Open Federated Testbeds:
with focus on 5G/SDN/NFV/MEC
2nd workshop with IEEE SDN initiative-EIT Digital

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IEEE
SOFTWARE
DEFINED
NETWORKS

eit Digital

WRAP UP
&
NEXT STEPS

IEEE
Advancing Technology for Humanity

SDN Initiative Background

Goal/Mission

- Foster growth and development of Software-Defined Networks (SDN), Network Functions Virtualization (NFV), Cloud-Edge-Fog Computing as key technologies for Network Softwarization

- Promote a systemic vision addressing the socio-economic transformation of ICT and Telecom Ecosystems also encompassing skill development, policy, ethics.

Opportunities

- Provide an open, collaborative and rich environment to develop **Key Innovative Products /Service**

- **For Operators:** safe open innovation forum to engage with leading edge innovators and keep up with latest technology innovation

- **For Equipment Vendors**: unique collaboration platform with operators and innovators

- **For Startups:** rich engagement platform with leaders in networking infrastructure

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Two Trusted Independent Third Party Organizations

- **IEEE:** 400,000 members across the world

- **EIT Digital:** Largest European Open Innovation organization in Digital Technologies

- Expertise and Collaboration

Community Infrastructure

- One destination
  Virtual Lab to Open Federated Testbeds
- Phase 1: PORTAL & WIKI catalogue
- Phase 2 Orchestration, control, management, policy across testbeds
- Phase 3 Access to Local and Global Community Resources

Perceived Benefits by Segments

Open Federated Testbed	100 X NETWORK OPERATORS & SERVICE PROVIDERS			100 X GLOBAL EQUIPMENT VENDORS	10000 X SMB, ENTREPRENEUR, STARTUPS (& THEIR INVESTORS)	GOVERNMENT ACADEMIA
	Business Units/Product Marketing	Operations	Strategy & Research	Compute Storage Networking Chipsets	Open Source & Commercial Markets	Regional National International
Managed by Two Trusted **Independent** Third Parties	✔	✔	✔	✔	✔	✔
Targeted Testing: Curated Insight into Wide Range of Testbeds and Labs						
Access to Wide Networks of **Local** Innovators & **Global** Industry Leaders	Cost Efficient Open Innovation	Cost Efficiency	Connecting Research & Innovation	Cost Efficient Open Innovation	Access to Market & Access to Finance	Public Private Partnerships
Validation	• Blind Spots • Big Bets • Product/ market fit	De-risking deployment	Influence + Credibility of Strategic & Research Options	• New Products Roadmap • Alignment with Operators	Scaling: From prototype to productizing	Future Job Skills & Education
Economic Impact	Optimized Service Portfolio & Margin	Reduction Testing Cycle & Costs	Return on Assets	Revenue New Products & Services	• Funding • Lower Barrier of Entry • Growth Acceleration	Job Creation, Global Connectivity, Competitiveness Impact on Society

Potential Members

- Founding Members
- Associate Members
- Enterprise > $2M
- Startup <$2M

- Academia
- Government

Number of participants/Projects		Year 1	Year 2	Year 3
Operators	Founding Member	2	8	12
	Associate Member	2	12	25
Vendors	Founding Member	2	8	12
	Associate Member	2	12	18
Enterprise	Founding Member	2	20	30
	Associate Member	2	30	45
	Testing	10	60	90
	Certification	3	15	23
Startup	Certification	20	50	100

Program

Sustainability model = annual fee

	Founding Member	Associate Member	Startup Government Academia	Non Members
Advisory Board	✔			
Annual Workshop & Events	Main Sponsor / Speakers	Speakers	Invited Guests / Speakers	
Testing & Catalog Access	Unlimited	Unlimited	Unlimited	Up to 10 per year
Certification	Unlimited	Up to 10 per year	Fee per project	Fee per project
Searchable Project Directory	✔	✔	✔	
Research Paper	✔	✔	✔	✔