

DARC – Distributed Africana Repositories Community – pilot project

*Project proposal by the Afrika-Studiecentrum (Leiden) submitted to SURF, for the Call for Tender DARE Services Projects DARE.
April 2003*

Management Summary

This is a project proposal to set-up a portal service for African Studies based on the Digital Academic Repositories (**DARE**) infrastructure. The project proposal is initiated by the Afrika-Studiecentrum (**ASC**) in Leiden. The Library of the University of Leiden is the proposed DARE repository partner.

1.1 Aim

With project DARC, the Afrika-Studiecentrum aims to lay the foundations for a digital platform for scholarly communication in the field of African Studies.

The objective of the project concurs with the mission of the Afrika-Studiecentrum to foster scholarly communication in the field of African Studies.

Africanists are scattered around university faculties, research institutes and multi-disciplinary projects. The researchers tend to bundle their expertise in changing collaborative configurations and networks of excellence. To support these synergetic forces the community of Africanists needs an integrating communications platform. The Scientific Advisory Council of the Afrika-Studiecentrum, in which some 10 Dutch universities and institutes are represented, recognizes this need and supports the DARC initiative.

The proposed implementation of the digital platform is based on the concept of a two-layer model:

- 1) Distributed institutional repositories that provide tools and methods for the controlled and managed availability of research output (DARE layer).
- 2) Community portals that provide integrated access to this intellectual output from the vantage point of different disciplines and fields of interest (Community services layer).

The DARC initiative will contribute to populating repositories (DARE layer) with African Studies content by involving researchers affiliated with various universities and research centres in the Netherlands. It will develop a community portal on top of these repositories to gather and share information about these African Studies resources (DARC layer).

The Afrika-Studiecentrum will realize the objectives of the DARC initiative in several steps. The first step is pilot project DARC. This project aims to position the digital platform for the Dutch community of Africanists within the framework of the DARE Programme in the Netherlands. It is anticipated to extend the pilot fully in consecutive steps, at the national level within the DARE Programme and at the international level within the EU 6th Framework Programme.

1.2 End result

Pilot project DARC will deliver the basic building blocs for the proposed DARE/DARC platform for Africanists:

- A small-scale running pilot/demonstrator involving ASC researchers and one DARE repository (month 4)
- An implementation model with a set of standards and best practices for implementing the DARE/DARC platform (month 6)
- A DARE/DARC business model, including service level agreements, for DARE repositories and services (month 6)
- An evaluation report with conclusions and recommendations concerning the prospects to develop the pilot into an operational service and to extend it within the DARE Programme (month 6)

1.3 Project period

September 2003 – February 2004

The project begins on the 1st of September 2003, or as soon as the DARE repository in Leiden is ready for the pilot.

The project duration is 6 months.

The project ends the 28th of February 2004, or six months after the start of the project.

1.4 Tender criteria

The DARC initiative will contribute to the realization of the DARE infrastructure by adhering to the DARE starting points as listed below. The pilot project will involve researchers of the Afrika-Studiecentrum and will re-design the scientific information workflows within this institution, improving the publication and dissemination processes in particular. By demonstrating and extending these practices to other, related institutions, the DARC initiative seeks to achieve 'critical mass' for the DARE approach. This in turn, will help realize the development of the projected community platform for African Studies.

Towards generic solutions: information gathering at the thematic level

The services to be developed by the DARC initiative will serve the academic community working on Africa-related issues by gathering relevant and frequently consulted information, such as:

- information about Africanists and their expertise area
- information about publications and other research output
- information about grants, fellowships and projects
- information about publishers and linking to publisher's services
- working papers, e-journals, newsletters, refereed series, occasional papers, student theses, articles, presentations, research data, etc.

Currently this information is placed on web pages scattered around university sites, mostly invisible, badly updated and often inaccessible because of dead links.

Pilot project DARC will gather information from one DARE repository only. At least two information services will be implemented: 1) Africanists in the Netherlands 2) Publications by Africanists in Leiden.

In consecutive stages it is intended to gather information from other repositories as well and provide a comprehensive coverage of all Africanists research information.

Towards generic solutions: information submission at the institutional level

Researchers will contribute much of this information themselves with the support of the institutions they are affiliated with. The underlying DARE infrastructure will provide the necessary services to store and manage this information in repositories. African PhD and post-graduate researchers, guest fellows and visitors will also have the opportunity to put their research material in the Dutch institutional repositories.

For the pilot project, 25 ASC researchers and Africanists from Leiden will populate the DARE repository, with a minimum of 300 items. In consecutive stages it is intended to populate more repositories and involve Africanists all over the country.

Improved scientific information management workflows

For the institutions and researchers alike the new workflow will alleviate the current administrative overhead significantly.

To date, researchers manage their own bibliographical references in word processing files, personal databases and personal web pages. They are repeatedly required to provide information about their track record and research output for different purposes, for web sites, for presentations, for curriculum vitae, for annual reports, for evaluation reviews, etc. Because researchers are mostly affiliated with more than one research institute, they need to repeat this exercise again and again.

As researchers submit their own data to the DARE repositories and are held responsible for keeping the data up-to-date, institutions will be able to retrieve the data needed for their own purposes independently from the researchers.

During pilot project DARC, the internal workflow for managing research output information at the Afrika-Studiecentrum will be re-designed in accordance to the generic DARE/DARC workflow principles, as defined above.

Controlled and managed availability of digital research material

Currently researchers store their digital research output on diskettes, PC hard disks or institutional data servers. With the DARE infrastructure it is anticipated that researchers will be able to submit digital material to institutional repositories, anytime and from anywhere in the world. They will not need to look after this material themselves, any longer. They will always be able to access their own material in the future. During pilot project DARC the requirements and conditions for storage, preservation and access to ASC research material will be agreed and documented in a business model, including service level agreements with the DARE repository.

Implementation model: standards and interoperability

The DARC portal service will provide access to all Africana material stored in the Open Archives Initiative (OAI)-compliant repositories that are being implemented by the DARE partners.

The common DARE/DARC platform will facilitate each university to host and share African Studies content on-line in an open standards-based XML application framework.

The implementation model will address issues such as record ownership across the DARE repositories, the one to one relationship between the researcher's personal profile record and his/her publication records, the link between the metadata records and the content in the repositories and/or at the publisher sites, access control levels and interoperability with other information systems, such as the library system. Standards and conventions for unique identification and linking across platforms will be implemented in accordance to OAI-standards. During the DARC project, the Afrika-Studiecentrum will contribute to the development of this implementation model through consensus building talks with DARE partners. All the issues raised will be investigated and those that cannot be solved during the project will be listed for future work.

Transfer of expertise and building partnerships

The pilot project will deliver documentation on the DARE/DARC implementation model, including standards and technical solutions, and best practices for use by other organizations interested in implementing a thematic or disciplinary portal: e.g. in the field of area studies or development studies.

The pilot project will identify parties interested in participating in follow-up activities, such as an extensibility demonstrator project.

The Afrika-Studiecentrum is committed to extend the proposed OAI-based platform beyond the Netherlands and to develop a truly international community portal, together with partners in the USA, such as Michigan State University (Africa Online Digital Library), partners in the EU, such as the Africa-Europe Group for Interdisciplinary Studies (AEGIS) and partners in Africa, such as the Universities of Dakar, Cape Town and the Western Cape. A project proposal to this end is being prepared for the next EU 6th FP call. The emphasis will lie on digitization of Africa related research resources and content.