

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

Cees de Laat

Matthijs Koot, Leon Gommans, Guido van 't Noordeinde



WP 20.11 SARNET: Security Autonomous Response with programmable NETWORKS

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Leon Gommans, Rodney Wilson, Rob Meijer

Tom van Engers, Marc Lyonnais, Paola Grosso, Frank Fransen, Ameneh Deljoo, Ralph Koning, Ben de Graaff, Stojan Trajanovski



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} overhead
production



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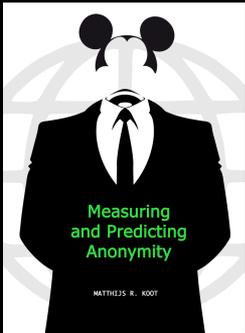
} overhead
production



WP 20.3

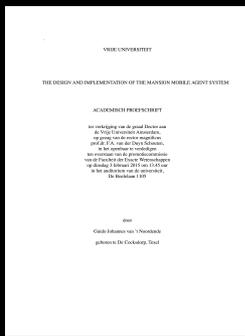
- 3 PhD's

- 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.

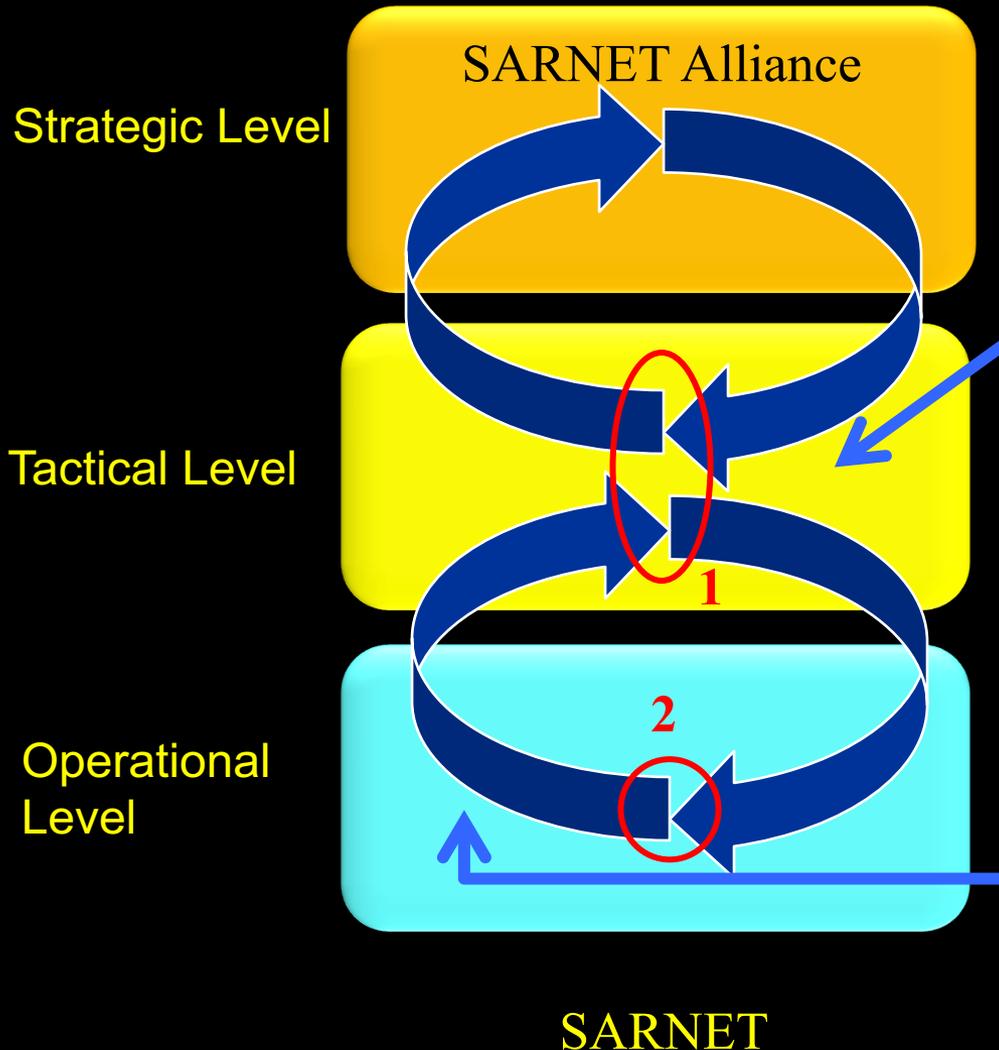


- KLM Science officer
- IETF/IRTF AAA work
- How to create trust across domains



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)

