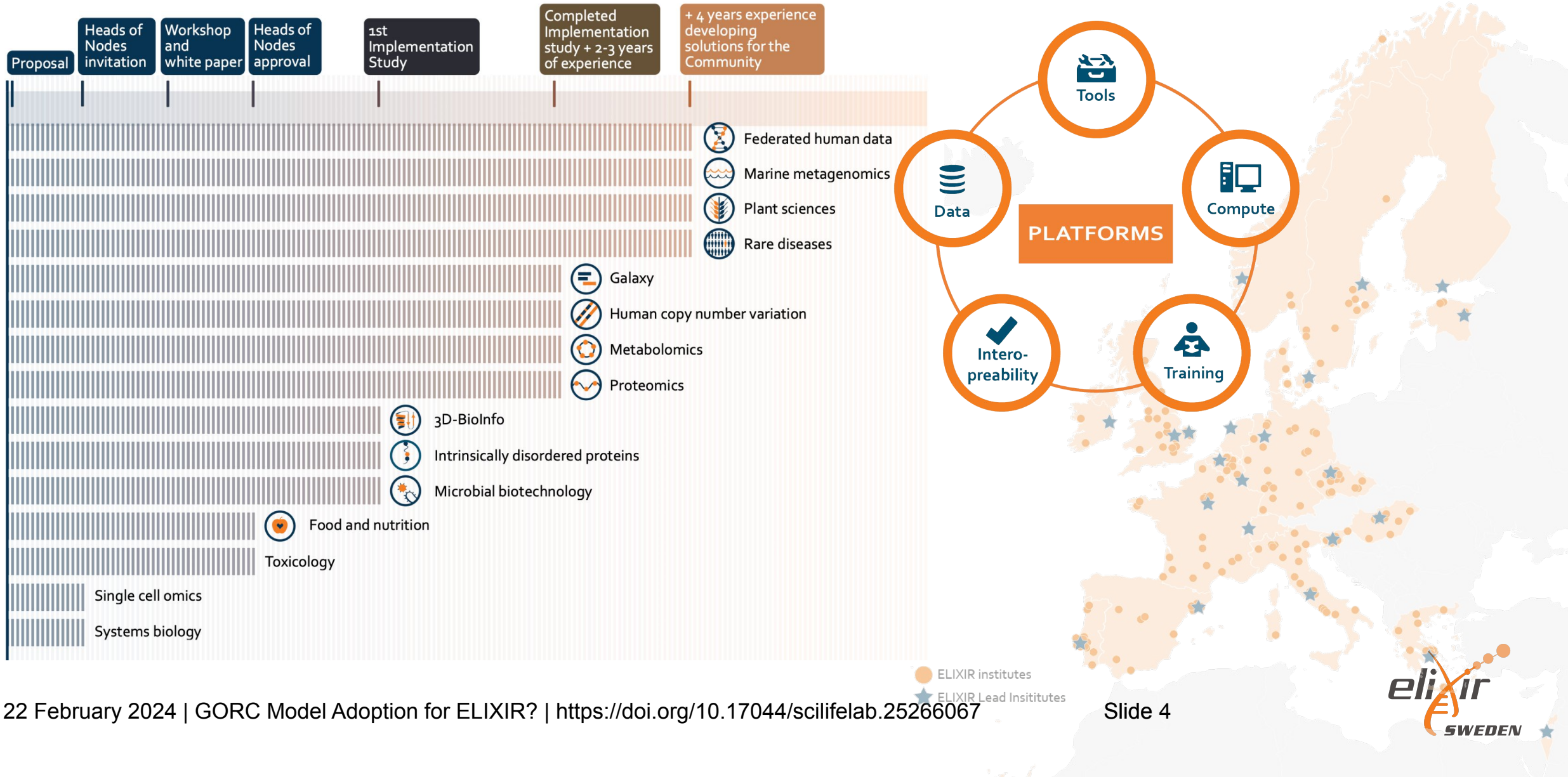


- ELIXIR is a network of 23 national **Nodes** & the **ELIXIR Hub** connecting 250+ research institutes
  - 5 **Platforms**
  - 17 **Communities**
  - 10 **Focus groups**
  - **EU projects & internal projects**
- The Nodes collectively run hundreds of bioinformatics **Services**

