DFG Core Facility – Bayreuth Center for Stable Isotope Research in Ecology and Biogeochemistry Data Management Plan

The data management of the BayCenSI is based on the FAIR principles (**F**indable, **A**ccessible, **I**nteroperable, and **R**eusable) of Horizon2020 (Wilkinson et al. 2016). To implement the FAIR principles in the BayCenSI, the following three points are defined as central components of the Core Facility's Data Management Plan.

1. Data handling

During data collection, the BayCenSI assures analytical quality control. Standard formats (metadata) for longterm storage will improve the common understanding and reusability of the data. Data handling will follow the <u>DFG-</u> <u>Guideline for Handling Research Data</u> (Sept. 2015) and, if appropriate, subject-specific guidelines such as the DFG Guidelines on the Handling of Research Data in Biodiversity Research.

2. Use of central cloud storage (BayCenSI-Cloud)

For data exchange, securing, and long-term storage of raw data (at least 10 years), a central file server with a cloud service (ownCloud) is used. The cloud allows flexible access for authorized users. Housing, maintenance, and backup of the file server are done by the IT service center of the University of Bayreuth (IT-S).

3. Publication of data

The data acquired within a project will remain confidential. However, for non-commercial users enjoying reduced prices, access to the facility will be granted with the understanding that the work at the BayCenSI is aimed to be published in peer-reviewed international journals, preferably with open access. Users are responsible for the publication of their data. However, the BayCenSI encourages users to make their data publicly available on a long-term basis in generic or discipline-specific data repositories. A (persistent) identifier should be assigned (such as a DOI) to the research datasets to ensure identification, citation, and discoverability.

The analytical service provided by the BayCenSI is to be indicated in scientific (data) publications at the appropriate position. Any work that originated in the BayCenSI must be identified and cited in the acknowledgments of the publication.

If the development of new analytical methods or significant intellectual contributions by service facility members become necessary for the design of experiments or the generation or evaluation of the data, the user commits themselves to include these members in the respective publication as co-authors according to good scientific practice.

Data Agreement:

As a user of the BayCenSI, I confirm that I have read and understood the BayCenSI Data Management Plan. I commit myself to participate in the plan as defined above and to comply with the DFG Guidelines for Safeguarding Good Research Practice (Sept. 2019).