

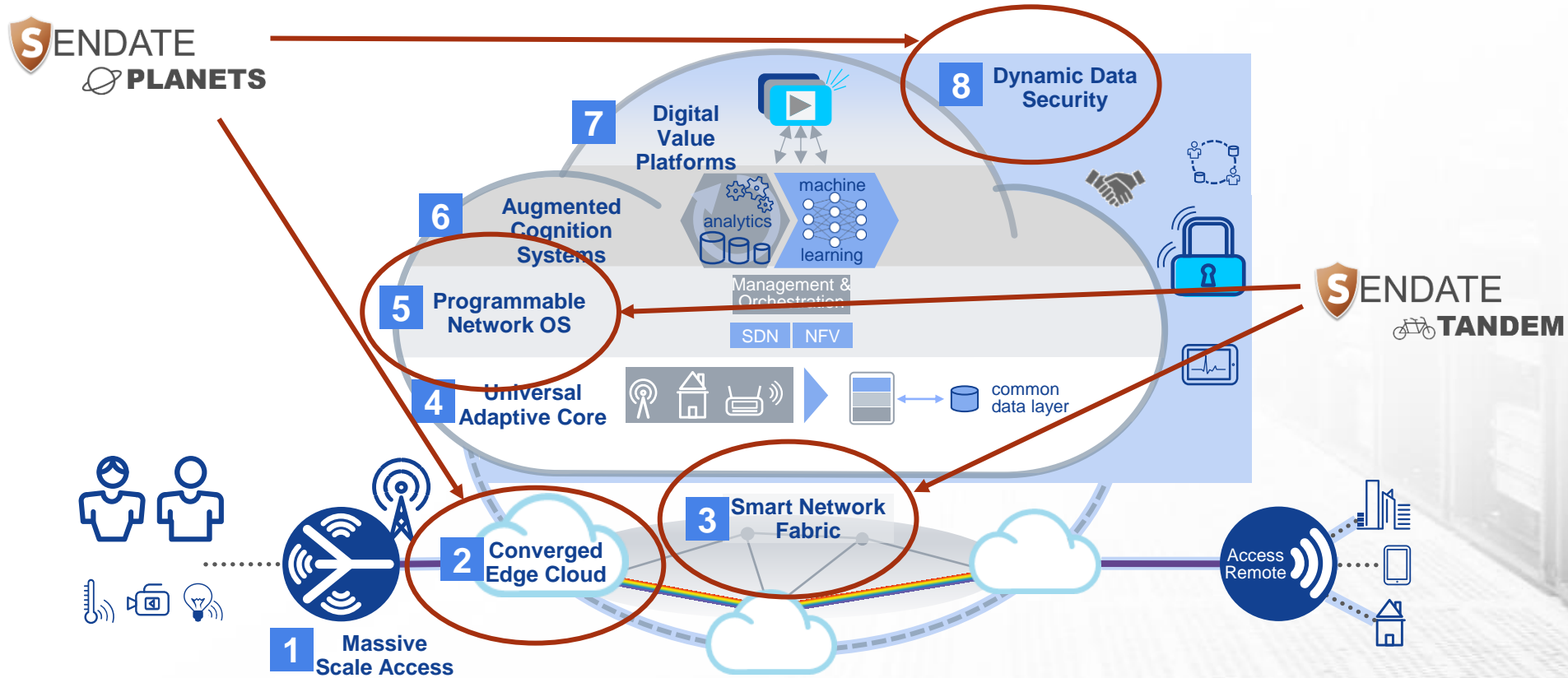


# SENDATE-TANDEM & SENDATE-PLANETS

Sigurd Schuster  
Nokia

Berlin, 17.10.2016

# The Future X Network



# SENDATE-TANDEM

**5** Programmable Network OS

**3** Smart Network Fabric

- Programmable Optical Interfaces with sub-ms reconfiguration time
- SDN control plane for highly reconfigurable networks
- Holistic OS for both telecom and IT resources
- Efficient, flexible and easy to deploy metro infrastructure
- Partners:

