

EGEE ↔ GEANT

Peter Clarke

Clarke@hep.ucl.ac.uk



EGEE vision: Enabling Grids for E-science in Europe

- **Goal**

- Create a European wide production quality Grid

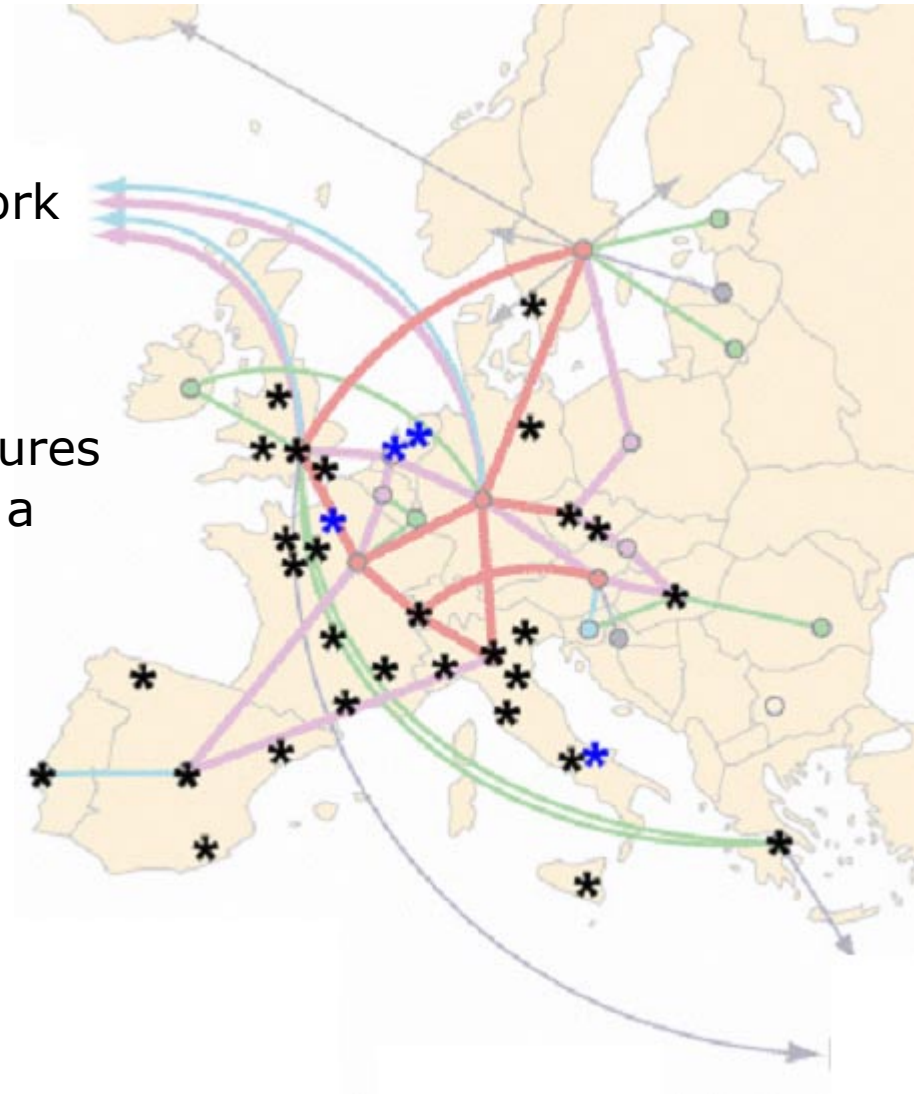
- **Build on**

- EU and EU member states major investments in Grid Technology
- Pioneering project prototype results

