

# Proteus

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Department for  
Digital, Culture,  
Media & Sport

**UK  
5G**

**Innovation  
Network**

# PROJECT PROTEUS

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- Open RAN 5G solution architecture that is abstracted from the underlying hardware platform, in particular in the PHY / Layer 1
- Developing a PHY L1 solution that is not IP restricted to a particular CPU vendor and can be deployed to different platforms with a common software architecture, from a common code base, with equivalent functionality and system performance
- Demonstrate our solution on two platforms: x86 server, and ARM based PCIe inline acceleration card.
- Deploy this solution on UK5G test network in Bristol, and at the BT R&D facility Adastral Park.



# Our Impact on the market

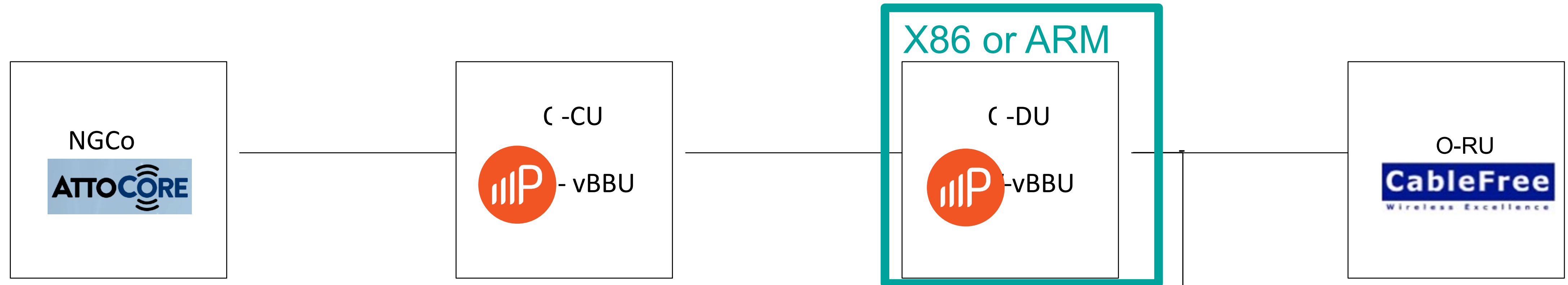
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The UK's 5G Supply Chain Diversification Strategy (<https://www.gov.uk/government/publications/5g-supply-chain-diversification-strategy/5g-supply-chain-diversification-strategy>) aims to promote a more distributed supply chain for components.

Proteus delivers this vision and the resilience that comes with it. with a solution that is based on software implementation using generic compute platforms.

This enables us to play to the strengths of the diverse CPU suppliers, whilst maintaining great flexibility and agility, while enhancing speed of deployment.

# How are we doing it?

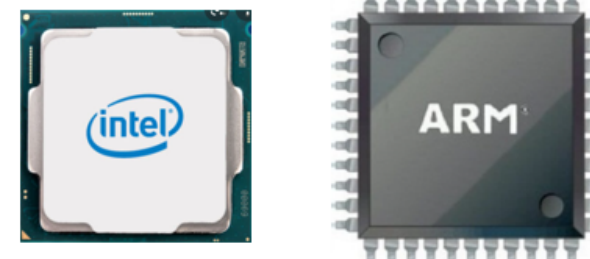


- Focus is L1, within the O-DU
- L1 is the entity most tightly coupled with the CPU (e.g. using CPU specific instructions), Proteus will implement a New L1 implementation, common architecture, careful segregation of functions tightly coupled to the CPU architecture.

vBBU today



vBBU 2022



# Collaboration possibilities

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*Proteus delivers a flexible E2E 5G solution with a number of possible deployment configurations.*

*Partnerships would be interesting in a range of areas including :*

*Additional platforms  
FrontHaul  
Rus  
RIC rApps / xApps*