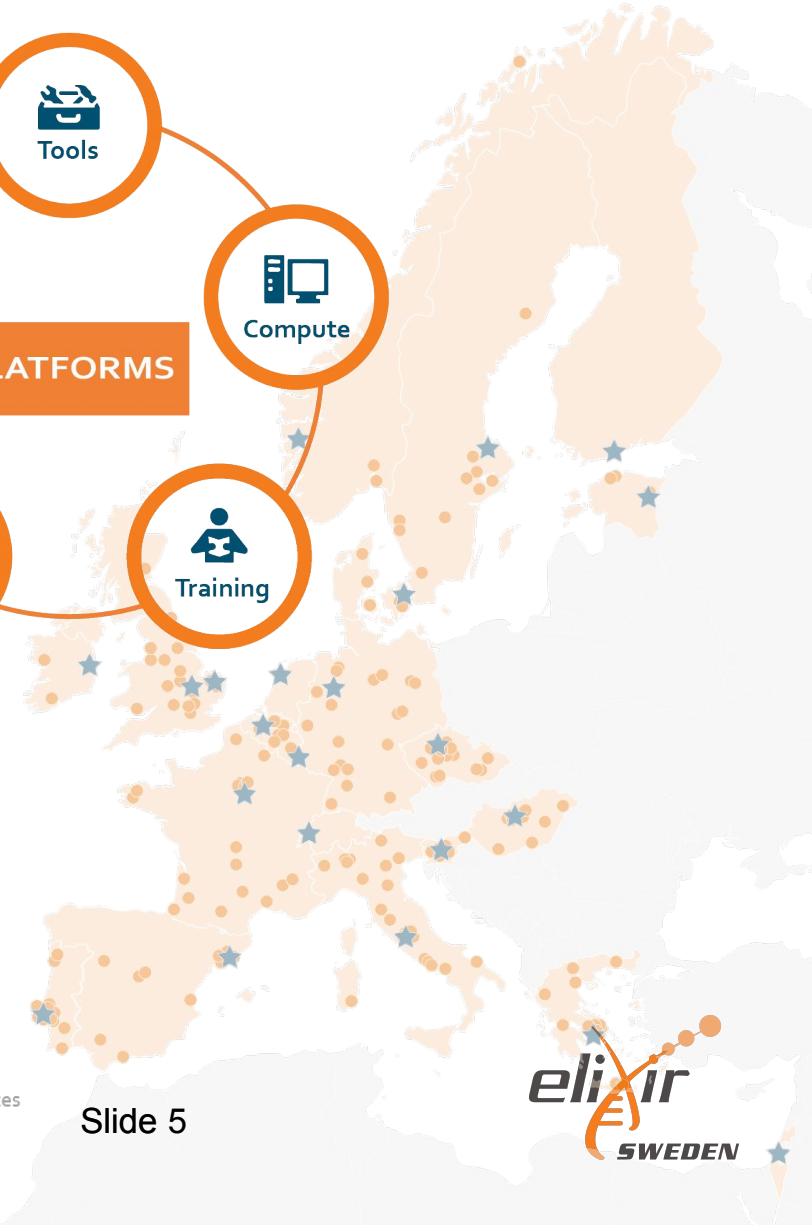
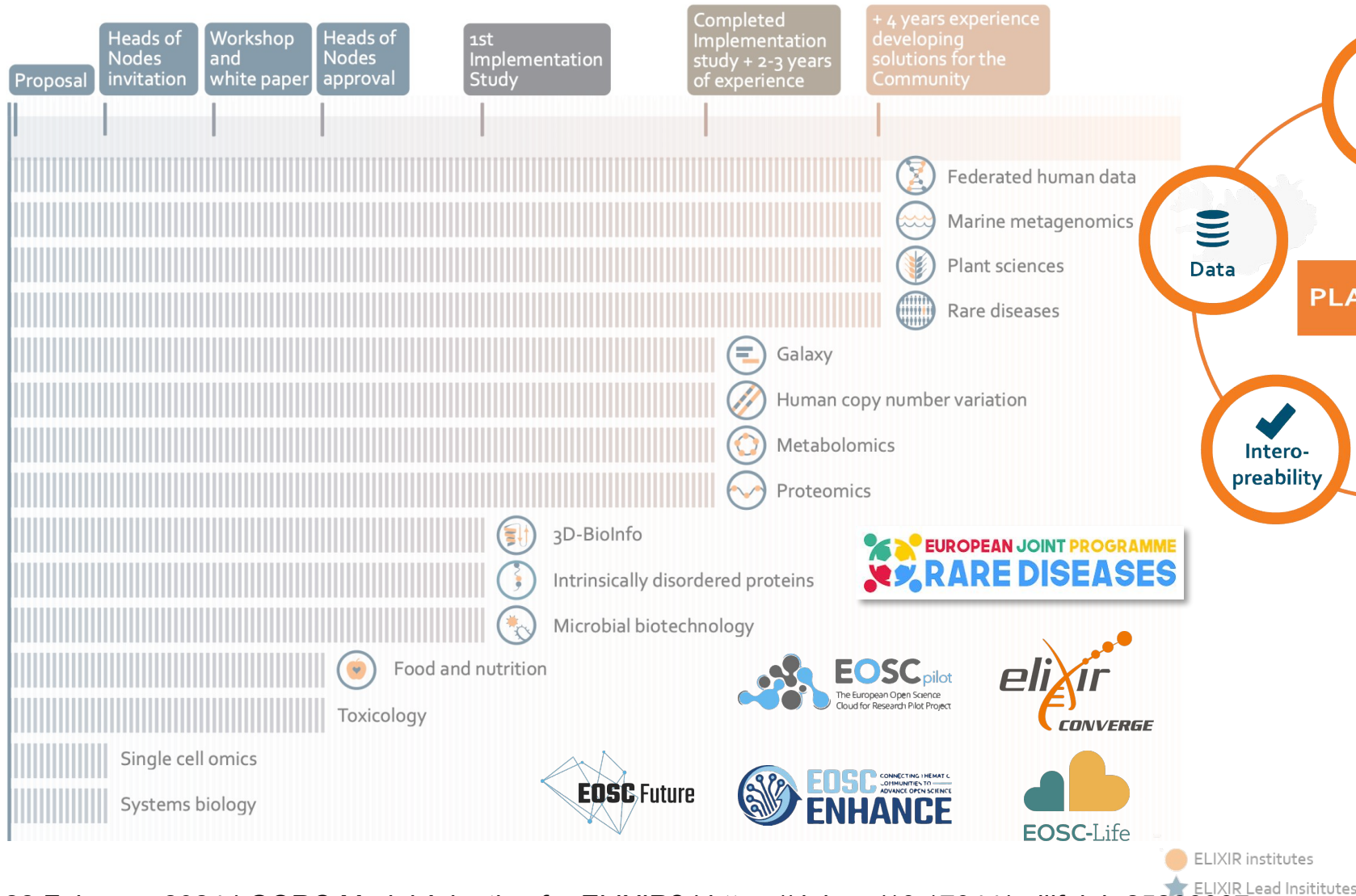




