Work package 7 – Technical work: Technical reference architecture

The general objective is to draft the technical reference architecture of DARIAH. This architecture will consist of drafting engineering plans for the construction as well as small proof-of-concept prototypes for key enabling technologies. There are four major activities:

1) Scope a study for technologies building modules:
 • Identifying already existing technologies that enable research infrastructures,
 • Carrying out a survey of technological infrastructure at partner centres, and
 • Recommending technologies and standards for the primary building blocks of DARIAH.

2) Build the technical reference architecture:
 • Demonstrating the validity of an approach that focuses on the development of an integrated middleware for supporting digital access to arts and humanities data and services in Europe,
 • Focusing on Web and Grid services as the foundation for an open semantic Service-Oriented Architecture (SOA),
 • Focusing on the use of preservation in a distributed architecture, and
 • Reporting on the developments of the proof-of-concept demonstrators and migration plans for legacy applications.

3) Suggest a technical and functional roadmap:
 • Methodological recommendations for the construction phase of DARIAH,
 • Establishing a model for a future DARIAH network, based on the organisational layers (local/thematic collections, national data centres and European/international bodies), and
 • Defining tasks and roles of the partnering data centres and overarching DARIAH services.

4) Construct proof-of-concept demonstrators:
 The demonstrators are design studies that focus on specific problems of arts and humanities data, which need to be overcome to implement DARIAH as a research infrastructure. The developed system will integrate the access, archiving, and organization of electronic resources and will permit the harvesting of metadata.
 • Construct an exemplary Service-Oriented Architecture to demonstrate the viability of the technologies identified in the technology review. The architecture will be based on the "Archaeological Records of Europe - Networked Access" (ARENA).

 • Construct an exemplary digital archive to showcase DARIAH as an infrastructure that offers sustained access to arts and humanities research results in various formats. The archive will be based on the collections at the Nordisk Forskningsinstitut, Denmark, as well as the ECHO collections at the Max Planck Institut für Wissenschaftsgeschichte, Germany.