WSL Environmental Data Portal *EnviDat*: Conceptual Framework

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Environmental Data at WSL

The amount and quality of environmental data is rapidly increasing worldwide. The **Swiss Federal Institute for Forest, Snow and Landscape Research WSL** has a long tradition in data collection. The data sets collected by WSL researchers include **time series and spatial samplings spanning over 100 years**. WSL operates a comprehensive network for environmental research that includes more than **six thousand observation sites**. Such long-term environmental monitoring datasets are particularly valuable towards obtaining an **integrated view of the Earth System** and its changing climate. Sharing this data encourages new national, pan-European and global collaborations.

EnviDat – Portal for Research Data

EnviDat is an overarching research **data portal** for facilitating an user-friendly access to WSL's rich reservoir of **environmental data**. The portal's main functional requirements include data discovery through text and spatial metadata search, publishing of datasets with Digital Object Identifiers (DOIs) and the provision of a repository for diverse data types. **Data curation** and quality control remain with the experts through distributed data management. The **EnviDat core design principles** focus on usability and user-friendliness. The EnviDat conceptual framework highlights the importance of future **technical interoperability** with the pan-European data community.

EnviDat Conceptual Framework

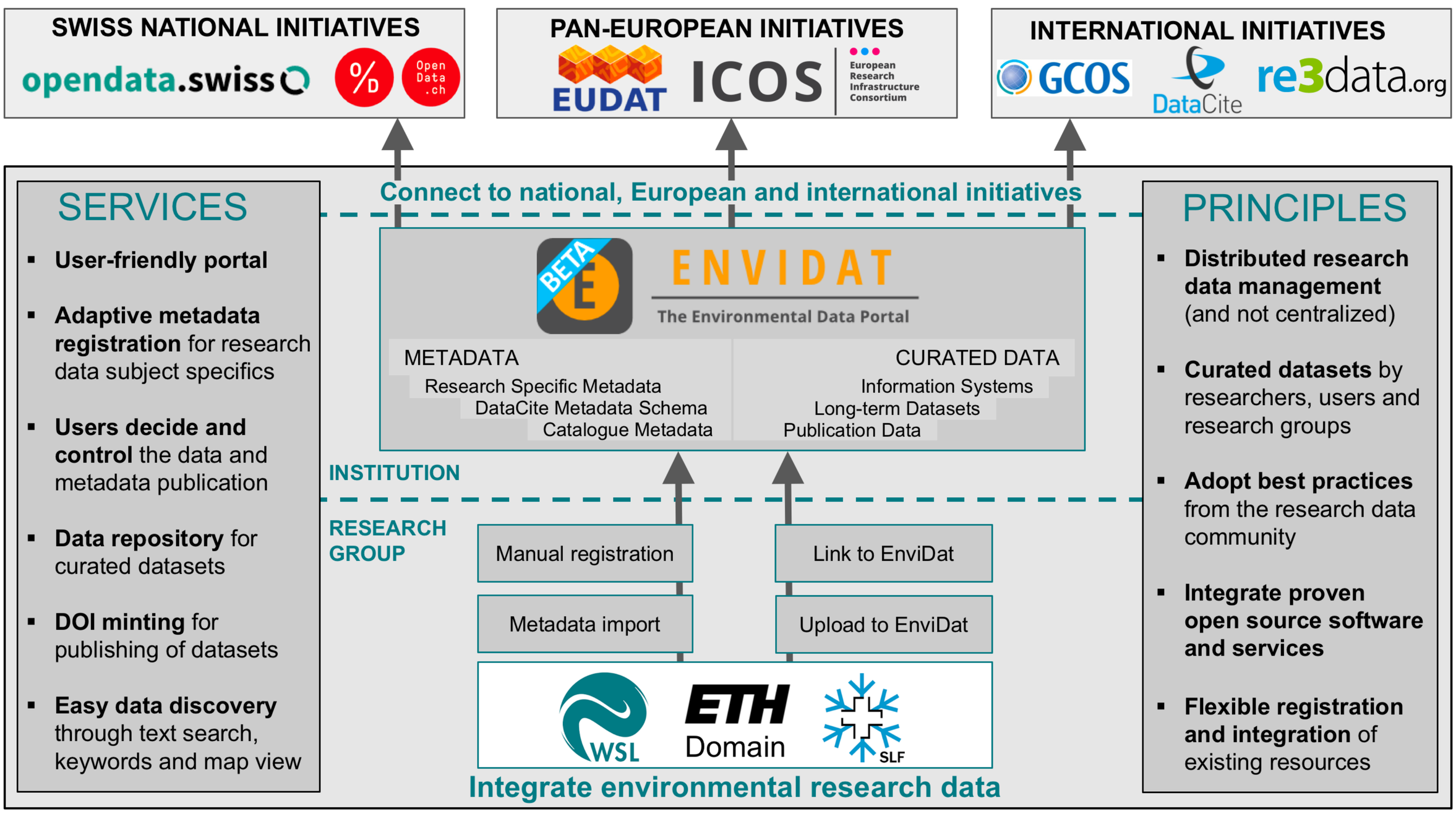

Figure 1. Conceptual framework of the **EnviDat environmental data portal** (**www.envidat.ch**) as of May 2018, highlighting several important principles such as the connection to the wider **research data management community** and, where possible, the **adoption of best practices and standards** in data sharing. Basic **metadata interoperability** between EnviDat and other initiatives is achieved by integrating proven research data management software, as for instance CKAN, whereas long-term integration with active pan-European initiatives could be achieved by, e.g., incorporating key **EUDAT services** in EnviDat.

ENVIDAT
www.envidat.ch

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Conclusions and Outlook

Existing institutional **environmental data portals** such as **EnviDat** may help increase **pan-European** visibility of valuable and **curated environmental monitoring and forest research datasets**. Ongoing work on the **integration of the Swiss Long-term Forests Ecosystem Research Program** (LWF) and the **Swiss National Forest Inventory (NFI)** will be discussed in the accompanying presentation by Iosifescu et al. **EnviDat** welcomes the challenges associated with their integration and aims to facilitate **sharing of environmental data** with the wider research community and with stakeholders and other users.