CELTIC-NEXT Proposers Day
7th of September 2022, Online via WebEx

Pitch of the Project Proposal

Cost Efficient Resilient Networks

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What is the main benefit of the idea/proposal?

Achieve better resilience and fewer power network outages

What makes the added value?

A hybrid public / private approach which leverages existing communications networks providing resilience at lower cost than traditional approaches

Control of QoS remains with the utility

Why should I participate in the project?

Low cost resilience allows new applications in Critical National Infrastructure

New learning in combing networks in novel ways with graceful degradation

Cost Efficient Resilient Networks, Dr Kinan Ghanem, University of Strathclyde, kinan.ghanem@strath.ac.uk
Very short info about the profile of your organisation

PNDC is a research and testing hub founded by government, industry and academia which advances innovative ideas into business as usual for our members.

We provide this through a rich research programme with a highly skilled post-doctorate team, alongside one of the world’s most unique and comprehensive testing sites, with state-of-the-art assets in a real-world environment.

Cost Efficient Resilient Networks, Dr Kinan Ghanem, University of Strathclyde, kinan.ghanem@strath.ac.uk
Proposal

Introduction

Short info what the idea/proposal is about (vision, motivation, content, please include a picture describing your idea)

**Vision:** Combine public networks, with spot private network provision where necessary / cost effective, and use over the top services across multiple networks

**Motivation:** provide resilience while maintaining security

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Proposal

Introduction

Short info on expected outcome, impacts, schedule typical project duration 36 month

Key outcomes:

פעילויות

Assessment of the resilience of public network infrastructure under differing scenarios
Investigation of the minimum network requirements for utility network operation
Demonstration of QoS maintenance in failover situations
Study of graceful degradation options in Critical National Infrastructure (CNI) networks
Evaluation of cost and resilience trade-offs between different levels of public and private network provision
Pilot in diverse case study locations

YIELDING

● reduced capital and operating costs for different levels of resilience

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**Partners**

- **Existing consortium, involved countries.**
- **Expertise, profiles and types of partners you are looking for.**

PNDC has a unique combination of power and comms experience, with specialisms in 5G, resilience and security. We have 2 private 5G networks currently being deployed using both 5G providers permitted to supply UK CNI networks:

- **Nokia:** 3.8 - 4.1 GHz 3GPP N77, private network band, up to 100MHz channels
- **Ericsson:** 3.5 GHz 3GPP N78, public mobile network band, 50MHz channels

PNDC is seeking:

- utilities interested in private 4G or 5G networks for control
- mobile network operators interesting in providing services to the energy sector

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Contact Info

For more information and for interest to participate please contact:

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Presentation available via:
12th Sept. 15 CET

Join the follow-up Telco

Join meeting

Join by meeting number
Meeting number (access code): 2740 279 3463
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Can't join the meeting?

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