

explore.understand.share.



### Agenda

- Initial situation and specific needs
- Profile and objectives
- Approach and functionalities
- CKAN as technical platform
- Federal architecture
- Subprojects ORD@CH
- Project organization and rough planning
- Questions and contact



#### Initial situation and specific needs

#### «Data Silos»:

Research data generally remain confined in closed domainspecific environments.

#### Usage of data:

Basically no secondary usage beyond the research project that has produced the data.

#### Need for action (SUK programme 2013-2016 P-2):

Development of a metadata infrastructure («Metadata Hub») that spans across institutes and projects in order to make research data more broadly visible and accessible.

#### Requirements for the metadata hub:

- Harvesting, indexing and querying (plain text search) of the metadata
- Access to the research data (primary data) of the institutes via URL
- Usage according to the conditions of the research projects and institutes



## Profile of the ORD@CH project

- Development and pilot operation (9 months) of a metadata based publication platform for research data from the social sciences, the humanities, and the life sciences.
- Participating institutions:
  - FORS (Lead)
  - Digital Humanities Lab of the University of Basel
  - Scientific IT Services / SIB Swiss Institute of Bioinformatics of the ETH Zurich
- Milestones:
  - Start of the project: July 2014
  - Start of the pilot operation: spring 2015
  - End of the project: December 2015
- Continued operation and extension of the platform as an extensive metadata hub for Swiss research data in 2016.

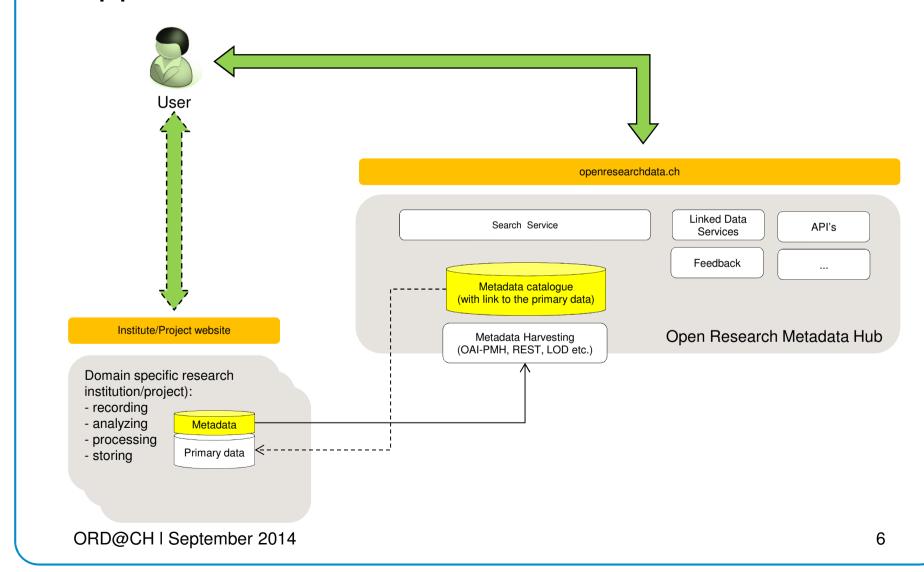


#### **Objectives**

- Promotion of secondary analysis of research data.
- Performance indicator for publicly funded research programs.
- Promotion of interdisciplinary approaches in research and teaching.
- Access to publicly funded research data for the general public.
- Increased visibility of research teams and institutes.
- Simplified publication of data linked to publications.
- Progressive integration of additional databases to build an extensive metadata infrastructure for research data in Switzerland.