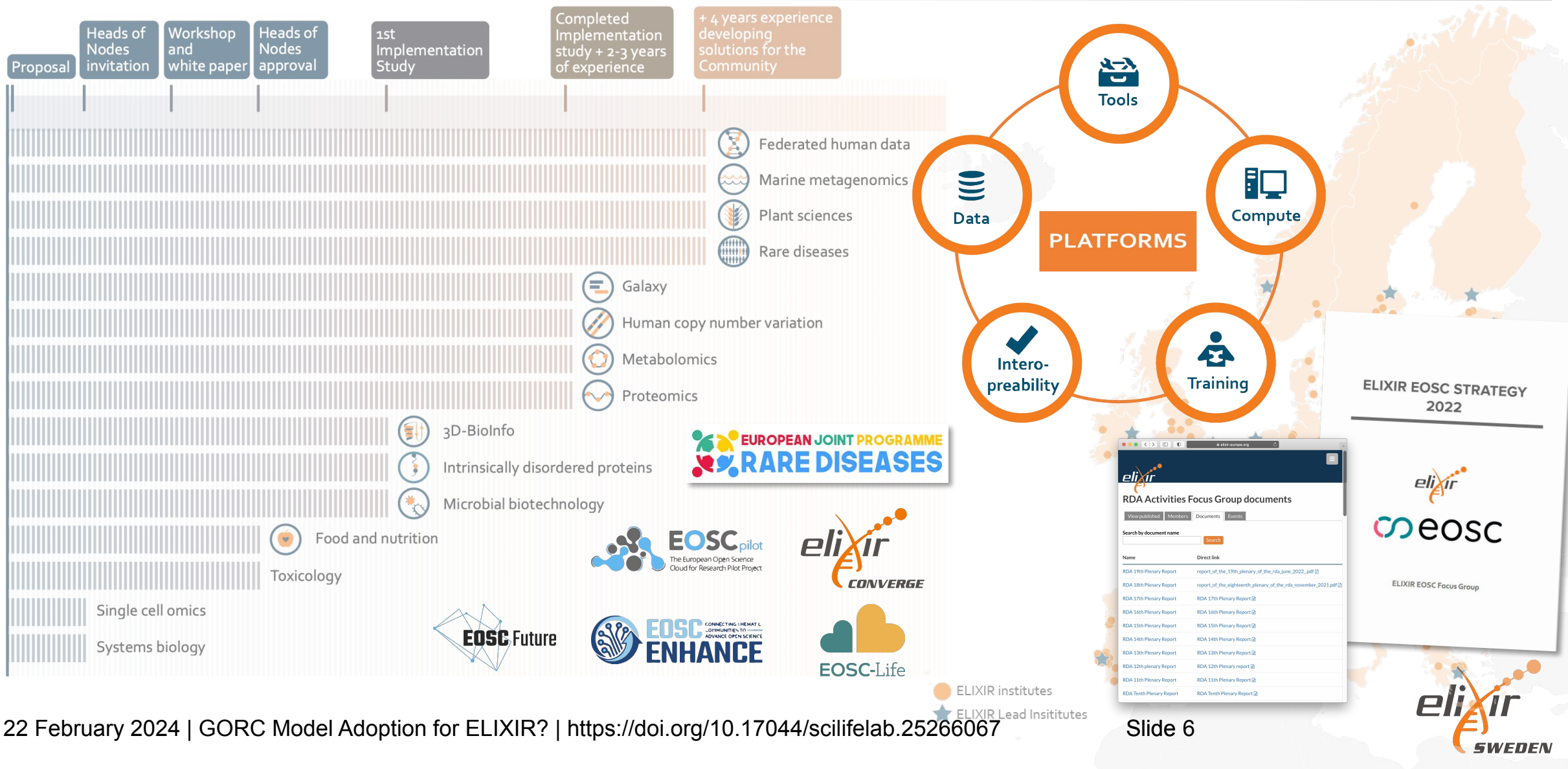
# A Europe-wide federated infrastructure