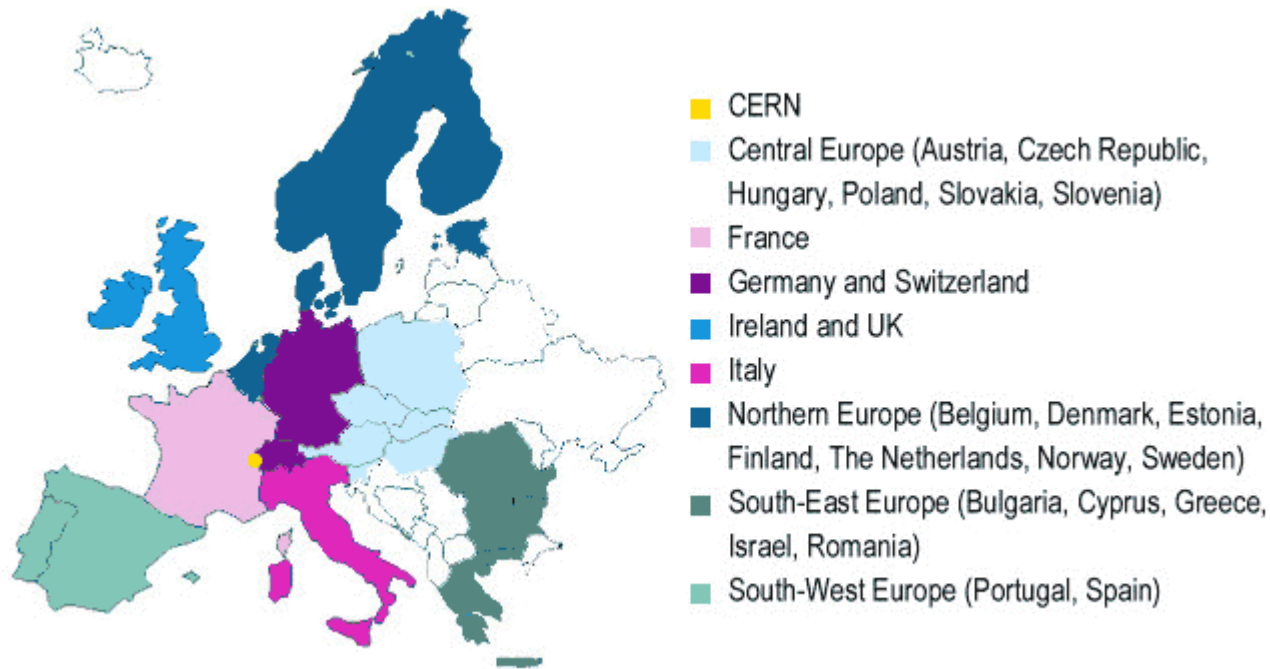


The Historical Analogy

- **EU Geant** \Rightarrow binds national NRENs and creates a high performance production network for Europe
- **EGEE** \Rightarrow will bind national Grid infrastructures - focussing all activities towards establishing a production quality Grid for Europe