### Approach: Metadata Hub





#### Main functionalities

- Registration of the primary datasets in a central metadata catalogue («Metadata Harvesting»)
- Full text search of the metadata catalogue through a user friendly web interface.
- Access to the research data («primary data» in the repositories of the data producers) via URL or contact address.
- Communication between data producers and data users (forum, feedback concerning specific datasets, etc.)
- Additional services for the use of the research data (e.g. API's or Linked Data Services)

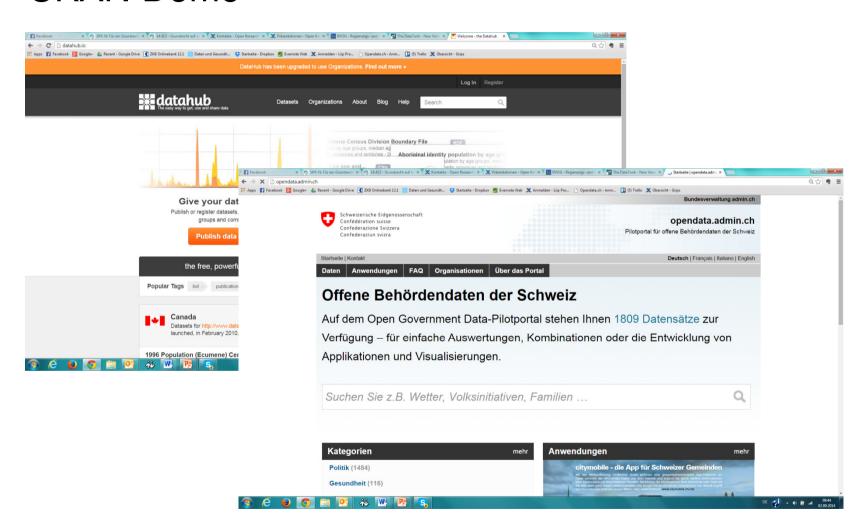


#### CKAN as technical platform

- Open Source Framework of the Open Knowledge Foundation for the publication of Open Data (de facto standard)
- References: data.gov (US), data.gov.uk (UK), opendata.admin.ch
  (CH) and over 100 more examples (for research data as well)
- Main functionalities of CKAN:
  - Harvesting, publishing and managing metadata
  - Search and discovery
  - Web frontends (flexible CMS integration)
  - Federation (of different CKAN instances)
  - Extensions, API's, Visualisation
  - Community building

