

SUBJECT:	CoCoRE 5G TESTBED
MEETING:	CABINET
DATE:	4TH MARCH 2020
DIVISION/WARDS AFFECTED:	ALL

1. PURPOSE:

To provide an information only update for Members on 'Connected Communities in the Rural Economy' (CoCoRE), a 5G Testbed pathfinder project.

2. RECOMMENDATIONS:

2.1 For information only.

3. KEY ISSUES:

- 3.1 In September 2019, [Cabinet](#) approved the Digital Infrastructure Action Plan. The approval decision was based on recommendations that the Council 'fully consider any prospects to engage with funding opportunities to install 5G infrastructure within the County where there is a basis of evidence of need'. This would involve opening up the County as a regional testbed and pathfinder for the variety of applications likely to be developed as a result.
- 3.2 The approval was founded upon the situational analysis, that broadband connectivity in the County is poor in places due to the sparsity of the population, the rurality of the landscape, the difficulty of the topography and subsequently the limited commercial viability of the county's deep rural areas. In fact, in comparison to the other nine Local Authorities in the Cardiff Capital Region (CCR), Monmouthshire's digital deprivation rates stood at 12.5% in September 2019, compared to 3-4% in other CCR local authority areas.
- 3.3 One of the core strategic objectives of the Council is 'Supporting enterprise, entrepreneurship and job creation'. The Council therefore wishes to capitalise on the provision of a high speed, first class digital infrastructure, in order to deliver economic growth, wealth creation and increased productivity and GVA for the county and the country. A robust digital infrastructure can also enable public service delivery in a challenging rural environment with poor public transport and the resultant higher proportionate costs of delivering services e.g. social care, whilst also helping to combat loneliness and rural isolation.
- 3.4 On 20th February 2020, the Council received notice of the approval of CoCoRE, a 5G testbed in South East Wales to connect rural communities across Monmouthshire and semi-urban communities in Blaenau Gwent. A project designed to demonstrate how 5G technology can be a force for good for businesses and citizens, CoCoRE constitutes Phase One of a wider ambition for a proposed Wales 5G programme being led by Welsh Government.
- 3.5 A total of nine projects across Wales, England and Scotland will receive a share of the £35m from the UK Government's Rural Connected Communities Fund. This includes test sites being set up in Blaenau Gwent, Monmouthshire, Orkney, Wiltshire, Nottinghamshire, Dorset, Shropshire and Worcestershire. The purpose of the Fund being

to explore new ways that 5G can boost business growth and productivity, improve the lives of people in rural areas and maximise the productivity benefits of new technologies.

3.6 Digital infrastructure and 5G connectivity are critical to providing the services needed to provide social and economic prosperity. 5G has speeds up to ten times faster than 4G and will greatly increase mobile capacity across the UK however, 5G offers more than a speedier internet connection. It uses advanced technology and therefore has the capability in the future, to transform the way the Council interacts with critical services for example, energy, water, transport and healthcare. 5G will also drive the adoption of new technologies such as driverless cars, remote healthcare and the 'smart' devices that are increasingly used in homes and at work.

3.7 CoCoRE presents a real opportunity for the County to support innovation in IoT devices, leveraging the region's compound semiconductor sector. Activity will directly address the following rural challenges and opportunities:

- Diverse Rural Economy - Agritech, Tourism, Flexible Working, Isolation, remote consultation and diagnostics;
- Integrated multi-modal transport - Journey Planning, transport planning, on demand transport; and
- Tourism, augmented reality at scale.

Solving some of these issues will provide enormous opportunities to increase the region's competitive and social position.

3.8 The overall aim of CoCoRE is to create a digital environment over a meaningful semi-urban and rural area that benefits from high quality digital services, both fibre and 5G. The location of the scheme will be focused around a 'Place' concept in Ebbw Vale and Monmouthshire, where one 'Hub' location is a Semi-Urban location with a large rural component close-by.

The initial outcomes expected include:

- 5G coverage in Monmouthshire and Blaenau Gwent;
- Management via Self-sustaining Special Purpose Vehicles providing missing skills and high value jobs;
- Commercial IoT device manufacture & supply;
- Scalable and transferable Use Cases; and
- A clear investment model for 5G deployments in Wales.

