O-RANOS

Andrew Thomas

Department for Digital, Culture, Media & Sport

UK 5G Innovation Network

ORANOS project in a nutshell

ORANOS with Cellnex, WeaverLabs, Parallel Wireless, Satellite Applications Catapult, AttoCore and The University of Bristol

Create architectural blueprint for multi-domain (Private and Public) 5G Network multi-vendor OpenRAN integration and interoperability equipped with satellite backhaul

Cellnex and other Private Network providers will benefit from the ability to deploy Private networks that allow Public devices (such as ESN) connectivity

Our Impact on the market

- Creating a use case to demonstrate that network resources can be shared between a Public (MNO) and Private Networks.
- Create knowledge and expertise of ORAN within the UK
- Create a framework for implementing and deploying x/r Apps in a secure and automated manner
- Demonstrate the use of software platforms to automate network integration based on Zero Trust
- Demonstrate the use of Satellite backhaul for non-latency critical traffic

How are we doing it?

- Contribute through the development of x/rApps to the supply chain diversification
- Contribute to open interfaces with security by design brought by inter-domain orchestration based on Zero-Trust
- AttoCore, combined with other supporting features, will be delivering a R.16 5G Core with innovative capabilities to support Public/Private network mobility/hand-over
- Backhaul multiplexer xApp which will select the backhaul network based upon real-time measurements and pre-defined policies
- Smart RIC Handover xApp to address UEs handovers between public and private network domains

Collaboration possibilities with ORANOS

- Projects that wish to deploy on both Private and Public Networks
- Projects developing x/r based applications
- Projects looking to develop cybersecurity strategies for OpenRAN