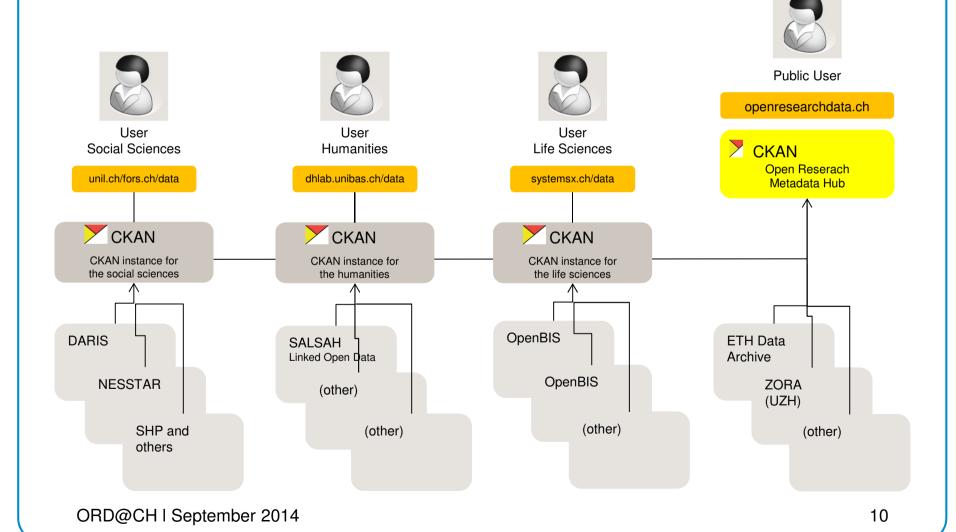


#### **CKAN Demo**





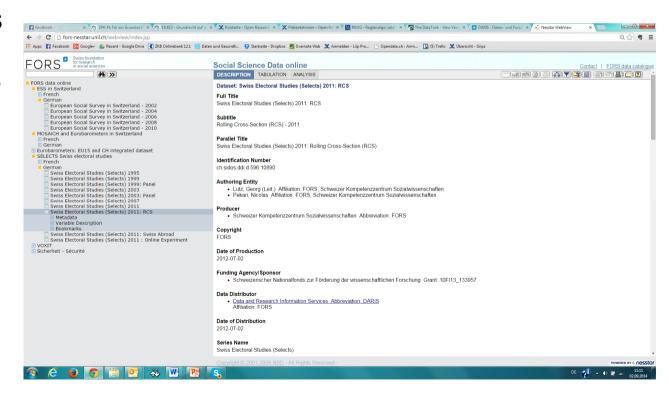
#### Federal architecture ORD@CH





# Subproject Social Sciences (FORS)

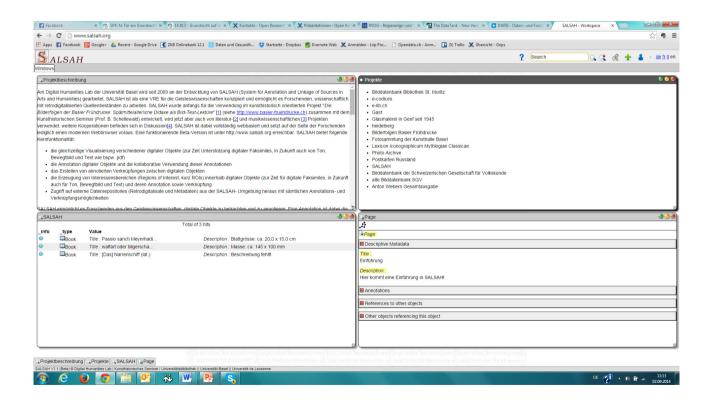
- Data sources FORS
  - NESSTAR (<a href="http://fors-nesstar.unil.ch/">http://fors-nesstar.unil.ch/</a>)
  - SHP
  - COMPASS
  - DARIS
  - FORSbase
  - •





#### Subproject Humanities (DHLab)

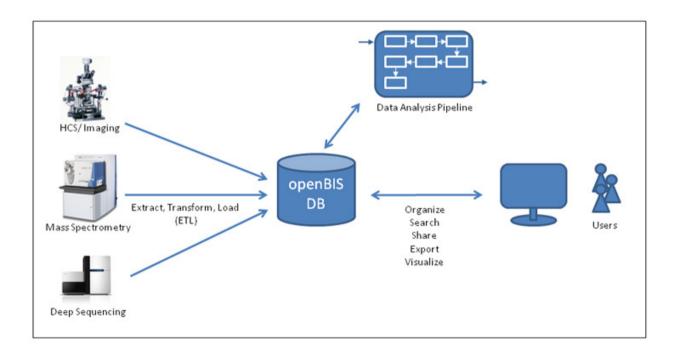
- Data sources DHLab
  - SALSAH (<a href="http://www.salsah.org/">http://www.salsah.org/</a>)
  - ...

