

# Letter of Interest to the Nordic e-Infrastructure Collaboration (NEIC) from the Nordic LifeWatch Consortium

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This Letter of Interest is in response to the request from NordForsk for Letters of Interest for Nordic e-infrastructure collaboration, and reflects the scientific needs, challenges, priorities and recommended actions related to the realization of a common Nordic research infrastructure in the field of biodiversity informatics.

Presently large European research infrastructures are being developed under the auspices of the European Strategy Forum on Research Infrastructures (ESFRI)<sup>1</sup>. LifeWatch<sup>2</sup> is one of several ESFRI projects which aim to establish eInfrastructures and databases in the field of biodiversity and ecosystem research.

The Nordic LifeWatch Consortium (coordinated by the Norwegian Institute for Nature Research<sup>3</sup> in collaboration with institutions from Denmark, Iceland, Finland, Norway and Sweden) aims to facilitate increased data sharing and scientific collaboration in the field of biodiversity informatics through the development of common eInfrastructures and analytical eTools. The Consortium member institutions are listed at the end of this letter.

The LifeWatch activities in the Nordic countries are presently at different levels. The Swedish LifeWatch is clearly the most advanced regarding the technical infrastructure development. The other Nordic countries will benefit from the Swedish experiences and implement them in a coordinated exercise. This will be aligned with similar initiatives where the Consortium members already are involved such as the Swedish Species Information Centre (SSIC)<sup>4</sup>, the Norwegian Biodiversity Information Centre (NBIC)<sup>5</sup>, the Global Biodiversity Information Facility (GBIF)<sup>6</sup>, the European Biodiversity Observation Network (EU BON)<sup>7</sup> and the Long Term Ecological Research Network (LTER)<sup>8</sup>.

We would also like to focus at the international dimension of LifeWatch (National, Nordic and European). Interaction, communication and coordination among these three levels are essential for a successful development of a interoperable eInfrastructure. Therefore, contact with the different European LifeWatch initiatives will be an important task for a Nordic LifeWatch consortium. A LifeWatch organization at the Nordic level will enhance the possibilities to reach the ultimate goals of LifeWatch.

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<sup>1</sup> [http://ec.europa.eu/research/infrastructures/index\\_en.cfm?pg=esfri](http://ec.europa.eu/research/infrastructures/index_en.cfm?pg=esfri),

<sup>2</sup> <http://www.lifewatch.eu/>

<sup>3</sup> <http://www.nina.no>

<sup>4</sup> <http://www.svenskalifewatch.se/en/>

<sup>5</sup> <http://www.biodiversity.no/>

<sup>6</sup> <http://www.gbif.org/>

<sup>7</sup> <http://www.eubon.eu/>

<sup>8</sup> <http://www.lternet.edu/>

Funded by NordForsk and individual in-kind contributions the Nordic LifeWatch Consortium constituted itself in 2012, and executed a pilot study to outline the possibilities for an enhanced cooperation between the Nordic countries within eScience and biodiversity informatics. The results from this pilot study will soon be published.

The report focuses on the following topics:

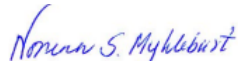
- Scientific Nordic needs for improved access to data and advanced eScience research infrastructure.
- Future challenges and priorities facing the international biodiversity research community.
- Scientific potential of open data access for individual researchers and institutions.
- Spin-off effects of open research data for the general public.
- Internationally standardized Nordic metadata inventory.
- Legal framework and challenges associated with data sharing, training and scientific needs.
- Strategic steps towards realizing a Nordic LifeWatch construction.

The report concludes that there are significant benefits regarding both scientific potential, technical developments and return of investments by constructing a common Nordic LifeWatch eInfrastructure. As a part of construction phase, a working group of communication experts will develop a dedicated communication plan to ensure efficient transfer of information between the LifeWatch project team and relevant stakeholders. The proposed common visions for the Nordic LifeWatch development by 2020 are:

- Every Nordic country has an operational LifeWatch structure.
- The technical capacity to harvest data from national data sources is operational.
- Common data analysis environments (virtual laboratories) have been developed.
- Permanent working groups have been established for different activities.
- The potential of the Nordic LifeWatch has been proved by products of scientific and policy relevance.
- The Nordic LifeWatch is a recognized regional part of the European LifeWatch.
- Stakeholder involvement is an obvious cornerstone in a successful implementation of LifeWatch.

The Nordic LifeWatch Consortium is now searching for long-term funding for the realization of a Nordic LifeWatch Construction phase. The Consortium members, as represented by the undersigned institutions, are ready to engage in a discussion with the Nordic eInfrastructure Collaboration (NEIC) on how to achieve the development and implementation of Biodiversity standards and ontologies; Catalogue services for metadata; WEB services and feature access services; Data harvesting tools and Virtual Laboratories

With kind regards,



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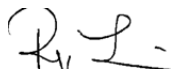
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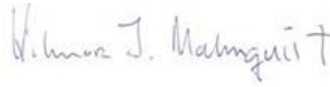
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