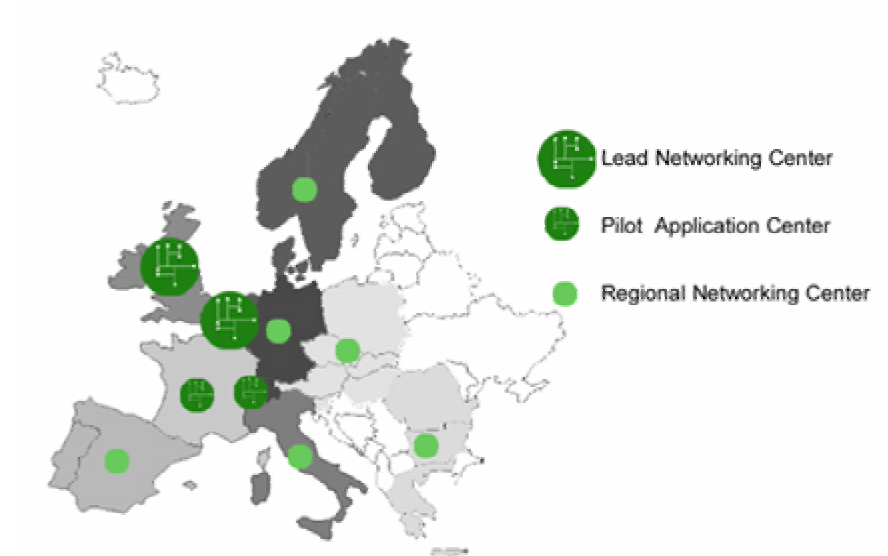
The EGEE consortium of Grid Federations



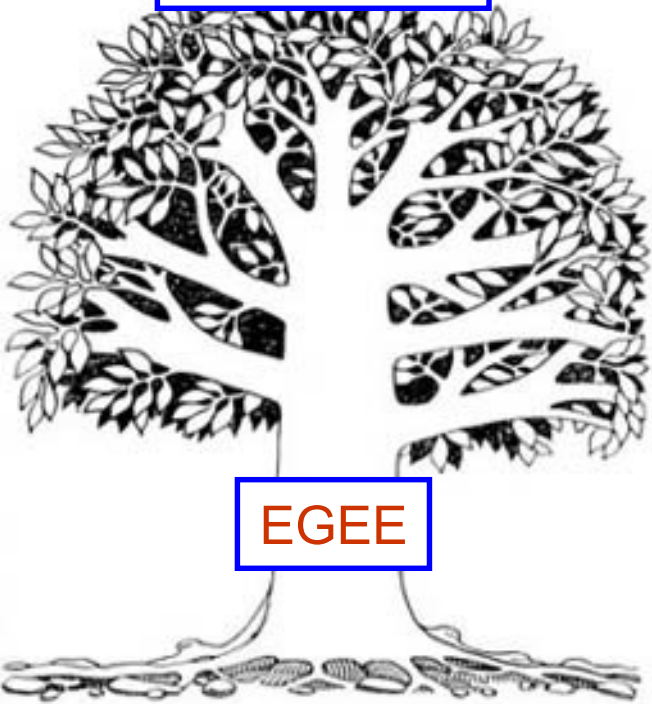
Integrated Infrastructure Initiative (I3)

Response to FP6 call "Communication Network Development – Grids"

- Networking Activities:
- Specific Service Activities:
- Joint Research Activity

