



## **SliceNet**

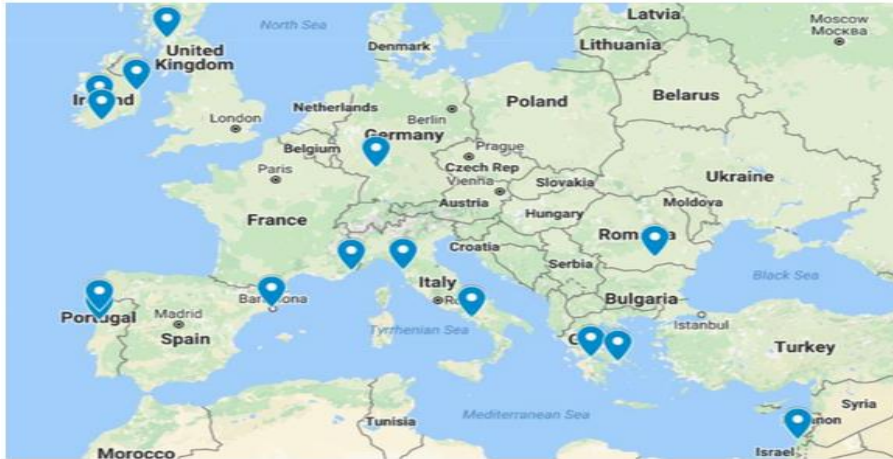
*End-to-End Cognitive Network Slicing and Slice Management Framework in  
Virtualised Multi-Domain, Multi-Tenant 5G Networks  
(H2020-ICT-2016-2/761913)*

**Prof. Qi Wang & Prof. Jose M. Alcaraz-Calero**

University of the West of Scotland

On behalf of the **SliceNet Consortium**

# Project Overview



EURESCOM

lattice labs

UNIVERSITY OF THE WEST OF ENGLAND  
UWS

NEXTWORKS  
ENGINEERING FORWARD

ERICSSON

IBM

EURECOM  
EUROPEAN UNIVERSITY OF  
COSTA MEDITERRANEA

UPC  
UNIVERSITAT POLITÈCNICA  
DE CATALUNYA  
BARCELONATECH

RedZinc

OTE

orange

efacec

DELL EMC

Creative Systems  
Engineering

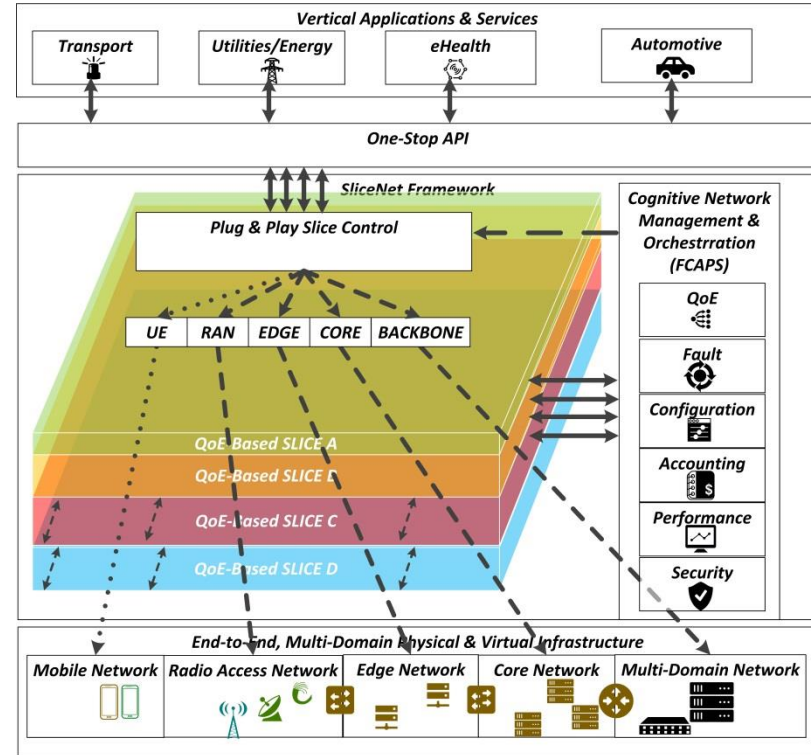
CIT  
CORK INSTITUTE OF  
TECHNOLOGY  
INSTITUT D'INVESTIGACIÓ I  
DEVELOPAMENT TECNOLÒGIC

Start/End: June 2017 / May 2020

Budget: 7.9 M€

# Main Objectives

1. Achieve an innovative, cognitive, integrated **'one-stop shop' 5G slice management framework** for **vertical businesses** and co-designed by vertical sectors
2. Enable extensible, **end-to-end slice FCAPS management** across multiple planes and operator domains
3. Establish **cognitive, agile QoE management of slices** for service assurance of vertical businesses
4. Empower **orchestration** for cross-plane coordination of management, control, service and data planes to achieve **system-level slicing** control and slice operation



