



eltic-Plus⁺

Smart Connected World

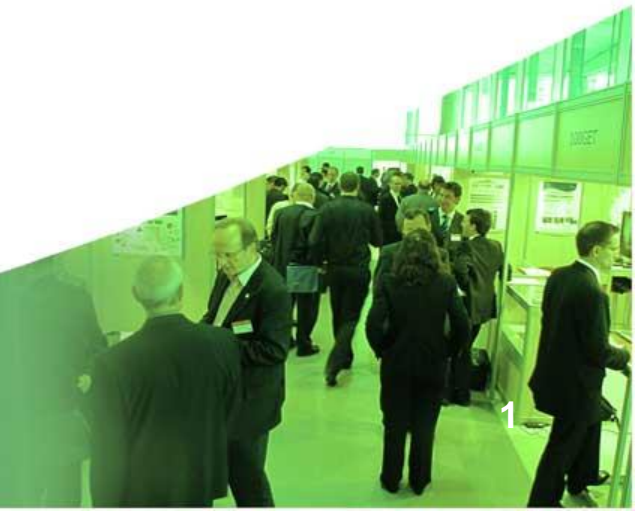


Celtic-Plus Proposers Day
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Resilient & Scalable Slicing over Multiple Domains

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Teaser

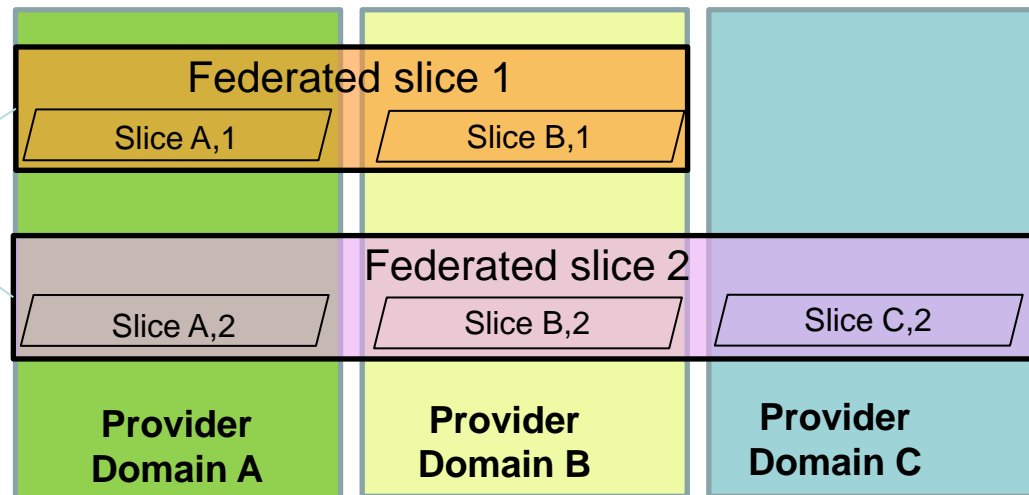


Advancing the **SCALABILITY** of network slicing by leveraging federation over multiple admin/technology domains



Ensuring **SURVIVABILITY & RESILIENCE** of NW slices running over different environments including the ones which are not under control of network provider

Scalable & Reliable 5G Network Slicing Choreography



- Aalto University, Espoo, Finland
- Department of Communications and Networks (Comnet)
- Personnel: ~115 (15 Professors)
- Budget: 60% external funding
 - H2020, Celtic-Plus, TEKES, Academy of Finland etc.



Example Projects



MATILDA



Proposal Introduction (1)

- Vision: Realization of a **highly resilient and scalable** network slicing architecture for enabling end-to-end 5G-based services across multiple technical and administrative domains.
- Motivation:
 - Explosion of **5G verticals with varying requirements** in terms of both network and computational resources, performance, resilience and service
 - A significant number of verticals demanding 5G-based **mission-critical applications** with ultra-reliability support (e.g., autonomous cars, industrial control, remote surgery, public safety services, etc.)
- Content: **Advanced federation strategies** for scalable network slicing over heterogeneous admin/technology domains, **unified reliability framework**, field trials and verification with verticals

Proposal Introduction (2)

- Expected outcome: High-scalable slice choreography plane for offering vertical-tailored multi-domain slices “as-a-Service” with enhanced survivability/resilience support
- Impacts:
 - Both incremental and disruptive business models
 - Remarkable benefits for Telco operators, Service providers, and mobile subscribers
 - Contribution to standards and 5G industry alliances
- Schedule: Two years (from early 2018 to early/mid 2020)

Current consortium

- Finland:
 - Aalto University
 - Nokia
- Norway:
 - Telenor
- France:
 - Orange
 - Eurecom
 - INRIA

Partner Search

- Verticals
- SMEs
- Mobile operators
- IaaS/PaaS/SaaS providers

Contact Info

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