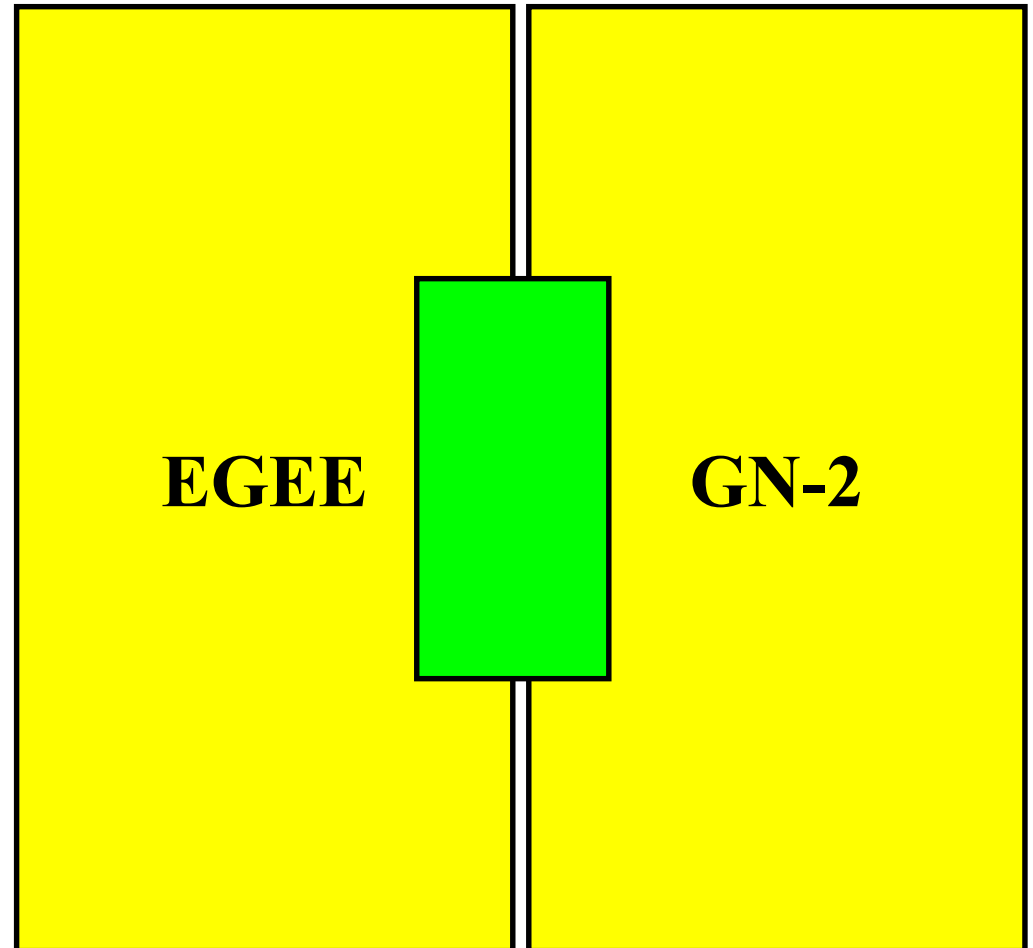


Applications



EGEE

Geant and NREN network



Networking activities

- Management & coordination
- User Training and Induction;
- User Support and Consultancy;
- Applications Interface.
- Dissemination and Outreach

Specific service activities

- EGEE Operations Management
- EGEE Core Infrastructure Centres
- Regional Operations Centres, responsible for coordinating regional resources, regional deployment and support of services in all other countries
- EGEE ↔ Geant&NRENs Liaison, Requirements and SLAs

Joint research activity

- Middleware Engineering for services:
- Quality Assurance team and a Grid Security team.
- Middleware Integration and Testing
- Network interface:
 - Network resource allocation and reservation
 - Performance information monitoring and publication

Liaison EGEE ↔ Geant/NRENS

(to ensure mutual understanding, and “buy in” for deployment)