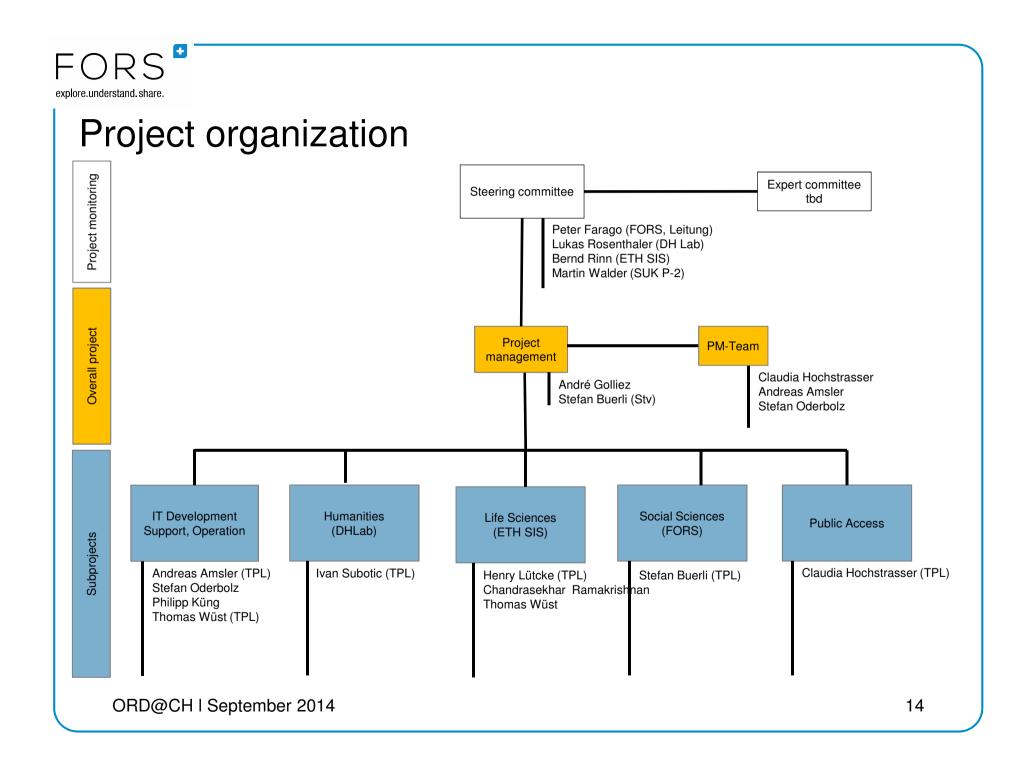




# Subproject Life Sciences (ETH SIS)

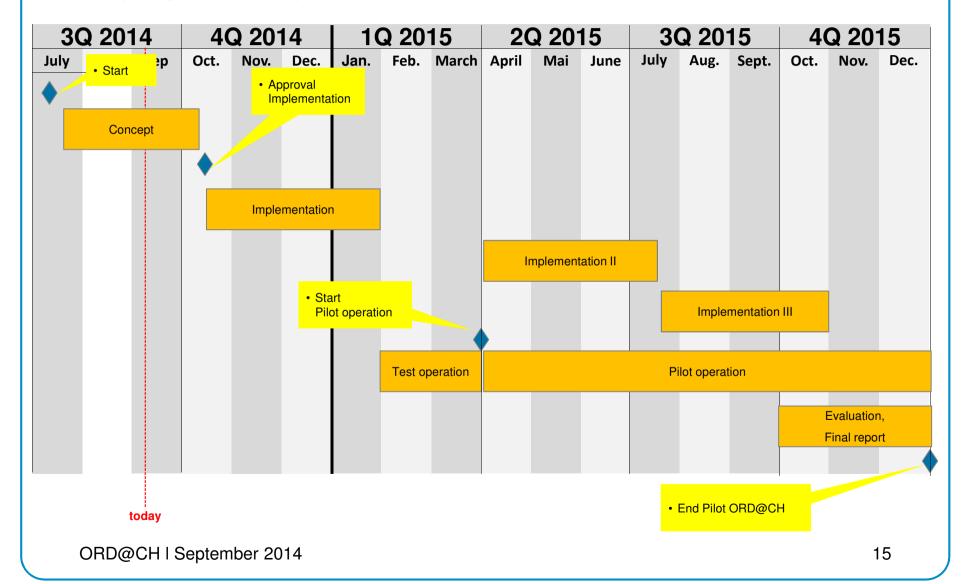
- Data sources ETH SIS
  - OpenBIS (<a href="http://sybit.net/software/openBIS/">http://sybit.net/software/openBIS/</a>)
  - ...







# Rough planning





# Thank you for your attention! Any questions?...





#### Contact



Contracting authority:

Peter Farago, Director FORS

peter.farago@fors.unil.ch

Direct: +41 21 692 37 31

Project management:

André Golliez, Managing Partner itopia ag

andre.golliez@itopia.ch

Direct: +41 44 355 56 24

Stefan Buerli, Research Inventory administrator FORS

stefan.buerli@fors.unil.ch

Direct: +41 21 692 37 29