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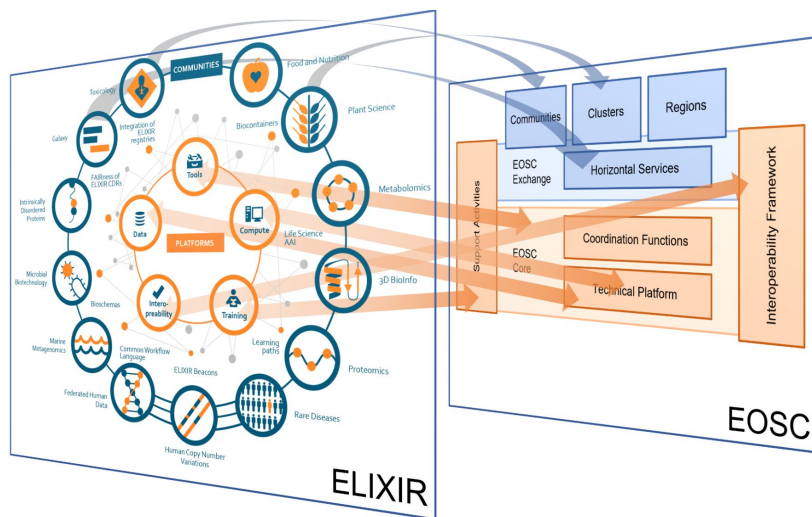


