



Building bridges between countries and continents

el4Africa brought researchers and e-Infrastructure developers from many countries together, providing many new opportunities for Africa-Africa and Africa-EU cooperation. The project organised four major gatherings in Malawi (*On to e-Science!* / May 2013); Rwanda (*An African e-Infrastructure for Virtual Research Communities and their Applications* / November 2013); Nigeria (*Leveraging Science Gateways & Virtual Research Communities in African e-Science* / March 2014); and Tanzania (*High Performance Computing for Public Good* / June 2014).



Priorities for tomorrow

The activities of **el4Africa** have led to the publication of 44 recommendations for speeding up the development of impactful e-Infrastructures in the continent. They constitute the legacy of the project for policy-makers, researchers and developers.



el4Africa in Numbers

- **34 e-Infrastructure projects** with huge potential impact identified by the project
- **15 Communities of Practice (CoPs)** identified in Africa
- **5 Certification Authorities** created in Africa
- **5 Identity Providers** created in Africa
- **More than 20 applications** available on the Africa Grid Science Gateway and the Pharmacology Science Gateway
- **292 participants** at the el4Africa workshops
- **44 recommendations** for future development of e-Infrastructures



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Teaming up for exploiting e-Infrastructures' potential to boost RTDI in Africa

PROJECT OUTCOMES

**TEAMING-UP FOR EXPLOITING
E-INFRASTRUCTURES' POTENTIAL
TO BOOST RTDI IN AFRICA**



Funded by the 7th Framework
Programme of the European Union





An extensive state of the art

Through a wide-scale survey, **el4Africa** has drawn a comprehensive picture of established and emerging e-Infrastructure applications in Africa. The results revealed interesting findings including 34 potential e-Infrastructure applications and brought to the fore some important avenues that could be further explored.



The el4Africa Project Wall

el4Africa published an online virtual wall used to showcase the identified 34 e-Infrastructure projects in Africa to the international community. The Project Wall notifies them of the available collaboration opportunities.



e-Infrastructures for society

Beyond the ICT sector, e-Infrastructure applications can have large economic, societal and environmental impacts. **el4Africa** studies showed positive benefits in aspects such as the creation of jobs and new services, overall economic growth, and energy needs in Africa.



Recommendations to developers

el4Africa published a set of recommendations for e-Infrastructure developers in Africa including an empirical 5-step approach to developing an application, the need to engage into collaboration activities, and capacity and skills building.



A Gateway to Science

el4Africa deployed the first ever Africa Grid Science Gateway, a portal for researchers to access a wealth of e-Infrastructure applications in an easy and user-friendly way.



Towards federated research organisations

el4Africa developed a program to deploy certification authorities (CAs) and Identity Federations (IdFs) across Africa; as a result Kenya, Malawi, Nigeria, South Africa and Tanzania NRENs have successfully deployed CAs, and Identity Providers have been created in 5 countries.



Flagship demonstrators

el4Africa identified and developed a range of African e-Infrastructure flagship demonstrators, including a Pharmacology Science Gateway, the TRODAN Data Repository, the Weather Research and Forecasting (WRF) Model and a Community Health Portal.



A new paradigm for rural broadband access

el4Africa contributed in demonstrating new ways to expand broadband connectivity to rural areas through the Serengeti Broadband Network (Tanzania). This pilot experience can be replicated to give access to e-Infrastructures for more researchers across Africa.



A Regional Operation Centre (ROC)

el4Africa has contributed to the establishment and continuous support of the Africa & Arabia ROC for the management of a continental Distributed Computing Infrastructure (DCI) interoperable with the European Grid Infrastructure.

