



Demonstration of **5G** solutions for  
**SMART** energy **GRIDS** of the future



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**Energy transition**



**Smart Grids**

**Islands**

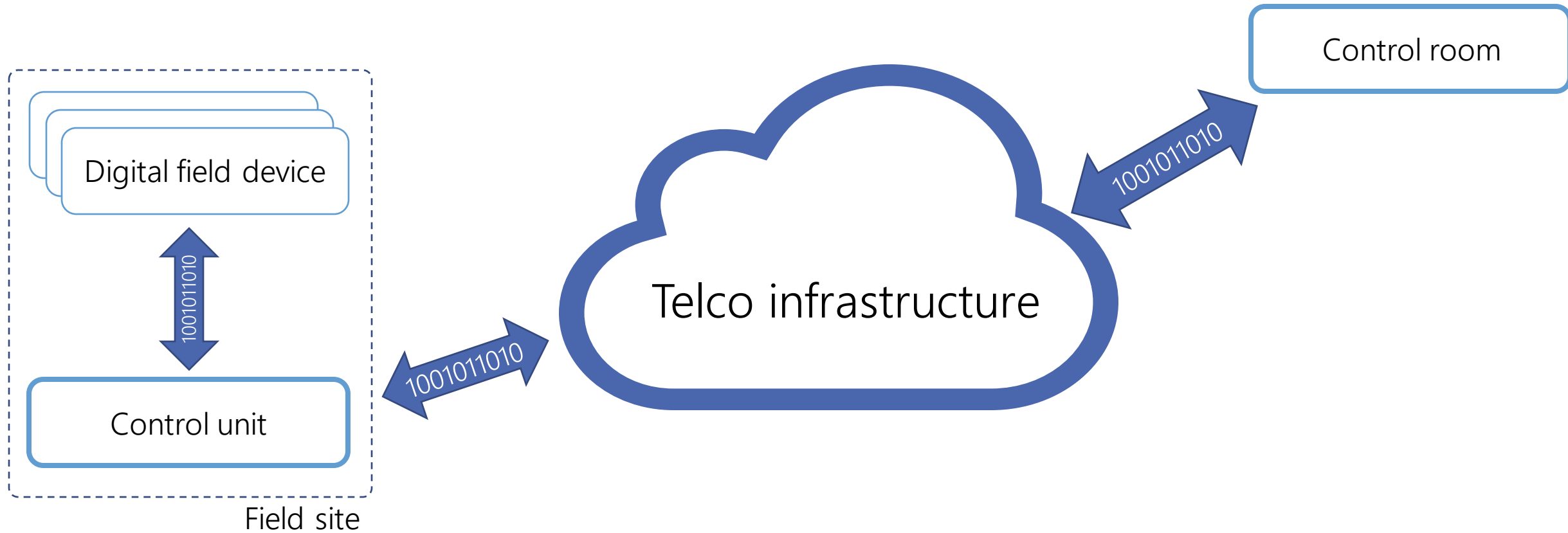
**Digitalisation**

**Renewables**

**Energy Storage**

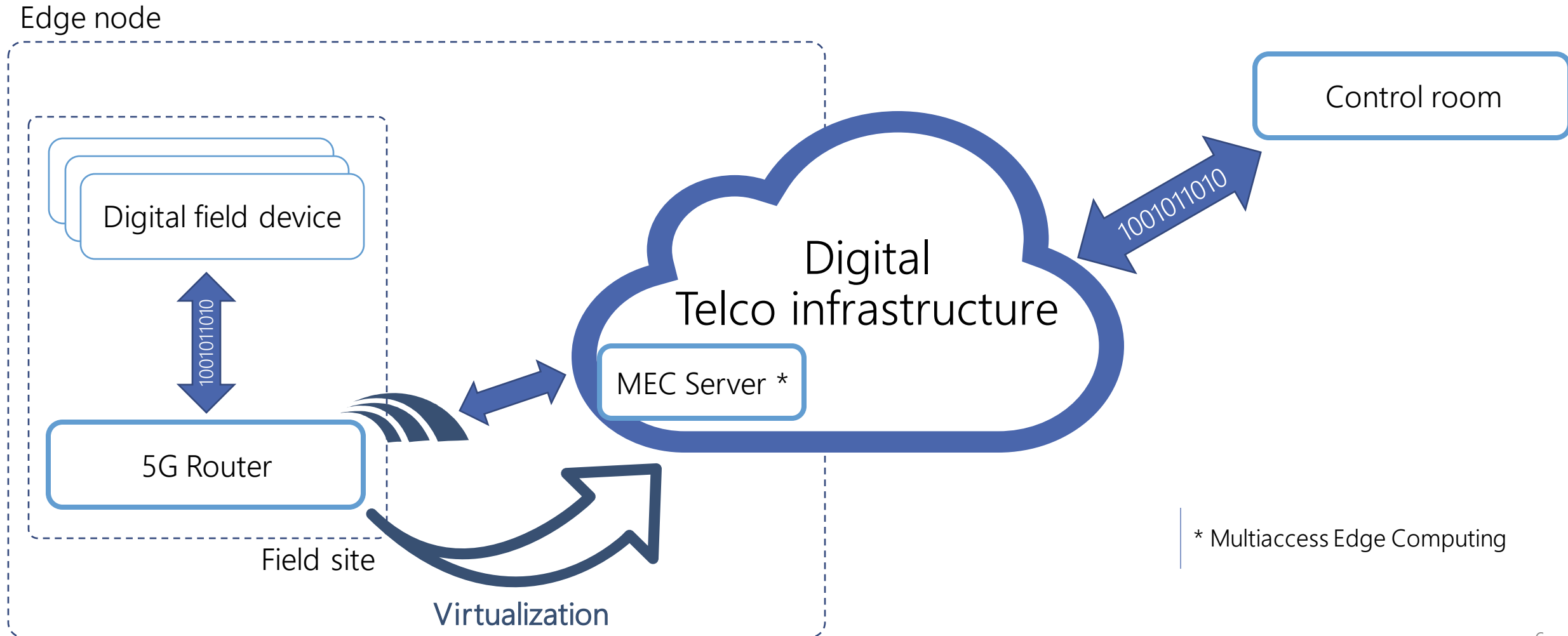
# Digitalisation: what kind?