Specific Service Activity

Requirements & Planning
Methodology & Model

Service Level Agreements
(SLR=> SLS => SLA)
SLA Adherence Monitoring

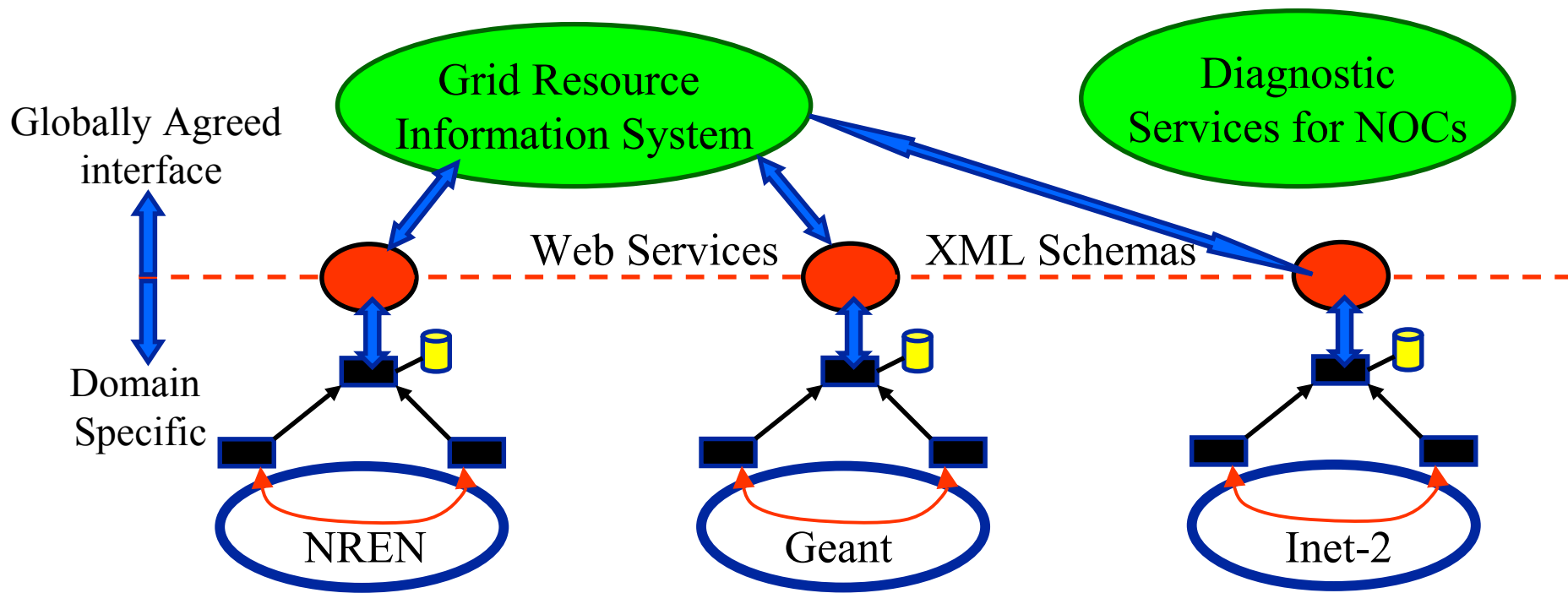
Operational Model

Joint Research Activity

Performance
Measurement & publication
- Resource information/management
- SLA monitoring
- Operational Diagnostics

Resource Allocation
& Reservation across
multiple domains

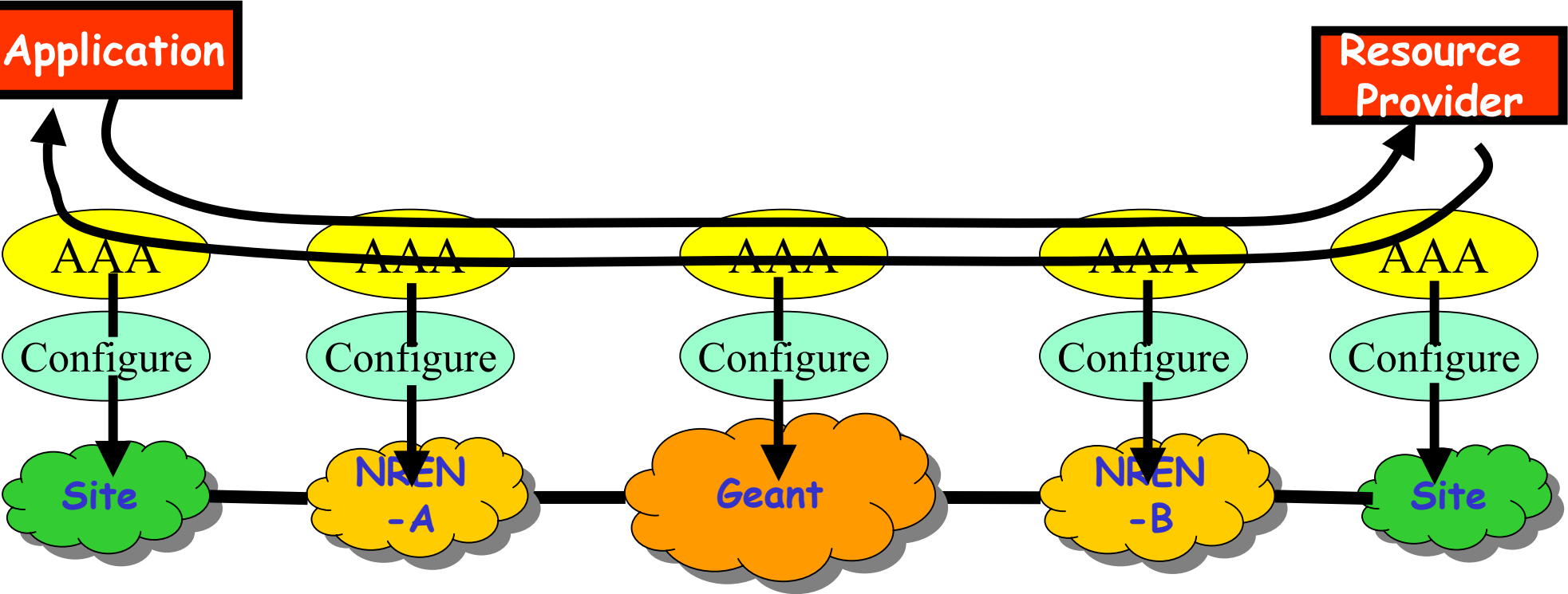
Network Performance information measurement and publication



