

Subject: 5G & Future Connectivity Programme - 5G Innovation Acceleration**Report of:** Janet Ross**Portfolio:** Clean Energy and Connectivity

Report Summary

NTCA Cabinet previously approved an allocation of £7m for a *5G and Future Connectivity Programme*, with the overall ambition to drive advanced connectivity adoption in key sectors where there is local capability and opportunities to unlock economic benefits, new markets and improve competitiveness. The programme recognises that coordinated investment to support commercialisation of new technologies is required – increasing the opportunities for the area to benefit from the exploitation of future connectivity developments.

The two proposals introduced in this report reflect the first phase of investment from this programme. Both are being brought forward following an open 'expression of interest' process which attracted 13 submissions. Investment Panel considered these projects at its September meeting, recommending both for approval.

The associated funding ask is for £1.263m linked to the wider 5G Innovation Regions programme.

Proposal 1 - Port of Blyth, 5G Innovation Lab (Cellnex)

This proposal will provide a Private 5G "Living Lab" within the *Energy Central Learning Hub* located at the South Harbour area of Port of Blyth allowing businesses based in and around the port and wider value chain to work on 5G tech.

Proposal 2 - 5G / Immersive Innovation Lab (5Gi-LAB) (Digital Catapult)

A collaboration between Digital Catapult UK, Vodafone, Digital Catapult NETV (Sunderland Software City), Dynamo North East, and Floe (co-working space provider) to set up and run a 5G/Immersive Innovation Lab (5Gi-LAB) located in Newcastle's Eldon Square.

Recommendations

The Chief Executive is asked to

- approve Investment Fund funding of £1.263m for the Port of Blyth Innovation Lab and 5G Immersive Lab proposals included in this report, subject to the funding conditions set out in Appendix 1 of this report.

1. Background Information, Proposals and Timetable for Implementation

- 1.1 NTCA Cabinet approved an allocation of £7m for the 5G and Future Connectivity Programme with the overall ambition to drive advanced connectivity adoption, with a focus on our key sectors where there is local capability and opportunities to unlock economic benefits, new markets and improve competitiveness. Proposals set out in this report will unlock a first wave of opportunities for innovation which utilise advanced wireless connectivity and will strengthen our position for further government investment and contribute to wider strategic initiatives such as Investment Zones and our green growth ambitions.
- 1.2 £3.5m was made available through an EOI call in March 2023 and 13 EOI submissions were received across 3 lots as detailed below. Lot 1 and Lot 2 were progressed through to full business case and Lot 3 is being advanced separately.

- **LOT 1** – 5G/future connectivity test beds or ‘innovation labs’ to improve access to high quality connectivity innovation facilities, equipment, and co-working space for SMEs.
- **LOT 2** - Projects that support private sector commercialisation of proven 5G use cases and deployment at scale in NTCA key sectors.
- **LOT 3** – Infrastructure providers and mobile network operators invited to collaborate with NTCA/partners on opportunities for Full Fibre and 5G infrastructure deployment along the Northumberland Line Economic Corridor

- 1.3 A full external green book appraisal has been undertaken which identified that the projects have a strong fit with the Combined Authority’s Vision and key priorities and a strategic fit with wider regional and national policy. The overall risk rating of the business case is green with the outstanding issues dealt with through the conditions of funding set out in Appendix 1.
- 1.4 £1.263m is requested, leaving a further £5.737m of the overall allocation remaining (£2.29m in the current period) to support wider priorities identified in the 5G and Future Connectivity Programme including accelerating digital infrastructure rollout and digital inclusion which will be developed in consultation with NTCA Digital Executive Board.
- 1.5 The two projects are anticipated to begin to mobilise immediately following the delegated decision with delivery expected to begin in early 2024 and to run until March 2025 as per the implementation time table below:

Activity	Deadline
Initial Consideration by TOG	20 th July 2023
Consideration in detail and approved by Digital Executive Board	7 th August 2023
Follow up consideration and approval by TOG	7 th Sept 2023
Consideration by Investment Panel	14 th Sept 2023
Notification to applicants of successful assessment of full business case submission	End Sept 2023
Contracting and Mobilisation of projects	Sept/ Oct 2023
Project Start Dates	Q3 2023
Project Close (latest)	Q2 2025

2 Potential Impact on Objectives

- 2.1 The outputs and benefits associated with these projects contribute to the objectives set out in the North of Tyne 5G & Future Connectivity joint vision by addressing the gaps in our innovation ecosystem, building on NTCA intent to establish this region at the vanguard of 5G capability in the UK.
- 2.2 A number of further benefits are outlined in the full business case proposals which align to NTCA’s objectives for economic growth and inclusive economy: including the provision of physical co-working space; access to up-to-date 5G enabled innovation labs; wider impact on learning opportunities linked to growth sectors; public service innovation; a partnership with a major network operator (Vodafone) and raising the profile of the region as innovators in this space with national government.

