

e-Infrastructure governance: structures and financial issues

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User perspective: services



More data centred

For virtual organisations

As a global activity

Sharing and combining resources:
datasets and instruments

Using all what's available

- Personal equipment
- Services in the cloud

Open access



Make IT work seamlessly



Video on collaboration, eResearch will be included

http://www.surfmedia.nl/app/video/uwoYqfSIfTVTgNphfLRQ8gif/play?format_id=A1NQahgLIOLWF4mMATSXiShW&mode=object

e-Infrastructure Ecosystem



Maintainability, sustainability, and extensibility



e-Infrastructure ecosystem



- Providing seamless access to services enabled by internationally shared use of:
 - Computing and storage facilities
 - Generic application services
 - Sensors and instruments
 - Network resources
- Providing hassle free end-to-end interworking via a single user interface and a single control plane for the allocation of multiple resources, from multiple domains and in multiple locations worldwide
- Adapting itself continuously to the demands of an ever changing outside world



e-Infrastructure for Science: an ecosystem



- COM (2009) 108, ICT Infrastructures for e-science: *“e-Infrastructure is an environment where research resources (hardware, software and content) can be readily shared and accessed wherever this is necessary to promote better and more effective research”*
- The e-IRG recently produced a White Paper 2009, a Roadmap 2010 and a Blue Paper for ESFRI, addressing the change to e-Infrastructure as a service
- On 6 October 2010 the High-Level Group on Scientific Data made recommendations to enable Europe ‘to gain from the rising tide of scientific data’

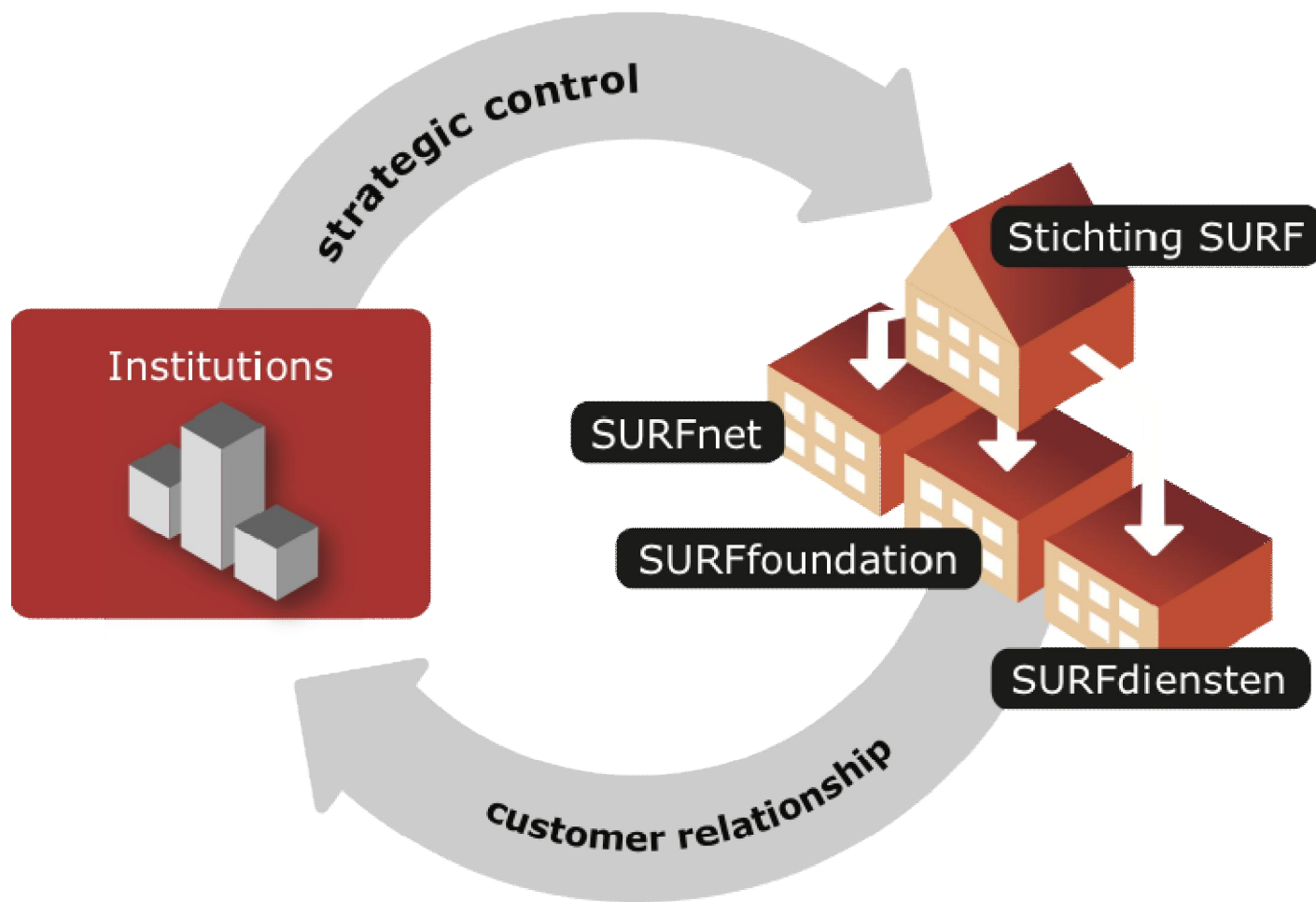


Hence...

