# Comp-O-Ran

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Department for Digital, Culture, Media & Sport





### Project Lead:



Neutral Host Network Operator

**Project Partners:** 



Intelligent Software Algorithms



WHY: Revolutionizing the performance and costto-deploy for densified 5G New Radio (NR) outdoor small cell clusters.





HOW: Using Intelligent Software Algorithms to capitalise on the advancement of 5G Small Cell Technology which is based on an Open Architecture







# Coordinated Multipoint Open Radio Access Network **5G NR O-RAN DISTRIBUTED MIMO**

- Application of mmWave transport systems and the integration of standard Open Radio Access Network technology
- Enabling the deployment of disaggregated multi-transmission and reception multi-node 5G NR
- Removing the need for excessive fibre deployment, driving down capital-● intensive deployment costs and reducing time to deployment







# Increased Dependency on Fibre Increased Civils work and Planning Increased expenditure, multiple providers





# Reducing Fibre Dependence Reducing CAPEX Reducing OPEX











#### **5G Densification for Mobile Operators**

CoMP Clusters in-fill Urban and Suburban areas with high performance 5G at a fraction of the cost of a new Macro or Mini-Macro deployment

Each Fibre backhaul contains and edge DU node that provides connectivity for up to 10 CoMP O-RAN RU's. Delivering up to a 10km Corridor Footprint.



# **Project Innovation: Use Case**





#### **Enabling 5G Transportation** Corridors

#### **5G FMA for Suburban and Rural**

Joint Transmission and Joint Reception improve the Signal to Noise and result in higher cell capacity and faster peaks speeds.













# **GET IN TOUCH**





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# Collaboration