# A Europe-wide federated infrastructure





# Aligning ELIXIR with international efforts?



**elixir**

**RDA Breakout 5**

**WG GORC International Model WG: Global Open Research Commons IG update and GORC International Model WG: Reflections and Document Development**

Reported by Wolmar Nyberg Åkerström (Collaborative notes) - 17 participants

The aim of this session was to highlight the purpose and progress of activities in the [Global Open Research Commons \(GORC\) IG](#) and to invite contributions to a document where the [GORC International Models WG](#) will collect and curate a set of attributes that will allow Commons developers to compare features across science clouds and commons.

The session was opened with an overview of some of the [definitions introduced in the IG](#). A research commons is a trusted ecosystem that provides seamless access to high quality interoperable research outputs and services. Commons initiatives can be categorised by type of e-infrastructure, geographic region, scientific domain etc. And a Commons includes a spectrum of elements ranging from IT, research objects and standards to governance, engagement and sustainability as illustrated by the following diagram:

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**BioFAIR**

**A new BioCommons infrastructure for the UK life science**

**The ELIXIR-UK Node**

The national Node of ELIXIR in the United Kingdom, providing coordination and capacity building. A consortium of 14 UK research organisations. Supplies many of the ELIXIR Services to European and international partners. Participates in a call of ELIXIR Communities, activities and projects, leading many of them. Also with UK funding on policy, infrastructure provision and skills. <https://elixir-uk.org>

**The need for a UK BioCommons**

In 2014 ELIXIR-UK (together with Technology UK) undertook a research study to:

- Identify the Research Data Management (RDM) needs of UK life science researchers
- Evaluate the feasibility and impact of the creation of a new UK Institute delivering a FAIR Data and Methods Commons

This was funded by EPSRC, MRC and Wellcome, and included desk research, a community survey, dedicated interviews, and a technical analysis and scope.

**BioFAIR Data Commons**

- Has a data catalogue with a federated data layer
- Supports FAIR data at Research Performing Organisations and projects
- Open banking to public and private
- Leverage ELIXIR-UK services, catalogues and data archives
- FAIR Research Data Management advisory

**BioFAIR Computational Methods Commons**

- Harmonises analysis capabilities using computational workflows and notebooks
- Curates and shares best practice tools & workflows
- Integration with data catalogues & stores
- AI readiness and QA
- Leverage ELIXIR computational tools and workflow capability

**BioFAIR Integrated Data Services**

- Metadata and Standards framework based on FAIR Digital Objects and FAIR
- Biobanking, RDM, Data, FAIR, Imaging, ELIXIR-UK and other developments
- Life Science Access Infrastructure (LSA) APIs
- Data and method provenance & traceability
- Communities of Practice
- Training about the Commons and data stewardship, research training
- Developing shop with journal and API

**International comparators**

Global Open Research Commons (GORC) International Model developed by the RDA GORC IG

**Complementary research infrastructures**

Global Open Research Commons (GORC) International Model developed by the RDA GORC IG

**Contact**

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Twitter: @BioFAIR-UK  
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**Biotechnology and Biological Sciences Research Council**

Data-Interop F2F 2023

RDA P19 Report

AHM 2023 UK Poster

# Summary of the activity



**Description:** A landscape survey of infrastructure support for adopting the FAIR data principles in life science research practice. The activity originated from the work leading into and following the [RDA Life Science Data Infrastructures IG](#) session at the RDA 20th Plenary in March 2023. It involved [ELIXIR](#), [NBIS](#), [SciLifeLab](#) and several RDA groups and fed into a proposal for the RDA 21st Plenary.

