

5GinFIRE

https://5ginfire.eu/

Anastasius Gavras Eurescom GmbH

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Closing the Gap

- 5G creates new opportunity to close the gap between industry-led efforts and experimental efforts
 - Different implementations of API and experimentation services
 - □ Lack of a reference architecture
 - Federation is not always feasible at all levels
- NFV technology as an enabler for deploying experimentation testbed instances on top of common physical infrastructure
- Similarly, common key architectural components and APIs may also be suitable for experimental facilities
- Resource Models, experiment descriptions, packaging and representation could be identical



5GinFIRE Reference Model Architecture

- Based on existing Open Source projects
 - e.g. Openstack, Opendaylight
- Based on ETSI reference architecture of MANO functionality
 - Open Source MANO
- Introduce and integrate infrastructures from verticals
- Generalize the concept of VNFs by accounting for functionalities other than network, namely, for verticals, aka VxFs
 - universal management of virtual functions
- Automated deployment of VxFs and creation of VxF stores





5GinFIRE Experimentation Workflow

Technologies, Infrastructures and Verticals







Thank you!



Panel

- What is the added value of testbeds ?
- What is the future of testbed federations ?
- Is there a business proposition for testbeds ?
- What is the relation of open source vs. standardisation in the context of testbeds ?
 - Researchers that want to experiment
 - Engineers that want to test a system or component