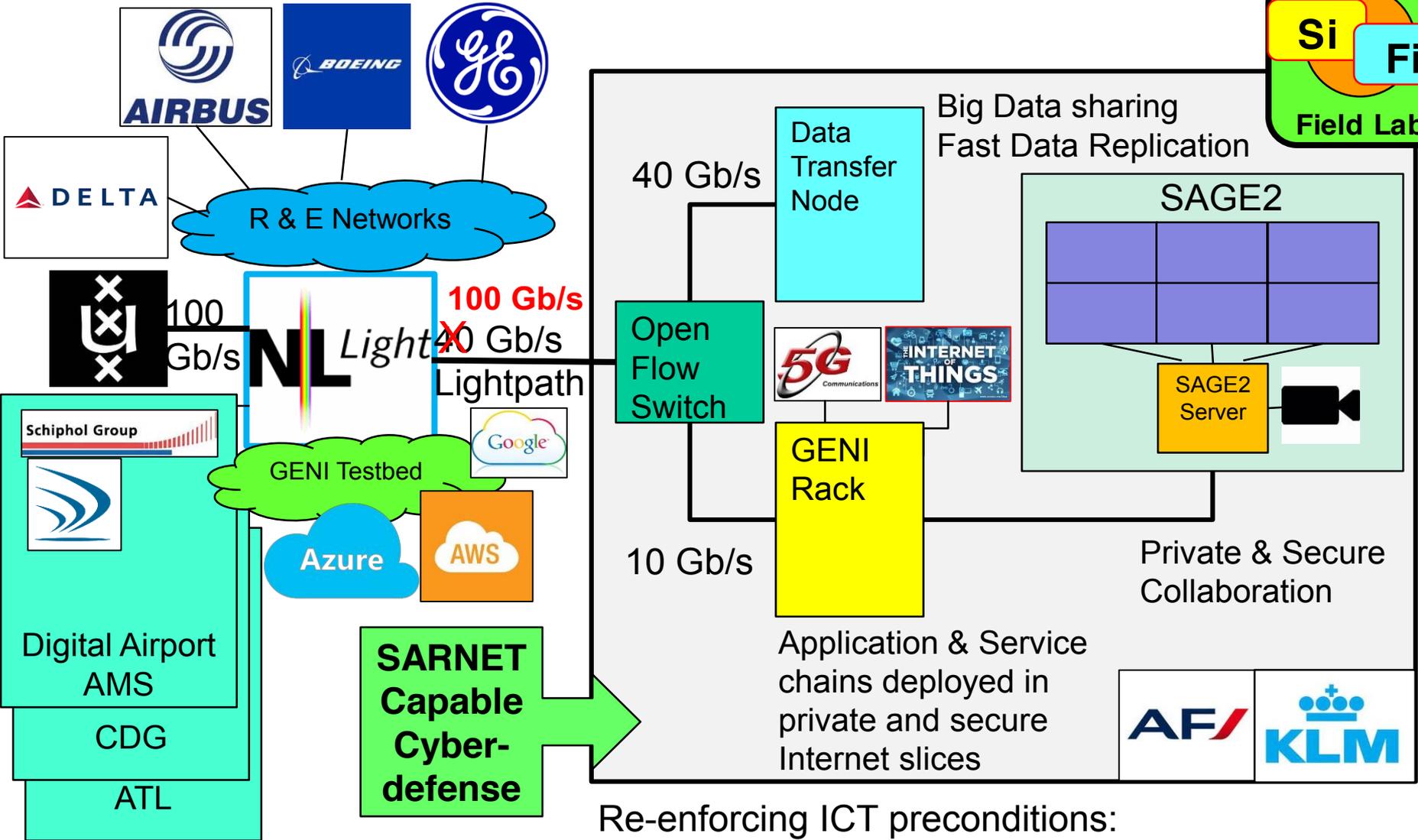
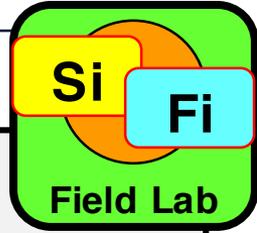
From Dec 8: Gleb Polevoy (PD):
Determine best defense scenario against cyberattacks deploying SARNET functions (1) based on security state and KPI information (2).

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



CHANGE!



COMMIT/

IV-E: E-INFRASTRUCTURE VIRTUALIZATION FOR E-SCIENCE APPLICATIONS (P20)

P20 in 140 characters

Henri Bal

VU University Amsterdam
University of Amsterdam
Delft University of Technology
TNO
Solvinity
LIACS
ONVZ

COMMIT/

CHAR P20[140];

Dutch ICT Research
Young KNAW
VIDI
URC



3 VENI
EuroPar
5 Best Paper



ONVZ
Lotto-Jumbo
Bitbrains
KLM



COMMIT/

6 H2020



EPD, Whitebox



DAS-5



11 PhD theses