**Achievements:** Progressed towards defining some of the [key aspects of FAIR for infrastructure solutions in the biomolecular life sciences](#) by surveying how infrastructure supports the FAIR data principles in life science research practice and using the RDA to convene interests around Life Data Infrastructures across regions and disciplinary boundaries.

## EOSC IF Business case #1:

### Guidelines for FAIR-enabling infrastructure

Data intensive research projects often operate in a patchwork of infrastructure services where partial results are produced and handed over across different providers. Converging on a set of guidelines on how to provide FAIR-enabling infrastructure services could simplify service provisioning for research projects and streamline the management of data and accompanying contextual information accumulated throughout the project life cycle.

Activity 1: FAIR for infrastructure, <https://doi.org/10.17044/scilifelab.24069510>

Slide 2





# Summary of the activity



**Description:** An analysis of alignment activities across regional and European data infrastructures to support interoperability of data and tools. The activity originates from [ELIXIR's strategy for engagement with EOSC](#) and its implementation across the [ELIXIR Platforms, Nodes and Communities](#). Aligning with and supporting the implementation while focusing on interoperability of data and tools across national, EOSC and RDA initiatives.

**Achievements:** Demonstrated how alignment with [global data communities in regional initiatives and cross-border infrastructures](#) can support interoperability of data and tools using examples from a showcase of [EOSC and RDA activities in ELIXIR Nodes, Platforms and Communities](#).

## **EOSC IF Business case #5:**

### **Common components and capabilities**

Interoperability across independent components is achieved by agreeing on a set of rules describing how to operate together to achieve a desired result. Identifying components common across data infrastructures can support convergence on a set of broadly accepted rules and assessment criteria for research enabling capabilities. Adopting common definitions of components and Open Science enabling capabilities can increase interoperability across data infrastructures.

Activity 5: EOSC alignment strategies, <https://doi.org/10.17044/scilifelab.24069528>

Slide 2





The All Hands meeting in Dublin, June 2023

The ELIXIR All Hands meeting is an annual event that brings together members of the ELIXIR community. The goal of the event is to review ELIXIR's achievements and activities so far, and discuss plans for the future. It includes:

- Presentations from the ELIXIR Platforms and Communities
- Workshops where groups within ELIXIR can plan, review and discuss their work
- Keynote lectures by invited speakers
- Social events where members of ELIXIR can network and meet new people.

The All Hands usually takes place in June. The meeting is for ELIXIR members and invited guests only.

## All Hands 2024

The All Hands 2024 will take place in Uppsala, Sweden, 10 - 12 June 2024.

See the [All Hands 2024](#) page and the [All Hands Eventscape site](#).

## Title:

Strengthening ELIXIR Nodes, Platforms and Communities using the Global Open Research Commons International Model

## Abstract for proposal (Max 400 words):

**This workshop will introduce participants to a typology of essential elements for a research commons and invite participants to explore the attributes and features that enable seamless access to high-quality, interoperable research outputs and services. It brings together ELIXIR partners from the Research Data Alliance (RDA) community and staff from across ELIXIR Nodes, Platforms and Communities in a dynamic exchange of ideas guided by these outputs of the RDA Global Open Research Commons (GORC) International Model Working Group.**

The GORC activities in the RDA aim to support cooperation among OpenScience platforms and have received extensive input from the global community—including EOSC and the NIH. Discussions leading up to the creation of the [GORC Interest Group](#) and [GORC International Model Working Group](#) trace back to 2018 and a [joint commitment](#) with GO-FAIR, CODATA and WDS was presented in 2021. In 2023, the RDA's 10th anniversary plenary hosted the milestone event "[Building blocks of Global Research Commons: Europe and beyond](#)" and later the same year the RDA outputs [GORC IG: Typology of essential elements](#) and [GORC international model](#) were released.

The format is interactive and will focus on opportunities to adopt the international model. A short introduction to the model will lead into audience-directed discussions focused on