

D3.3 (M18) - Report on curation in core ELIXIR registries (an ELIXIR Norway ELIXIR₃ deliverable)

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Context

This report serves as an update on the progress of WP₃ Task 3.4 in ELIXIR₃, in support of curation efforts on content in repositories of metadata, datasets, tools, training, workflows, and other resources, in line with the ELIXIR Platforms. The report documents progress made, methods used, and plans for the near future as of month 18 of a 48-month timeline.

ELIXIR Norway extends support to numerous internal and external service providers in Norway, in cases where the services have been accepted as ELIXIR Services. Being an ELIXIR Service comes with many advantages, from gaining exposure to a broader range of potential users to a raised profile throughout ELIXIR, that can help secure future funding, among other benefits. While these Services maintain specific operational responsibilities, ELIXIR Norway offers versatile infrastructure-related support. We provide a first-line helpdesk, potential Node e-infrastructure integration (where feasible), service monitoring, and metrics collection. Our technology hub further enriches this by imparting best practices and standards, and hosting workshops and conferences.

The inception of Task 3.4 is based on observations that most ELIXIR Norway Services do not promote available resources sufficiently, including relevant ontologies, essential repositories like Bio.tools and FAIRsharing, and key Services from other ELIXIR Platforms. The primary objective of the Task is to assist service providers, task forces, and other Tasks and work packages in effectively using available resources for maximum benefit. The work in this Task has been aligned with, and partially builds up on the work performed in the European context in the H2020 project ELIXIR-CONVERGE (February 2020 - July 2023) ([871074](#)).

This Task also supports task forces and other work packages within ELIXIR Norway. Specifically, assistance has been provided to the data deposition brokering task force, and efforts have been initiated to provide standards as well as a platform for the FAIRification of training materials, benefiting the FAIR training task force and multiple work packages. Deployment of a FAIR training is currently in progress. Additionally, contributions have been made to expanding the EDAM ontology (Task 3.6), including areas relevant to ELIXIR Norway work packages and Services.

Delivery

Service providers (including internal providers via other WPs)

Upon assuming lead on WP3 Task 3.4 in February 2023, the first action was an assessment of Service presence and status in registries and repositories in collaboration with other Task 3.4 members and the ELIXIR Norway Service Coordinator, who had previously met with most service providers and comprehensively mapped their current standing. Services were assessed to determine their relevance to specific repositories and evaluations were made to gauge the quality and extensiveness of available information. Although it is the responsibility of the Services to maintain and update their profiles in the future, profiles were created or enriched as needed. This work led to developing guidelines for optimizing the use of these resources by future service providers.

Bio.tools

- Added more comprehensive, SEO-friendly descriptions.
- Expanded sections related to tool availability, functions, operations, and keywords.
- Updated URLs and added additional listings and publications where relevant.
- Enhanced contributor sections and added persistent identifiers.
- Provided a direct link to the ELIXIR Norway helpdesk.

FAIRsharing

- Created a profile for JASPAR, which was notably absent in the repository.
- Updated existing profiles to ensure a broader, more accurate representation.

EDAM

- Drafted additional concepts for statistics and machine learning (relevant to specific Services).
- Contributed to data management-related and domain-specific expansion of EDAM.

Task forces and work packages

Brokering Task Force

- Assisted with data deposition brokering into ENA.

WP3 & WP4

- Participated in workshops and courses to gain insight into developing FAIR training standards.
- Authored and published a standard operating procedure (SOP) for FAIR training, accessible through GitHub.
- Created an ELIXIR Norway training repository on GitHub and added training materials.
- Negotiated an agreement with ELIXIR Slovenia to host a Norwegian instance of the EeLP (ELIXIR-SI e-Learning Platform), a Moodle-based learning management system, in exchange for future training collaborations and sharing of materials.

WP6

- FAIR conversion of biodiversity-related documentation (EBP-Nor database manual) from PDF to GitHub pages, integrated with Bioschemas profiles for training materials.

Relevant community involvement

- Weekly meetings with the ELIXIR Biodiversity Community including involvement in the implementation study (standards/resources and training work packages) and monthly meetings with the ELIXIR Norway Biodiversity Working Group.
- Monthly meetings with ELIXIR Slovenia Head of Node to guide development of FAIR e-learning materials and the Norwegian instance of EeLP.
- Monthly meetings with the ELIXIR Training Platform, including involvement in developing training-related Bioschemas profiles and expanding EDAM in relation to FAIR training.

Current and future directions

Activities

- Development of FAIR training materials in the EeLP, integrated with Bioschemas.
- Script to generate Bioschemas/Schema.org data from the enriched Bio.tools entries.
- Workflow support for biodiversity-related curation efforts.
- Making all documentation and code related to Task 3.4 available in GitHub.

Workshops and meet-ups

- Meeting between the Service Coordinator and Service providers to learn more about their needs and discuss future support activities (April 2024).
- Workshop with members of WP6 (Biodiversity) on creating and maintaining FAIR documentation and training materials for infrastructure for biomolecular biodiversity research (October 2023).

- Meeting with ELIXIR3 WP3 and WP4 to determine a common vision for EeLP course development (October 2023).
- Meetings for further EDAM extension.

Outcomes

Task 3.4 has broad implications for enhancing the effectiveness, reach, and FAIR compliance of ELIXIR Norway Services, as well as associated work packages and task forces. Service providers benefit from improved visibility and interoperability resulting from optimized and FAIR-compliant profiles in relevant registries. ELIXIR Norway work packages and task forces benefit from access to updated standards, methodologies, and toolsets as well as standardized, FAIR training materials and documentation, which results in more effective training development, delivery and maintenance. This Task reinforces ELIXIR Norway's commitment to life science standards, and FAIR principles and promotes additional ways we can support current and potential service providers.