1 ELIXIR Data Resources & Services

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Remit. At its heart ELIXIR is a Data Infrastructure with the objective to provide transparent access services to biological data in Open Access, stable and sustainable environments and made aware to potential users. Given the rapid growth in biological data provision together with the fact that significant volumes of biological data provision is no longer constrained to a small number of laboratories and research institutes, the gaps are significant and will require substantial investment.

During the **ELIXIR Preparatory Phase** the landscape of European data resources was surveyed and it was noted that of the over 1000 resources identified only a small fraction had institutional support and long-term funding commitments. For ELIXIR it is necessary to identify core data resources of wide applicability and usage. Furthermore these resources must be well maintained with capacity and processes for professional service delivery as well as plans for life-cycle management and understanding of dependency graphs.

Recent discussions in the ELIXIR Interim Board and Heads of Nodes meetings led to the conclusion that a work stream of Data Resources & Services has to address and develop based on the relevant findings from the Preparatory Phase:

1. A recommendation on the ELIXIR Kite-mark that addresses issues such as the kite-marking process, requirements and service levels, as well as duties and benefits related to a service being kite-marked..

2. Agreed criteria for ELIXIR Core resources and the process to identify the set of core services, as well as definition of duties and benefits related to a core service.

3. Recommendation on service monitoring, life-cycle management and quality control / peer review.

4. A development / enablement path for additional / future core services.

5. Define actions to be carried out by ELIXIR related to kite-marked and core services.

These points mentioned above are the first issues this work stream has to tackle. This will be followed by the **major challenge** to move towards enhanced interoperability and usability of the Elixir resources and services. The ELIXIR resources and services have to build, strengthen and forge additional **international alliances**, in order to harmonise efforts, to share resources, to avoid duplication/redundancy and to maximise effectiveness. Specific organisations with which to collaborate may be in North America the NIH and NSF funded Bioinformatics resources like model organism databases and the BD2K centres, the Global Alliance, relevant resource and service providers in the Asia-Pacific region as well as in other parts of the world.

ELIXIR Data resources & services objectives 2014-2018

1. Establish criteria and process (including benefits & duties) for an ELXIR Kite-mark for resources and services;

2. Establish criteria for ELIXIR Core resources and the process to identify the set of core services (including benefits & duties);
3. Establish recommendations on service monitoring, life-cycle management and quality control;
4. Identify resource and service gaps;
5. Identify resource and service priorities;
6. Develop a resource and service blueprint to fill gaps and meet priorities;
7. Implement resource and service blueprint.

Relevant Node Services

Nearly all ELIXIR Nodes offer resources and services blueprint as outlined in the Node applications. This work stream needs to focus first on the establishment of criteria for an ELXIR Kite-mark to define which of these will become ELIXIR core resources and services.

Resources

To be defined after identification of the initial set of ELIXIR resources and services.