

IST Africa 2010 - Block III: EC Perspectives

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e-infrastructure

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European Commission
Information Society and Media



"The views expressed in this presentation are those of the author and do not necessarily reflect the views of the European Commission"

e-Infrastructures for Science

...ubiquitous research environments for accessing and sharing resources and tools...



e-Infrastructures addressed by EC



Innovating the scientific process:
global virtual research communities



Accessing knowledge:
scientific data



Experimenting *in silico*:
simulation and visualisation



Sharing the best computational resources:
e-Science grid, supercomputing



Linking at the speed of the light:
GÉANT



Characteristics of (e-)infrastructures

Infrastructure: “The basic systems and services ... a country or organisation needs to work efficiently”

Cambridge dictionary

- **Maturity**

- Ubiquity
- Accessibility
- Transparency
- Reliability

- **Formation**

- through connecting isolated systems and networks

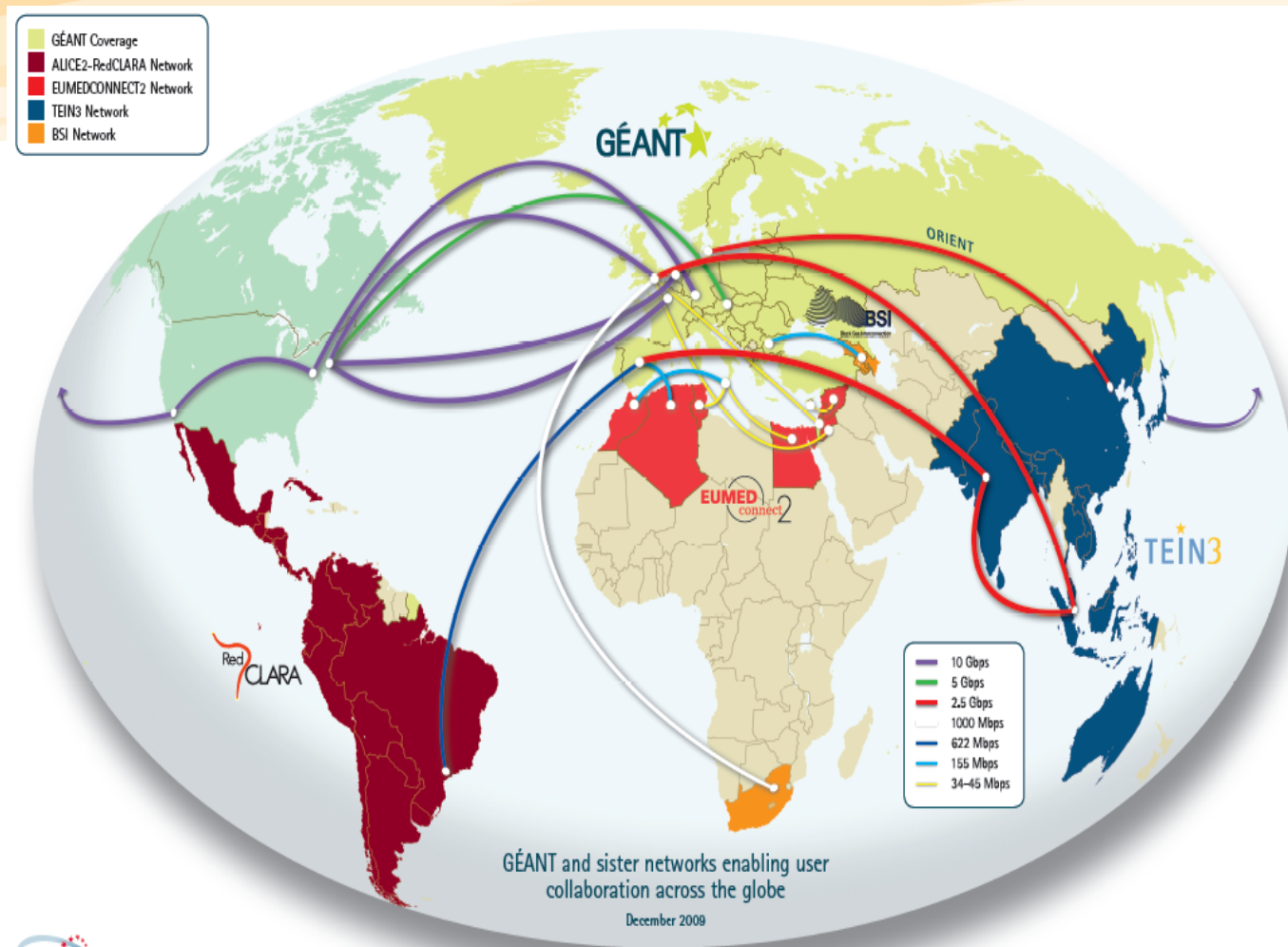
International Cooperation in RIs & e-Infrastructures

