Organizing Trust to enable Big Data Sharing

**Leon Gommans
Science Officer
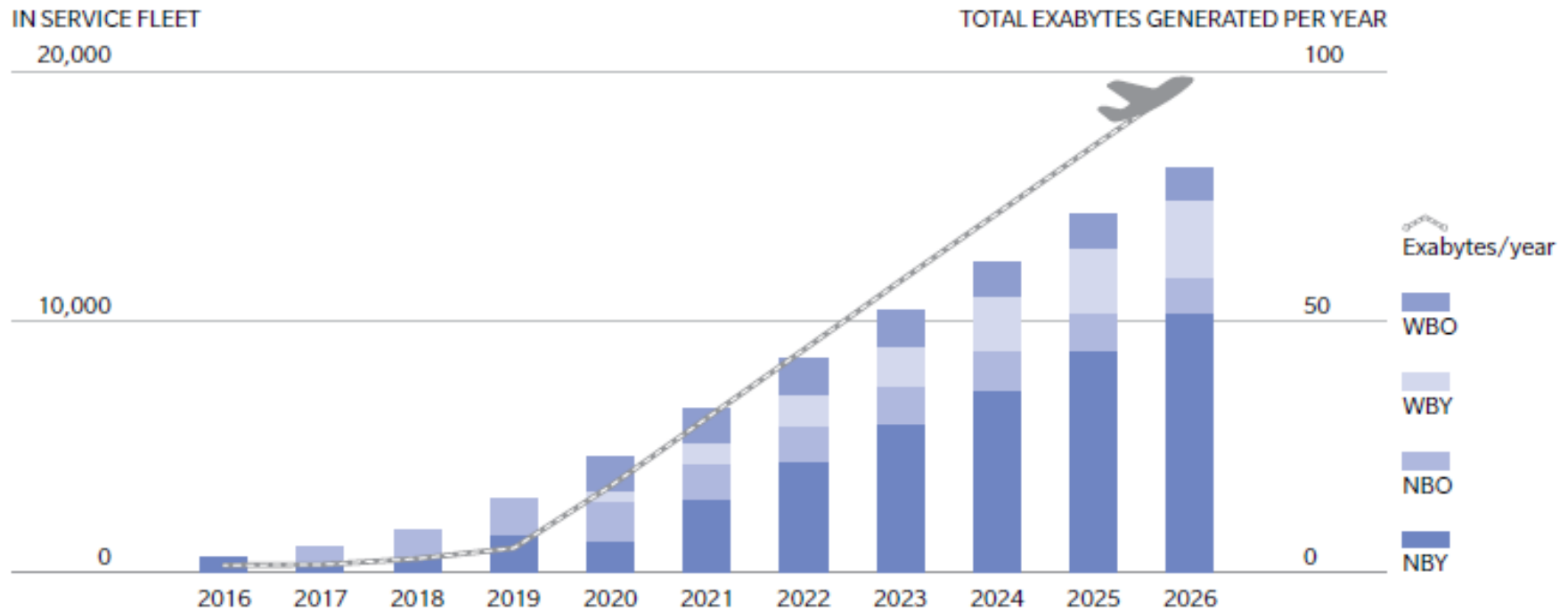ICT R&D**

**Guest
Researcher
UvA SNE group**

**Big Data
Small World
Amsterdam
Arena
22/04/2016**

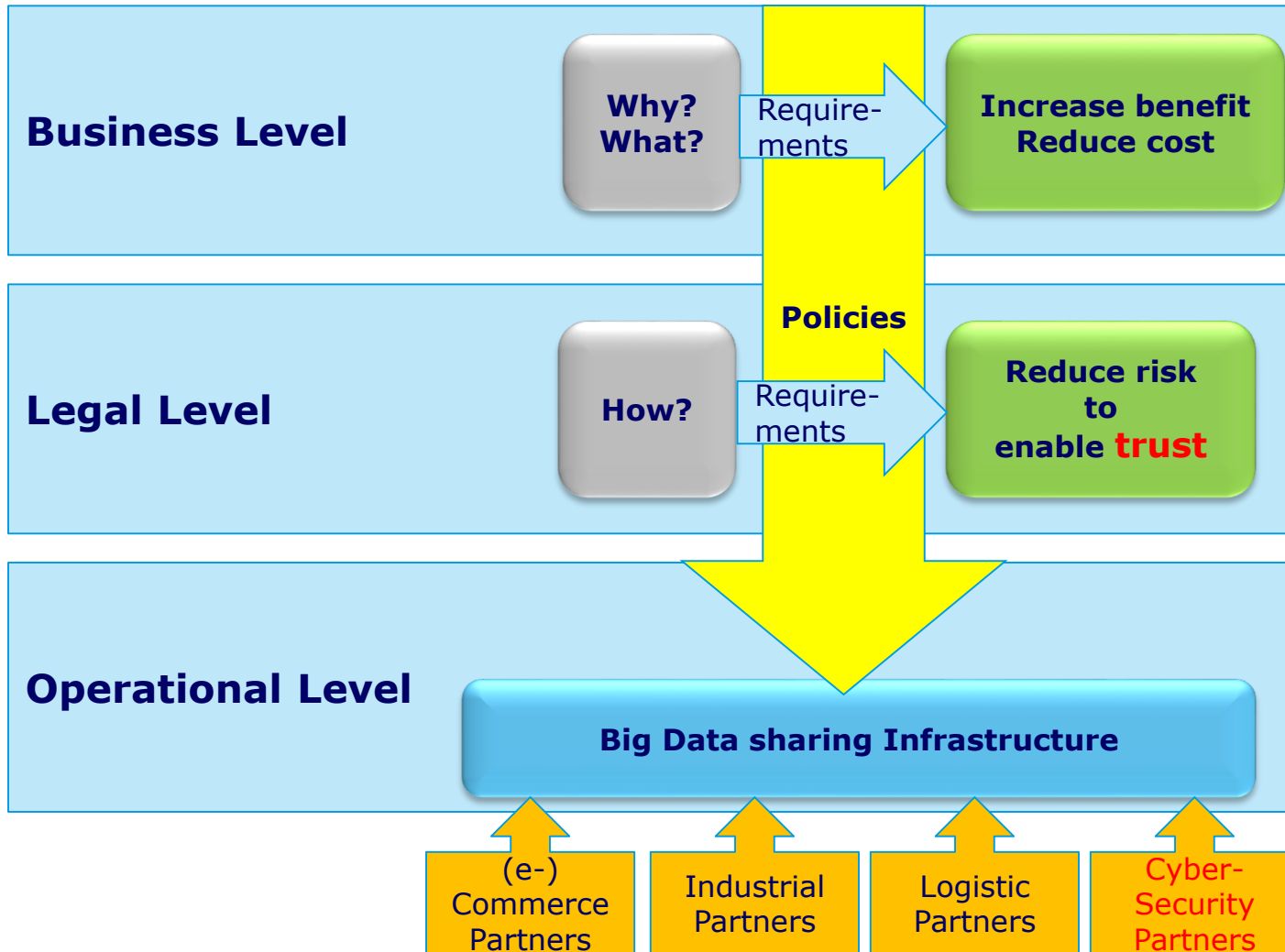KLM SKYTEAM

UNIVERSITEIT VAN AMSTERDAM

Aircraft Big Data: Are we going to share?

Source: Oliver Wyman Fleet & MRO Forecast, www.planestats.com/betterInsight

Aircraft fleet is expected to collect 98 Exabyte (98.000.000 Terabyte) of data by 2026

.. not until we understand how to *organize* trust

Business Level

| Why? What? | Require-ments → | Increase benefit Reduce cost |

Policies

Legal Level

| How? | Require-ments → | Reduce risk to enable **trust** |

Operational Level

Big Data sharing Infrastructure

(e-) Commerce Partners | Industrial Partners | Logistic Partners | Cyber-Security Partners

My PhD Thesis Dec. 2nd 2014

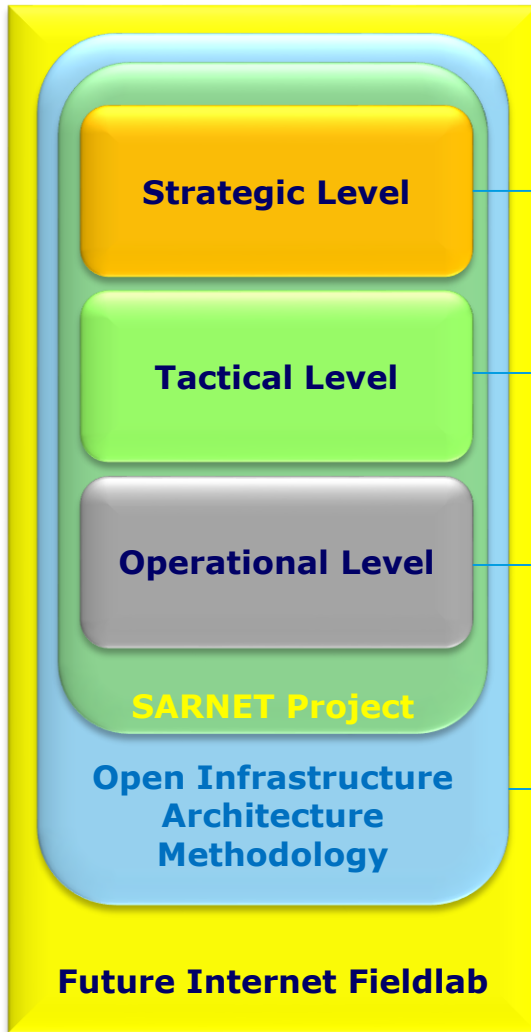Multi-Domain Authorization for e-Infrastructures

Leon Gommans

Chapter 5: Organising trust in multi-domain scenario's

NWO – COMMIT/ SARNET project
Big Data Sharing in cybersecurity context

Secure Autonomous Response NETworks that collaborate

Strategic Level	Research into creating a SARNET Alliance by describing stakeholder benefits, cost and risk to share resources and modelling organizational behavioral of a **Service Provider Group** **organizing trust** (with Faculty of Law)
Tactical Level	Research into tactics that implement defense scenario's by considering its **effectiveness**.
Operational Level	Research into the implementation of interoperable SARNET's that create a **responsive**, dynamic cyber-defense environment whilst behaving compliant to commonly agreed rules translated into policies.

SARNET Project

Open Infrastructure Architecture Methodology

Research into formal functional specification using architecture specification languages supporting fast (automated) implementation via solution archetypes.

Future Internet Fieldlab

Research supported by a deeply programmable Future Internet Fieldlab (in collaboration with NSF GENI project).