SENDATE Closing Event

Jörg-Peter Elbers
ADVA
Secure data center interconnects

- DC Spine switch
- DC Edge router
- Core OLS
- Metro OLS
- DWDM Transponder

Key Terms:
- DC: Data Center
- DCI: Data Center Interconnect
- OLS: Open Line System
- DWDM: Dense Wavelength Division Multiplexing

Features:
- Sustainable Capacity Scaling
- Intrinsic Security
- Zero-Touch Operation
SENDATE Secure DCI highlights

1. Open Transport PoC
2. Open SDN & NFV Lab
3. New 400Gb/s Receiver

Field Trial of Quantum-Safe 100G Communication over R&E Networks

- Poznań
- Hamburg
- Oslo
- Trondheim

2800 km distance

Hybrid inband Niederreiter PQ + Diffie-Hellman Key Exchange

100G end-to-end AES256 encryption

SENDATE Multivendor Optical SDN Trial

- Telia Company
- BNLSE
- VPIphotonics

Services App
Planning App
Multi-domain controller

Transponders

Network Domain A
Network Domain B
Press coverage

European industry consortium successfully demonstrates SDN-based reach planning in a multi-vendor optical network field trial

Celtic-Plus project SENDATE simplifies operations of open optical networks

Fraunhofer HHI develops a distributed aggregation and reception of a record net capacity of 400 Gb/s superchannel in a single-photodiode 110-GHz Kramers-Kronig Receiver

ADVA achieves world-first 100G quantum-safe transport over 2,800km

Pioneering joint demo highlights how future-proof ultra-secure encryption is available today for existing telco networks

13 June 2018

Multi-domain Transport SDN made real in the ONF Proof Of Concept for Wireless Transport

JAN 3, 2019
KPIs so far … and still counting

- 35+ publications, 1 post-deadline paper
- 7 PhD & 10+ master students
- 2 field trials & 10+ PoCs
- 2 contributions to standards
- 10+ new partnerships
Commercial exploitation (examples)
Thank you!

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