- Global dimension of RI & e-Infrastructures
 - Addressing global challenges
 - Global connectivity & interoperability, open access
 - International cooperation: a positive sum game
- Regional development and integration
 - Support by EU co-operation and development aid programmes
- Extending reach of GÉANT towards world regions
 - Sub-Saharan Africa does not have its Research Networks fully connected to each other and to GÉANT

(GÉANT is the pan-European data network for Europe's research and education community. Together with Europe's national research networks, it connects over 40 million researchers across 40 European countries)



GÉANT Global Connectivity



Cooperation with Africa in RI

EU working with Africa through specific Partnerships

- As agreed by EU +African Heads of States and Governments (Africa-EU Summit - Lisbon 2007)
- Partnership 8 on “Science, Information Society and Space”
 - Reduce the Double Divide (Scientific and Digital)
 - Reinforce the use of ICT as means for growth, poverty reduction and socio-economic development
- AU Commission identified 19 Lighthouse projects to implement the Partnership:
 - AfricaConnect, is one of the 6 initiatives agreed for rapid implementation between the AU and EU Commissions



Funding tool:

ACP (Africa - Caribbean - Pacific) Connect

- **African Component** of ACP Connect: “AfricaConnect” (12 M€ EDF + 3 M€ cofinancing)
- Implementing partner: DANTE (grant contract in negotiation)
 - Grant expected to be signed in first semester 2010
- Results of AfricaConnect important to determine possible future extensions



AfricaConnect:

Preparing the ground for the implementation 1/2

- Increase awareness in public authorities and education and research institutions managers of the need for high-quality e-Infrastructure
 - The message is "no high quality research and education are possible without a high-quality network connecting to the world"
- Improve collaboration and rationalisation of efforts
 - Increase of the level of collaboration of regional NRENs
 - Foster and integrate supporting actions in place by European NRENs
 - Harmonise policies at national and regional level



AfricaConnect:

Preparing the ground for the implementation 2/2

- Support the emerging NRENs
 - How to reduce the imbalance of technical capability and state of development of universities and research centres?
 - How to develop national research & education e-infrastructures?
- Increasing importance of applications
 - What are the needs and potential development areas?
 - Support to cooperation and emergence of virtual research communities (intra-regional - not only towards/from GEANT)
- Future use of e-Infrastructures
 - Beyond “traditional” e-health/learning/government applications towards public services (e.g. civil protection, agriculture (crop and plague control), climatology, weather monitoring, etc.)



Potential of AfricaConnect

1/2

- AfricaConnect has the potential to become a real success with major impact in the region
 - Window of opportunity that cannot be missed!
- Needs a **strong political will** and a determined **collaboration of all stakeholders**:
 - Political: role of AUC in raising awareness in public authorities and institutional support
 - Stakeholders sharing a common vision and working in the same direction, with participation of other actors (e.g. AAU)
- Ambitious goals have to be balanced with resources available and readiness of NRENs



- Progressive evolution from development aid towards self-sustained national/regional e-Infrastructures policy
 - ▲ Sense of ownership and responsibility
 - ▲ Local development of know-how
 - ▲ Transfer of demand and competences to the private sector
 - ▲ National budgets should provide for national support
 - ▲ Sustainability in the long term
- A focused and fast action delivering tangible results
 - ▲ act as a catalyst for other countries and NRENs to get ready
 - ▲ federate other initiatives and efforts around AfricaConnect to multiply its impact

"Let's maintain the momentum and be practical!" ...



Connecting
the finest
minds

... Linking ideas at
the speed of light

Sharing the
best scientific
resources

... Harnessing
the unlimited power
of computers,
instruments and data

Building virtual
global research
communities

... Innovating the
scientific process



e-infrastructure



géant | grids | scientific data | supercomputing



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