3.9 The finer details of CoCoRE and the Council's role in its delivery are yet to be determined however partners will include Welsh Government, Blaenau Gwent County Borough Council, Cardiff Capital Region City Deal, Tech Valleys Programme, Cardiff University, Bristol University and private sector partners Cisco, Appy Way, Utterberry, Communication Service Providers and Local SMEs. A follow up report with further detail will therefore be presented at a later date.

4. **EQUALITY AND FUTURE GENERATIONS EVALUATION (INCLUDES SOCIAL JUSTICE, SAFEGUARDING AND CORPORATE PARENTING):**

4.1 Report for information only and therefore not relevant.

5. OPTIONS APPRAISAL

5.1 An options appraisal has been undertaken in Table One below.

Table One: Options Appraisal

Option	Benefits	Risks	Comments
Do nothing	None identified	<ul style="list-style-type: none"> Continue to be unable to influence the future direction of 5G deployment in the County and therefore may not get the full benefits of the initiative; Lack of early investment in 5G may cause subsequent delays to large scale commercial roll-out and reduce local economic impact. Reputational risk if a decision to proceed was revoked. 	Continuing disjointed delivery of digital infrastructure leading to further missed opportunities.
Support the CoCoRE 5G Testbed	<ul style="list-style-type: none"> The Council would gain a stake in the future direction of the 5G offer and an ability to shape test bed activities; Council investment could secure 5G bandwidth, which could then be used to support businesses and public service delivery; Benefits could include: job safeguarding; high value job creation opportunities; new business start-ups; productivity gains for existing SMEs; IoT device development opportunities; proposals to address current market failure; a 5G platform for future deployment and revenue generation, etc. 	<ul style="list-style-type: none"> Further clarification of the funding package requirements needed before any financial commitments are made. Details of ROI to be determined. Further details regarding governance, asset ownership, etc. to be clarified. 	Further clarification required prior to next decision report being submitted.

6. REASONS

6.1 The current digital deprivation rate of 12.5% in Monmouthshire is unacceptable, it puts our communities, businesses and indeed Wales at a severe disadvantage, particularly given Monmouthshire's proximity to the economic powerhouses of the South West, Gloucestershire and West Midlands. There is therefore, a strategic imperative to ensure

that Monmouthshire has sufficient digital connectivity to maximise our economic growth and wealth creation capability, and increase our productivity in order to increase the GVA for the county and the country.

- 6.2 The Council has previously taken a decision to 'fully consider any prospects to engage with funding opportunities to install 5G infrastructure within the County where there is a basis of evidence of need' which would involve opening up the County as a regional testbed and pathfinder. A conscious note will be made of any changes to legislation regarding any potential health impacts.
- 6.3 5G infrastructure development and testbed schemes are a high political and economic priority for the UK and Welsh Government. 5G, alongside full fibre, will form the core and edge of modern place-based infrastructure to drive the economy and deliver social benefits. Existing digital infrastructure in Monmouthshire and the wider Cardiff Capital region is inadequate and has historically lagged that available in the UK including Superfast & Ultrafast Broadband and wireless technologies, particularly 4G and now 5G. Having strong digital coverage for Internet and Data services drives a host of socio/economic opportunities. The CoCoRE project which forms part of the wider Welsh Government 5G strategy and intervention represents an opportunity to not only catch up and keep pace, but exceed the UK deployment of Next Generation Wireless, (5G).

7. RESOURCE IMPLICATIONS

- 7.1 CoCoRE is 50% matched funded with £5M coming from the DCMS Rural Connected Communities Fund and £5M from funding partners. The full capital resource implications for individual partners are yet to be determined, further details will be provided in a follow up report at a suitable point in time.

8. CONSULTEES

Previous consultees of the overarching Digital Infrastructure Action Plan have included:

- Monmouthshire communities;
- Cabinet;
- Senior Leadership Team;
- Economy and Development Select Committee

9. BACKGROUND PAPERS

N/A

10. AUTHOR:

Cath Fallon, Head of Enterprise and Community Animation

11. **CONTACT DETAILS:** E-mail: cathfallon@monmouthshire.gov.uk Mob: 07557 190969