- It's about services and their integration
- Close collaboration with users and e-Infrastructure service providers is urgently needed
- Coordination between domains on a worldwide scale should be our focus
- Open innovation is key



Governance in NL: users control strategy



Source: Innovation considered, ICT innovation as practised by SURFnet, Frank van Iersel, Kees Neggens, for the Dutch Ministry of Economic Affairs



Governance in NL: integration and financing



- Integration of governance
 - In May 2009: the Government decided to reorganise the Dutch national e-Infrastructure
 - Stichting SURF will become responsible for the ICT infrastructure, overseeing Research & Education Networking, Grid Computing, Supercomputing, and services for e-science
 - Via SURF users will have the control over strategy and investments policies
- Activities are financed both via tariffs and innovation subsidies thereby combining the interests of the research and education community and the national economy



Requirements for governance of an European e-Ecosystem



- Prioritise investment on user driven strategies
- Include users in private research (PPP)
- Use what's available in the private ICT-sector
- Ride the waves of national strengths and national user involvement
- Include experiences of leading edge international user groups, e.g. around large scale multi-domain facilities, being part of a worldwide e-Ecosystem
- Set and require open standards for generic services



Accompanying financing model



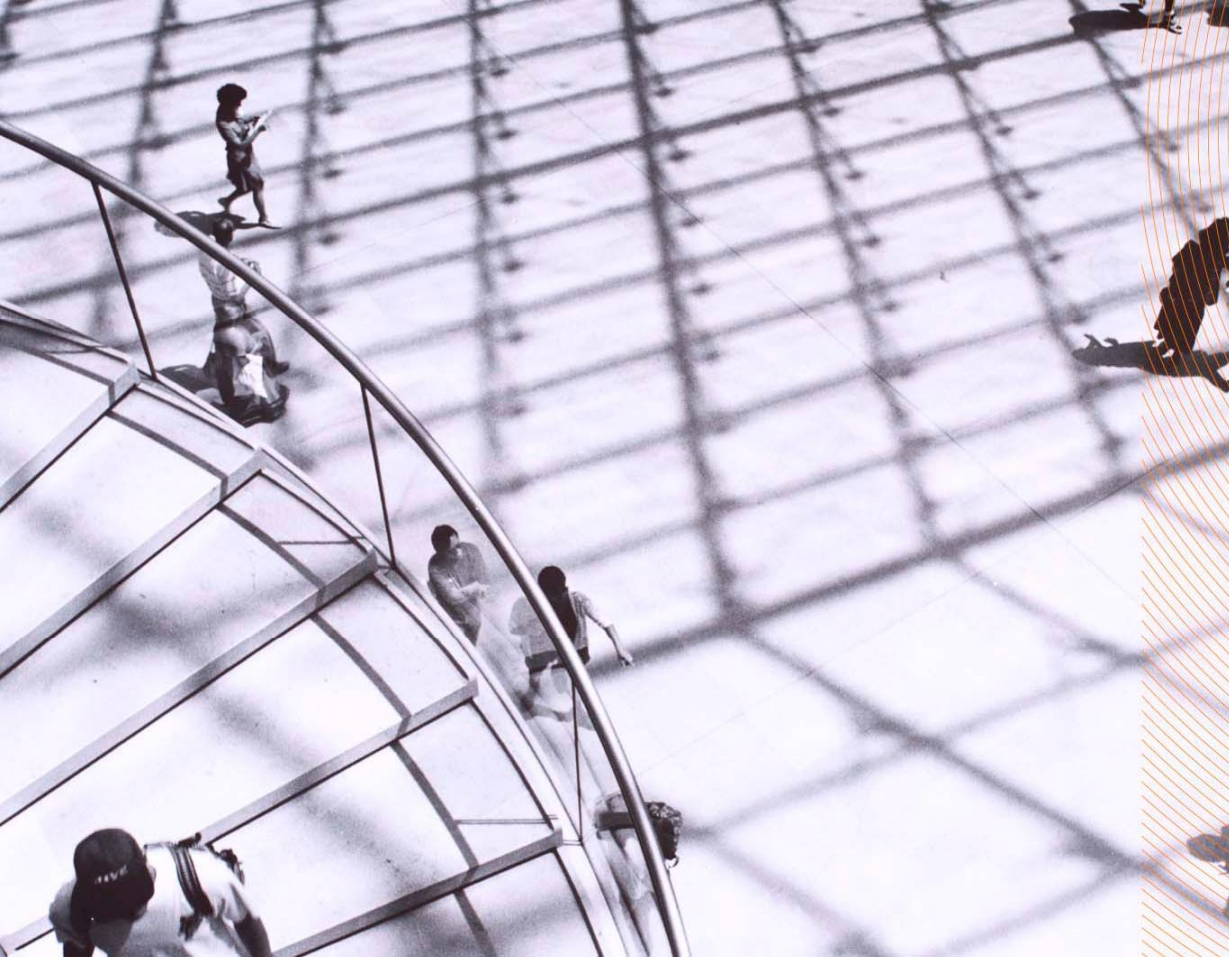
- Earmark additional funds for the innovation of the scientific e-Ecosystem
(ref. High-Level Group on Scientific Data, 06-10-10)
- Financial support on a matching base:
 - EU-investments leverage national investments
 - National investments leverage campus investments
- Profit from private investments in ICT services and ICT innovation
 - No limitations for the participation of industry research
 - ICT-innovation for science and education is the innovation engine for the general ICT-market
 - Private investments in 'commodity' ICT-services are complementary to public investments



To summarise and start the discussion



- E-Infrastructure can best be considered an e-Ecosystem: delivering an adaptive seamless set of various ICT-services
- Investment in e-Infrastructure should be user driven with a key role for existing national and international user bodies
- Early innovation of ICT remains a key argument for public support of the e-Ecosystem
- Europe should give an impulse by matching national, regional or user group funding for specific e-Infrastructure investments



Thank you for your attention

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