

WP 20.3 SeSI: Security of (Virtual) e-Science Infrastructure

Cees de Laat
Matthijs Koot, Leon Gommans, Guido van 't Noordeinde

} overhead
production



WP 20.11 SARNET: Security Autonomous Response with programmable NETWORKS

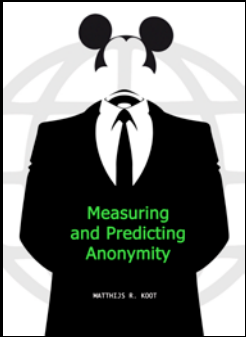
Cees de Laat
Leon Gommans, Rodney Wilson, Rob Meijer
Tom van Engers, Marc Lyonais, Paola Grosso, Frans Franken,
Amenah Deljoo, Ralph Koning, Ben de Graaff, Stojan Trajanovski

} overhead
production



WP 20.3

- 3 PhD's



- Matthijs Koot, "Measuring and Predicting Anonymity", UvA, June 2012.

- Bridging VL-e – COMMIT security research
- Privacy and integrity is a hard problem -> mathematical foundation
- Led to Ethical Committee for Information Sciences (ECIS)



- Guido van 't Noordende, "The Design and Implementation of the Mansion Mobile Agent System", VU, February 2015.

- Security of data in complex operating systems
- Big impact on Health Record policy
- Startup delivering solutions for distributed control on sensitive data.

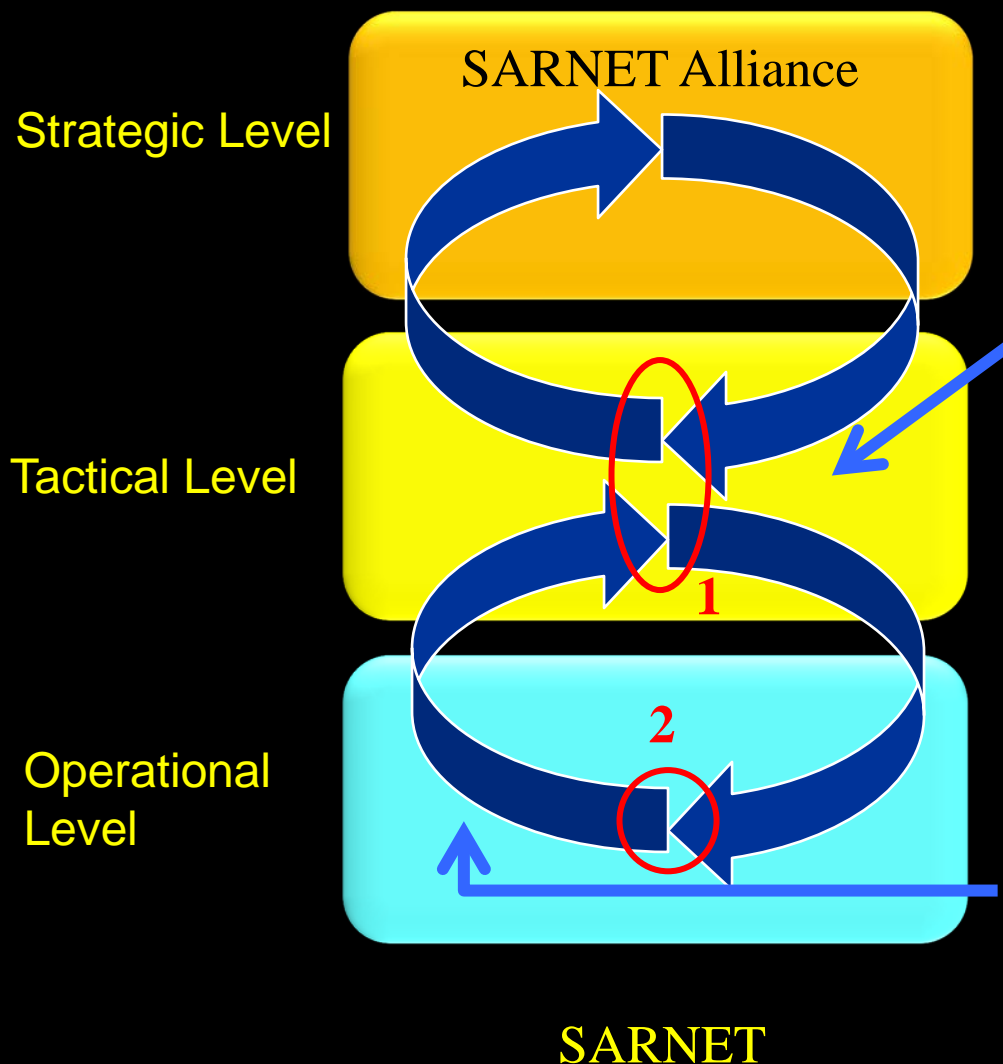


- Leon Gommans, "Multi-Domain Authorization for e-Infrastructures", UvA, Dec 2014.

