Vertical Innovations in Transport And Logistics over 5G experimentation facilities

**OSM#15 Ecosystem Day**

Experimenting with Network Applications for Transport & Logistics in 5G testbed

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Outline

• VITAL-5G project: Quick overview
• Assets offered to the 3rd party experimenters
• VITAL-5G Hackathon
01 VITAL-5G project overview
VISION

To enable the creation of 5G-enhanced services for the Transport & Logistics (T&L) industry by bridging the knowledge/expertise gap between the T&L sector, telecommunication experts and application developers. VITAL-5G will engage key logistics stakeholders (sea and river port authorities, road logistics operators, warehouse/hub logistic operators, etc.) and innovative SMEs, offering them an open and secure virtualised 5G environment to test and validate their T&L-related, cutting-edge Network Applications.
Concept

- VITAL-5G Open Platform administrator and technicians
- T&L Site Infrastructure Manager
- VITAL-5G Testbed administrator and technicians

VITAL-5G Experimentation Services

VITAL-5G Platform

- VITAL-5G Testbed (Antwerp)
- VITAL-5G Testbed (Galati)
- VITAL-5G Testbed (Athens)
VITAL-5G Functional Architecture

Unified interfacing approach between VITAL-5G platform and VITAL-5G testbeds
VITAL-5G Network Application package onboarding (I)

Network Application blueprint

VNF package

VNF Packages

Just drag and drop files or click here to upload files

Entries: 10

Product Name | Identifier | Version | Provider | Type | Description
------- | ---------- | ------- | -------- | ---- | -----------
IoT Event Alert Manager | 30540-460c-807d-99dc2632c948 | 1.0 | Nextworks | vnf | A basic VNF descriptor w/ one VDU

Compose a new VNF
VITAL-5G Blueprint onboarding (II)

VITAL-5G Platform
- Service & Network Monitoring
- Multi-site 5G Slice Inventory
- Vertical Service LCM
- Service Testing & Experiment Manager
- NetApp Catalogue
- Service Catalogue

Unified SBI
- Mon_conf
- Mon_pub
- Slice_conf
- Nfvo_lcm
- Nfvo_cat

Testbed-specific interfaces
- Testbed-X Monitoring System
  - 5G network monitoring
  - Network Probes
  - VIM monitoring
- Testbed-X 5G Slice Management System
  - 5G network slice management
  - 5G CN config
  - Radio controller
  - Transport network controller

Orchestration Testbed-X plugin

Onboard VNF package

Testbed-X NFV MANO System
- NFVO
- VNF
- VIM (VMs)
- WIM
- VIM (containers)
- “Edge” NFVI
- “Core” NFVI
Video presentation
Available assets for the 3rd party experimenters
Join Us

Are you:

i) An innovative SME that is looking for their next big step in developing vertical or agnostic services?

ii) A start-up that needs a foot ahead of the competition in developing new technologies?

iii) A researcher that requires FREE access to experimentation facilities to enrich their research with experimentation in real-life environments?

Then VITAL-5G wants to help you develop and/or test your vertical services for the T&L sector or try your agnostic service development by:

➢ Getting **FREE access** to the latest state-of-the-art testbeds technologies based on 5G systems and T&L facilities

➢ Getting **FREE access** to resources for your experimentation needs, thereby getting a chance to validate your optimization mechanisms for T&L operations in a real-life environment

➢ Getting 1 on 1 support from our experts to tailor your needs on our experimentation facilities

Innovate with us: [https://www.vital5g.eu/3rd-party-experimenters-participation/](https://www.vital5g.eu/3rd-party-experimenters-participation/)
VITAL-5G will open its unique 5G experimentation infrastructure to innovative SMEs, startups and researchers in order to develop and test their vertical services for the T&L sector.

Antwerp site available assets: [https://www.vital5g.eu/antwerp-trial-site/](https://www.vital5g.eu/antwerp-trial-site/)
Galatsi site available assets: [https://www.vital5g.eu/galati-trial-site/](https://www.vital5g.eu/galati-trial-site/)
Athens site available assets: [https://www.vital5g.eu/athens-trial-site/](https://www.vital5g.eu/athens-trial-site/)
VITAL-5G Hackathon
Hackathon: 5G-enabled experimentation for transport & logistics

• Why engage?
  • Opportunities to experiment with project assets and explore the possibilities of 5G in developing new and/or enhanced services
  • zero-cost access to technology experts from across Europe, who will support you in developing and optimising your applications and services for use on 5G networks
  • Our facilities are applicable across many industrial sectors, including Transport and Logistics (T&L), Industry 4.0, IoT, automated and remote vehicle control

Find more info:

Register at:

Register for FREE at
Friday, 16 June 2023
13:00-17:00 CEST
Hybrid mode

More information
https://www.vital5g.eu/
Thank you for your attention!

DHL

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https://www.vital5g.eu/