# Detailed Architecture

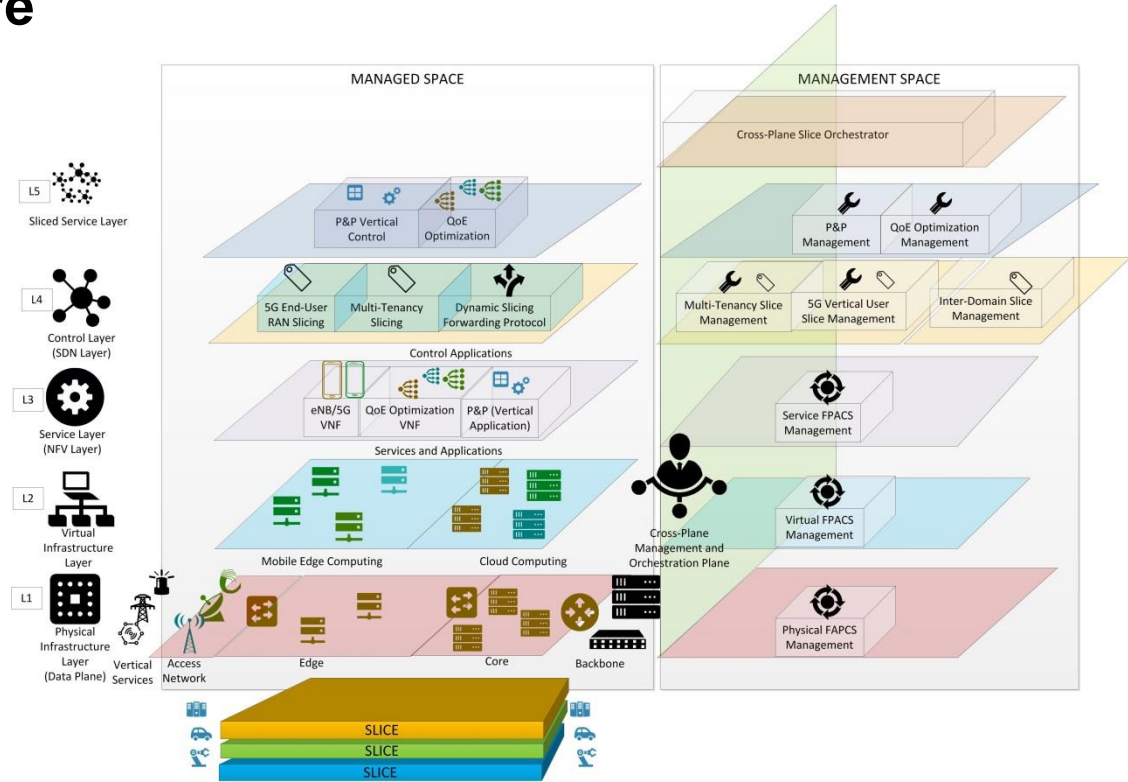
L5 – Sliced Service Layer

L4 – SDN Control Layer

L3 – NFV Data Service Layer

L2 - Virtual Infrastructure Layer

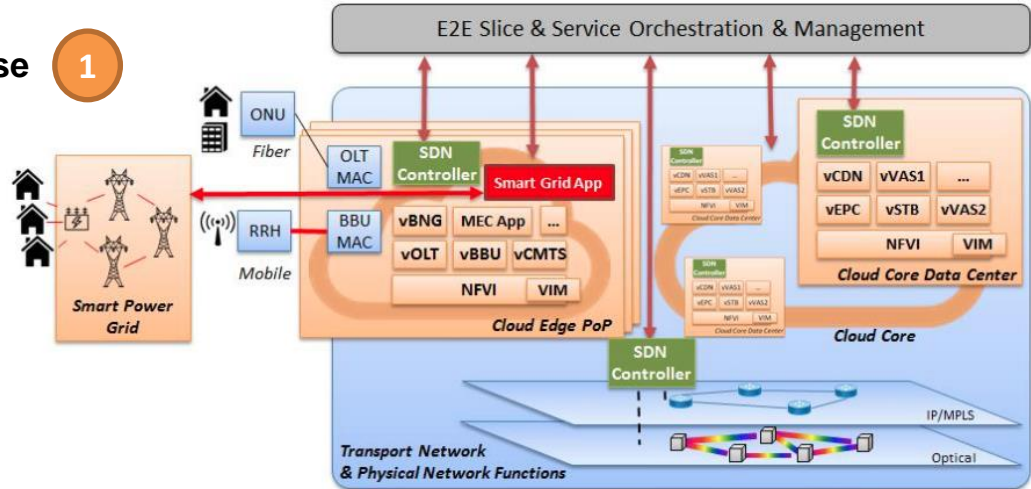
L1 - Physical Infrastructure Layer



# Use Cases

## 5G Smart Grid Self-Healing Use Case

1



## 5G eHealth Smart Ambulance Use Case

2



## 5G Smart City Use Case

3

