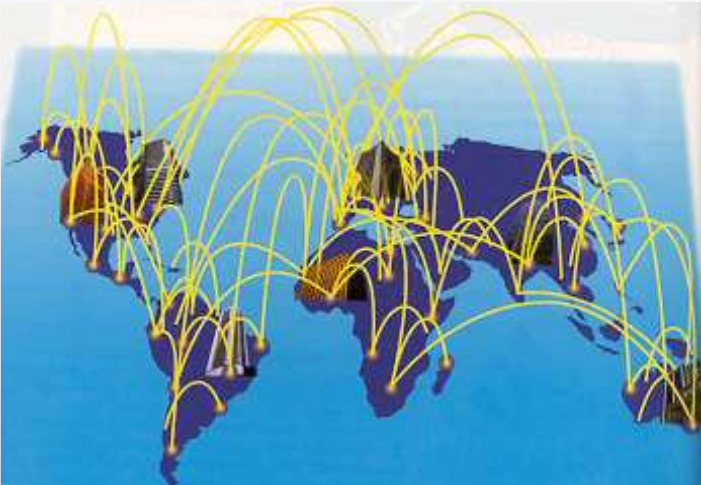


Next Generation Infrastructures

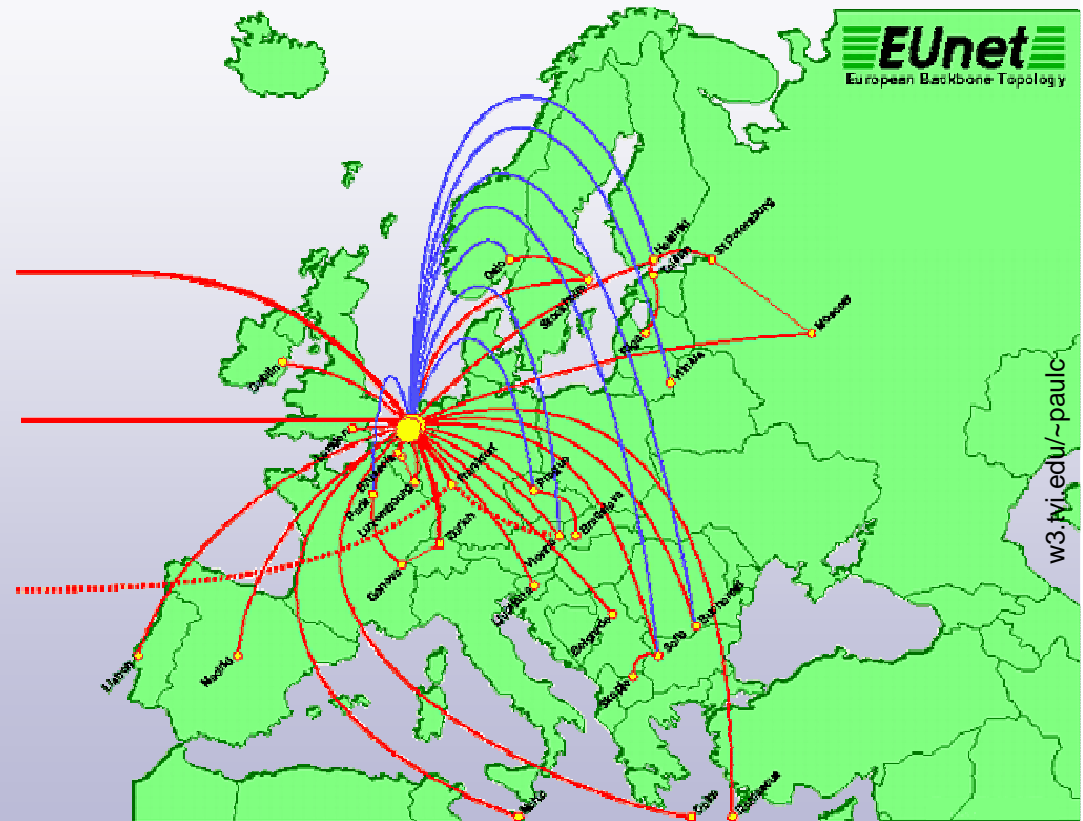
Ernst ten Heuvelhof

Infrastructures



Societal relevance

- Vulnerability
 - Congestion management
 - Asset management
 - Innovation
 - Market integration
 - Security of supply
 - Security and privacy of users
- etc.



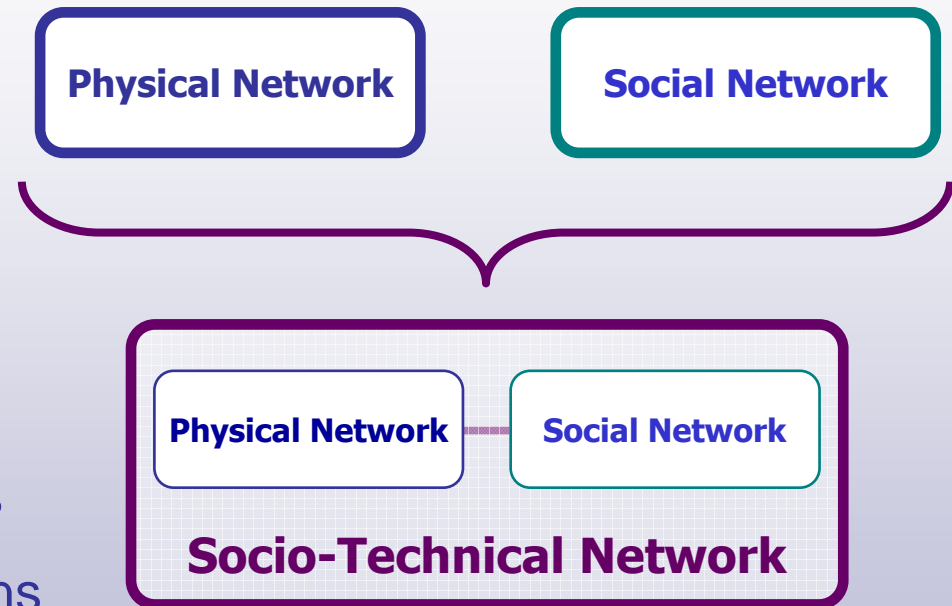
The Netherlands' hub function

Societal mission:

To stimulate and support the development of more flexible, reliable and intelligent infrastructures and services, in terms of public values and consumer interests, to better serve society in the future.

Scientific relevance

- Infrastructures are complex socio-technical systems
- Infrastructures evolve over time and adapt to:
 - Changing technologies
 - Changing end-user demands
 - Changing economic conditions
 - Changing public values
- The absence of central coordination



Scientific mission:

To develop a generic framework, methods and tools with which to understand and manage the development of network-bound infrastructures, and enable cross-sectoral learning.

The challenges

- Understanding the evolution of infrastructure systems and their emerging behaviour
- Identifying and protecting the many public values at stake
- Ensuring flexibility over the life cycle of infrastructure: dealing adequately with many types of uncertainty
- Ensuring a reliable service in situations of distributed decision making or malicious attacks
- Making more sensible use of scarce capacity

www.nginfra.nl

Thank you for your attention.

Any Questions?