The project OPOSSUM should encourage discussions for using the communication networks of critical infrastructures for non-critical services in order to open the network for new markets. OPOSSUM implements an OpenFlow-based SDN solution to allow the co-existence of critical and non-critical differentiated services on a common hardware substrate without mutual interference.

**OPOSSUM SDN Architecture**

- **NFV Applications**
  - Firewall/EDS
  - DHCP
  - NAT
  - Routing

- **Control Center**
  - Smart Grid Management

- **Public IP Network**

- **Flow path**

- **SDN Core**

- **Data Center Management**

- **Data Center Heat Management**

- **VNF Manager**

The Fibre To The Home (FTTH) network infrastructure in Eugendorf is used to establish a communication infrastructure for critical and non-critical virtual network functions.

**OPOSSUM provides**

**A Realistic OF/SDN Deployment**
- Real COTS Hardware (Switches, CPE, Hosts)
- Real end users (usage patterns)
- Productive optical fibre network infrastructure

**NFV Validation Testbed**
- VNF deployment in hybrid approach:
  - Critical network functions: static end-to-end flow configuration (SFLOWs)
  - Non-critical network functions: dynamic flow configuration (SDN Controller)

**Validation Architecture**

By Simulation, Formal: VeriFlow, VeriSDN, etc.
OPOSSUM SDN Virtual Network Function Service Orchestration

Meet us @
- 5. Workshop VDE/ITG Fokusgruppe Energieinformationsnetze und -systeme 16.09.2015, Frankfurt, Germany
- SDN and OpenFlow World Congress, 13.-16.10.2015, Düsseldorf, Germany
- European Utility Week 2015, 03.-05.11.2015, Vienna, Austria
- 6th FOKUS FUSECO Forum 2015, 5.-6.11.2015, Berlin, Germany
- ECSEL Austria “Electronic- & Software-based Systems in Europe”, Vienna, 23.11.2015

Project partners

Funded by

DI(FH) Thomas Pfeifferberger
Salzburg Research Forschungsgesellschaft mbH
Jakob-Haringer-Str. 5/3 | 5020 Salzburg
T +43.662.2288-444 | F -222 | thomas.pfeiffenberger@salzburgresearch.at