FORSbase - Implementing the FAIR principles for social science data archives

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For a social science data archive, Open Science in the strict sense is a generally a no-go for obvious data protection reasons. However, the FAIR principles can be implemented while at the same time satisfying the data producer, the data user, and data protection laws. In order to reach that objective, FORS - the Swiss Centre for Expertise in the Social Sciences - developed FORSbase, an online web application that makes data discovery, deposit, and delivery as convenient and open as possible for data in the social sciences. Its goal is to combine within a single system and database a wide range of archiving functions and tools for researchers themselves to document and deposit their data, access data and metadata, and to establish contacts and communicate with other researchers.

FORSbase was conceived as a work environment for social scientists and for FORS staff to support them through the entire data life cycle. It provides integrated data storage for primary data and metadata and allows for data preparation and exchange via international standards (DDI, etc.). A DOI is attributed to each dataset version to make the data findable and improve the citability of the data. The metadata on the study and the dataset levels are DDI (Data Documentation Initiative) compliant and therefore machine-actionable, allowing for greater interoperability with other social science data archives and research information systems. All data and research information is discoverable in our public online catalogue. As an institution that promotes the use of research data for secondary analysis, all archived data and documentation are carefully checked and validated. All data are accessible internationally for research purposes, e.g. for researchers with a valid university-level email address.

Two major hindrances for researchers to making their data widely accessible are the fact that the process of depositing data is usually long and burdensome and that they are generally not given the possibility of having made-to-measure options regarding access to their data. One way of dealing with these issues is to accompany the researchers from the beginning of the data life cycle to the actual sharing of the data. FORSbase allows researchers to deposit their data and upload their documentation very easily and at their own rhythm. Second, when depositing his or her data, the researcher can choose between different degrees of openness regarding delivery, ranging from a standard user contract to the option of requiring approval from the researcher before FORS has the green light to distribute the data.

In sum, for the social sciences appropriate infrastructure is needed to mediate the specific needs of data producers and users in relation to FAIR principles and data protection laws. FORSbase provides just such a technical solution, facilitating the sharing and use of secondary data, while at the same time protecting the confidentiality of research participants.