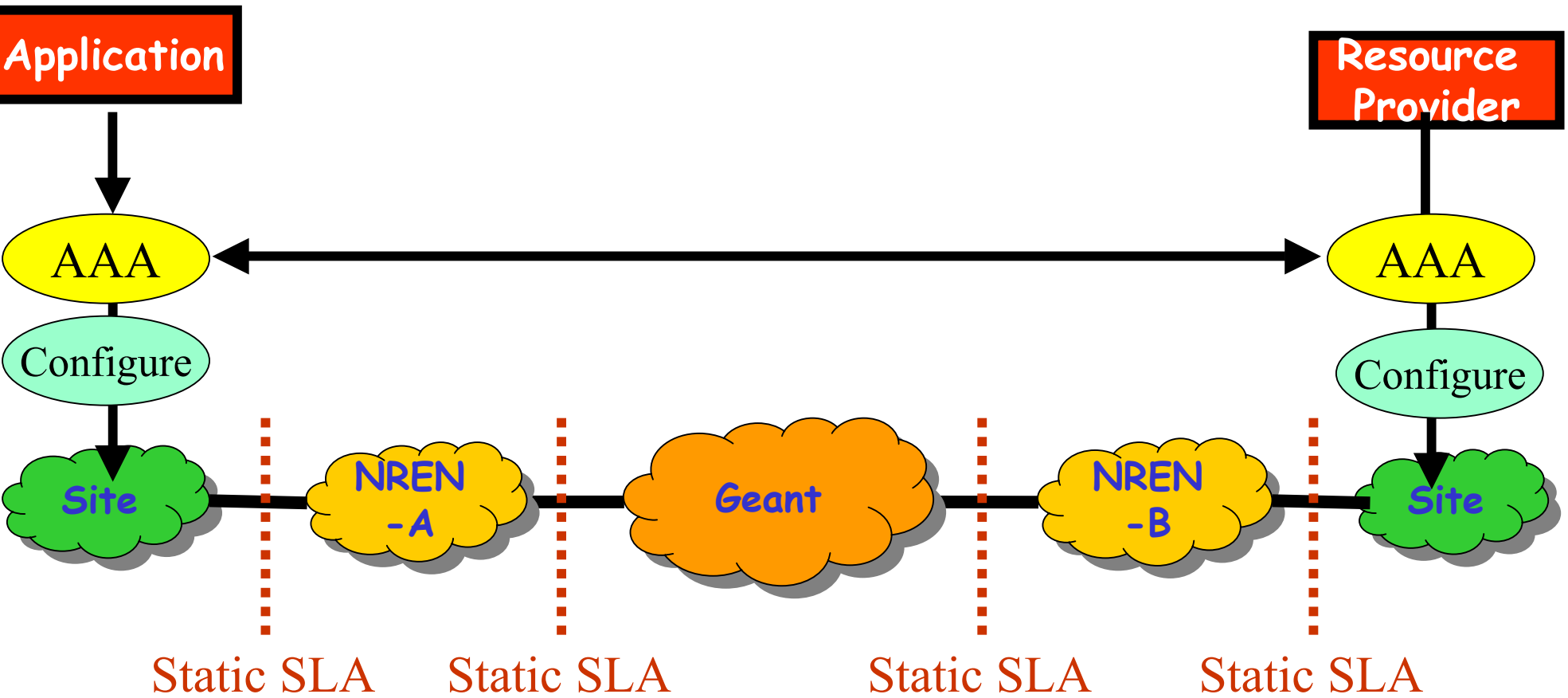
Network Performance information measurement and publication

- By construction this will be completely in line with
 - DANTE Perf Initiative
 - Internet-2 e2e pipes
 - GGF Net Mon WG
 - Global schema work
 - [PERT]
- EGEE effort will provide the Grid application parts

Network Resource Allocation and Reservation



Start "simple"



[Note: For example, GRS project of S.Bhatti, UCL]

Network Resource Allocation and Reservation

(I am) Aware of:

- GARA /Globus
- DataTAG work
- UvA AAA work
- UCL GRS and Cardiff G-QoS
- Canarie OGSA lightpath service work

Probably unaware of much other work – will of course research

EGEE Network Sector Direct Participants are

- CNRS/UREC (France)
- UCL (UK)
- DANTE
- DFN
- GARR
- GRNet
- ?? IMEC (BE)

- Fin -