- KLM Science officer
- IETF/IRTF AAA work
- How to create trust across domains

WP 20.11: Context & Goal

Security Autonomous Response NETWORK Research



Ameneh Deljoo (PhD):

Why create SARNET Alliances?
Model autonomous SARNET behaviors to identify risk and benefits for SARNET stakeholders

Till Oct 1: Stojan Trajanovski (PD)

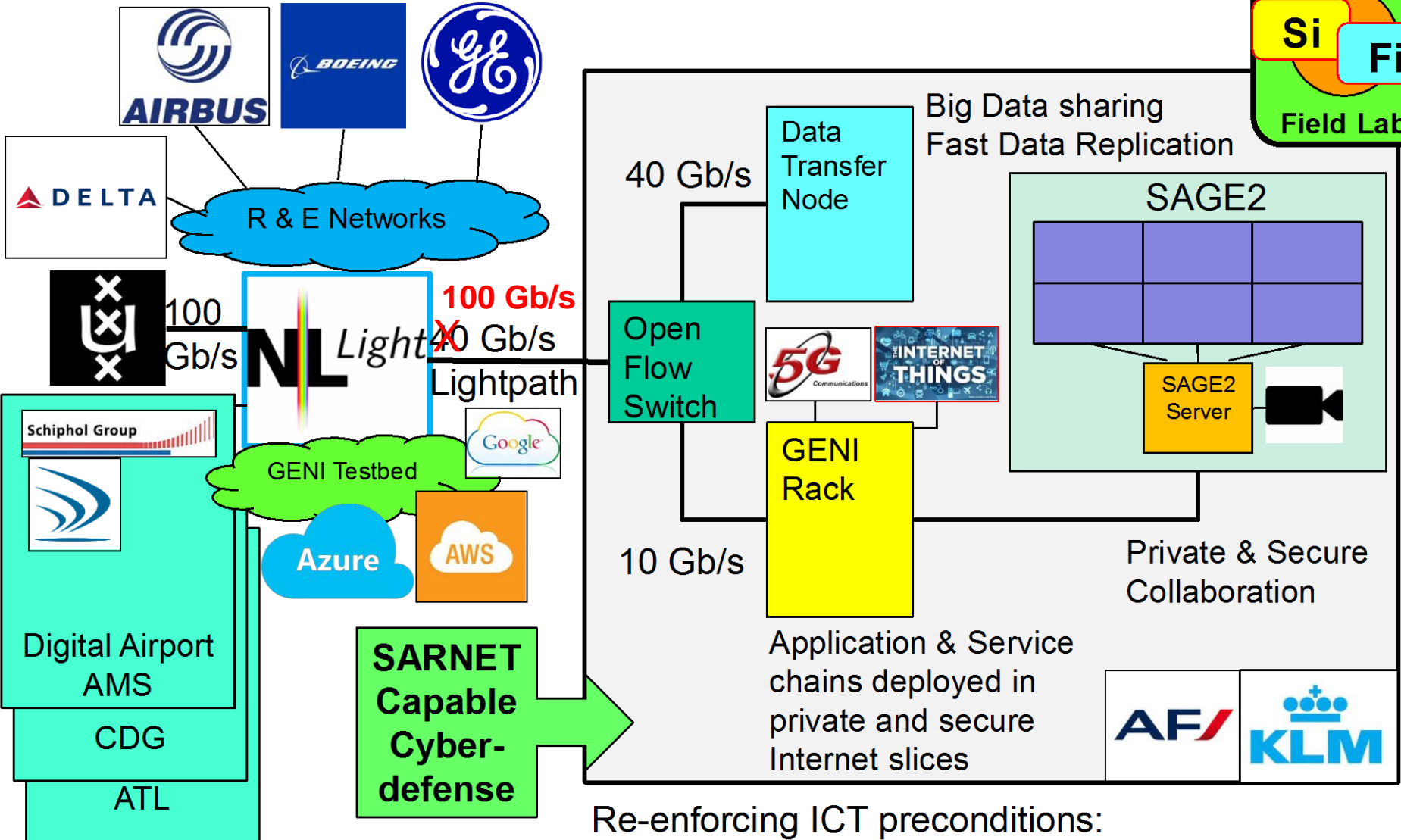
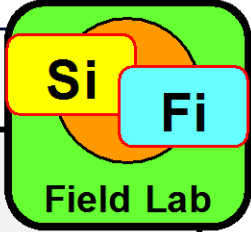
From Dec 8: Gleb Polevoy (PD):
Determine best defense scenario against cyberattacks deploying SARNET functions (1) based on security state and KPI information (2).

Ralph Koning (PhD)

Ben de Graaff (SP):

1. Design functionalities needed to operate a SARNET using SDN/NFV
2. deliver security state and KPI information (e.g cost)

Ambition to put capabilities into fieldlab



Re-enforcing ICT preconditions:
Each envisaged site has similar elements

WP 20.11

- Started August 2015, will continue till 2019
- Already 6 publications (1 journal), 12 presentations and 2 proof of concepts at SuperComputing Conferences

See delaat.net/sarnet

- Affiliated with California Pacific Research Platform and Lawrence Berkeley National Laboratory



- Oct 2016: 100 Gb/s connection KLM – SURFSARA - UvA
- Nov 2016: dark fiber Science Park – VU CAMPUS

CHANGE!