# Actual approach



# 5G-based cloud edge computing

# Digital telco paradigm shift



\* Multiaccess Edge Computing

# Smart5Grid overall concept



Smart5Grid  
Open Experimental 5G Platform

Platform layer

Virtualization/Telco layer

Energy layer

NetApp definition, modeling and implementation

NetApp Open Service Repository

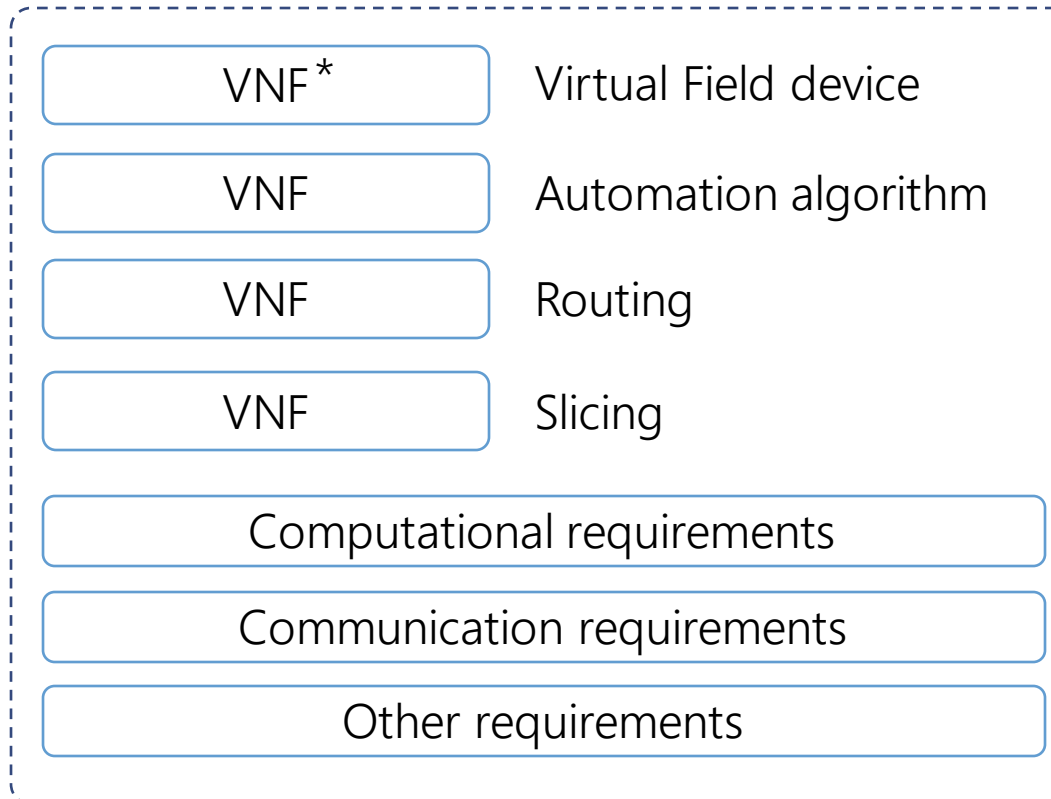
V&V Framework  
(Validation and Verification)

# Network Applications (NetApps) to simplify the 5G complexity



# A simple NetApp

NetApp Descriptor



\* Virtual Network Function





# IP monitoring for Smart Grids

Italian Demo | Olbia



# Power plant operators' safety monitoring

Spanish Demo | Barcelona



# Distributed generation management

Bulgarian Demo | (Southern region)



# Cross border frequency control

Greek-Bulgarian Demo | (Cross-border)



# You can build your own NetApp!

# Join our community

- Build and test your Network App in our experimentation facility
- Learn about 5G ecosystem
- Learn about Smart5Grid platform and use cases
- Participate in trainings and webinars
- Get technical support and documentation
- Get visibility through Smart5Grid community



[[smart5grid.eu](https://smart5grid.eu)]



## GENERAL INFORMATION

### THE CONSORTIUM

24 EUROPEAN  
PARTNERS  
COVERING  
7 EU STATES

### DURATION

**3 YEARS**

### TOTAL BUDGET

**8M€**



# The Smart5Grid Consortium is here acknowledged

## Coordinator



## TELCOs



## SMEs



EIGHTBELLS  
Independent Research & Consultancy



## Tech Companies



## Universities/Research institutions



## DSOs



## TSOs



\*Linked third-parties of Enel Grids

# Thank you!



**Daniele Porcu**

Project Coordinator

[daniele.porcu@enel.com](mailto:daniele.porcu@enel.com)