(1) Nokia Bell Labs France, (2) Astellia, (3) B-Com, (4) CityPassenger, (5) Gemalto, (6) INRIA, (7) Institut Mines Telecom / Telecom Sud Paris (IMT), (8) Montimage, (9) Orange, (10) Prove & Run, (11) TAGES SolidShield, (12) Thales Communications and Services (TCS), (13) Thales Services SAS (TS), (14) Université Rennes I (UR1), (15) VectraWave, (16) VirtuOR, (17) Nokia Bell Labs Germany, (18) atesio, (19) Creonic GmbH, (20) ID-Photonics, (21) Fraunhofer FOKUS, (22) TU Berlin, (23) University of Stuttgart / IKR, (24) University Erlangen, (25) itWatch, (26) Telenor, (27) Linus

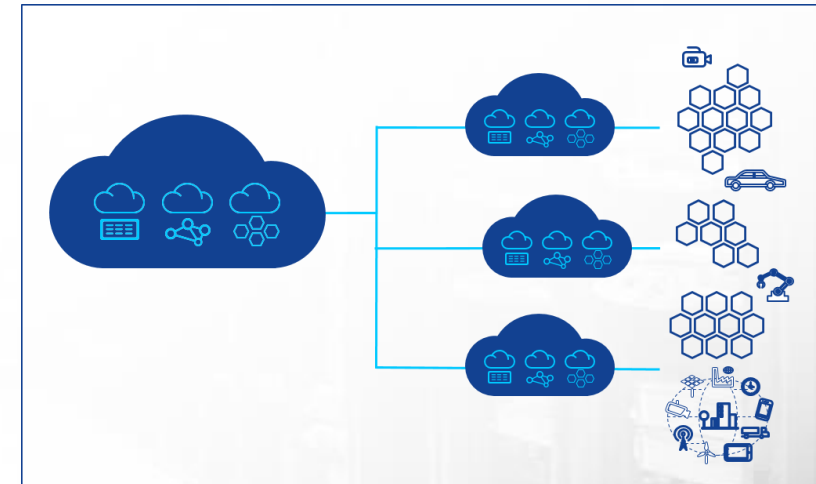


# SENDATE-PLANETS

8 Dynamic Data Security

2 Converged Edge Cloud

- Data center security management
  - Security for the inter-operability of distributed data centers
  - Holistic security management and orchestration
  - Investigation of inter-domain security information exchange
- Placement of virtual network functions
  - Integrate location awareness
  - Placement planning
- Partners



(1) Nokia Bell Labs Germany, (2) Airbus Group Innovations, (3) Fraunhofer AISEC, (4) BISDN, (5) genua GmbH, (6) Infineon Technologies AG, (7) Infosim GmbH & Co. KG, (8) Karlsruher Institut für Technologie (KIT), (9) Universität der Bundeswehr München (UniBw M), (10) Ruhr Universität Bochum, (11) Technische Universität Braunschweig, (12) Technische Universität Darmstadt, (13) Technische Universität München – Lehrstuhl für Netzarchitekturen und Netzdienste, (14) Technische Universität München – Lehrstuhl für Kommunikationsnetze, (15) Universität Würzburg, (16) x-ion GmbH, (17) 2NS, (18) Airbus Finland, (19) Comiq, (20) Elisa Appelsiini, (21) F-Secure, (22) Insta, (23) SSH, (24) MPY, (25) Softera, (26) VTT.



# Impact

- Gain know how and lay base for key elements of future European ICT infrastructure
  - Vertical industries, ICT service providers, ICT industry
  - Cross-pollination across the whole value chain
  - Competitiveness along the whole value chain
- Enable exploitation of opportunities of digitization
  - Multitude of new use cases (vertical industries, public sector, consumers and society)
  - Secure, reliable, performant, cost effective ICT infrastructure
- Support competitiveness
  - ICT Services
  - Networking products, solutions, standardization, patents, value add & employment
- Learn together (users, service providers, industry, research, public stakeholders)
  - Technology leadership, holistic understanding of opportunities and constraints
- Contribute to European Technology Sovereignty

supported by



Federal Ministry  
of Education  
and Research

**DGE**  
DIRECTION GÉNÉRALE  
DES ENTREPRISES

**Tekes**

**VINNOVA**