3 Key Risks

- 3.1 The project risks have been considered as part of the application process. The application has been appraised and funding will be subject to quarterly monitoring returns to ensure progress is made in line with agreed timelines.

4 Financial and Other Resources Implications

- 4.1 **£1.263m** is allocated to these proposals and should these projects be approved a further **£5.737m** of the overall allocation (£7m) will be remaining which will be developed in consultation with NTCA Digital Executive Board.
- 4.2 Funding will be allocated for 2 years based on the following profiles:

Project	Lot 1- Innovation lab	
	Grant Request	In-kind Support
Port of Blyth, 5G Innovation Lab (Cellnex)	£548k	£50k
5G / Immersive Innovation Lab (5Gi-LAB) (Digital Catapult)	£715k	
Totals	£1263k	£50k

5 Legal Implications

- 5.1 The Monitoring officers' comments have been incorporated in this report.
- 5.2 The award is subject to compliance with the requirements of subsidy control advice received and the GFA shall include any conditions deemed appropriate in this respect.

6 Equalities Implications

- 6.1 As required by Section 149 of the Equalities Act 2010, the Combined Authority has considered its obligations regarding Public Sector Equality Duty and there will be no anticipated negative impact on groups with protected characteristics from this proposal.
- 6.2 Each of the projects will complete a further project specific Equalities Impact Assessment as a condition of NTCA funding.

7 Inclusive Economy Implications

- 7.1 The approach taken will positively contribute to creating a more inclusive economy in the North of Tyne with specific positive impact on addressing the needs of businesses and residents in the region.
- 7.2 The 2 projects offer specific opportunities linked to Participation and Equity; through the provision of increased and open access to 5G labs for residents and SMEs and the offer of educational and training facilities to varied cohorts of residents.

8 Climate Change Implications

- 8.1 The Combined Authority has considered the implications relating to climate change. 5G is a technology that proposes to help mitigate climate change, one of the biggest threats to health, the natural environment and economic prosperity. 5G will support key industries such as manufacturing, agriculture, transport, and energy in reducing their environmental footprints.
- 8.2 As a region, we are encouraging this innovation with the 5G Innovation Lab at Port of Blyth which will enable 5g innovation in the offshore and renewables sector and positively impact on our net zero ambitions.

9 Consultation and Engagement

- 9.1 These projects have been discussed and approved at NTCA Digital Board, Technical Officers Group meeting, Investment Panel, at Officer level in NTCA. In addition, the project sponsor has undertaken engagement with relevant stakeholders.

10 Appendices

- 10.1 Appendix 1 - Funding conditions

11 Background Papers

- 11.1 NTCA Cabinet Paper July 2021
[Cabinet Decisions July 2021 \(northoftyne-ca.gov.uk\)](http://northoftyne-ca.gov.uk/Cabinet-Decisions-July-2021)

12 Contact Officers

- 12.1 Janet Ross Digital Infrastructure Delivery Manager (5G & Future Connectivity Programme)
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13 Glossary

- 13.1 None

14 Sign-off

1. Portfolio holder: Yes	2. Director of P&P/Head of Service: Yes	3. Director of Finance: Yes	4. Monitoring Officer: Yes
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**Appendix 1: Funding conditions
Port of Blyth Innovation Hub**

The following conditions will be included as part of any funding agreement:	
Condition 1	Cellnex to provide the final costs of the cabins to be provided by the Port of Blyth to house the project. This is the match funding for the project and the scale of the project is unknown until this is contractually finalised.
Condition 2	NTCA to agree pro-forma timesheet-based monitoring system with Cellnex to account for costs. This project involves £397,489 of capitalised Cellnex internal cost and the applicant has also included 10% contingency which they are committed to not claiming if it is not required.
Condition 3	Further work is required on the definition of outputs. The applicant has core outputs of supporting 25 businesses with development projects and providing training support for 100 people. These outputs are considered to be appropriate but the translation of these outputs into new to the firm / market products and the exact outputs from the training in terms of the different cohorts of residents reached are considered optimistic and could be refined through discussion.
Condition 4	Completion of an Equalities Impact Assessment
Condition 5	Completion of accreditation for the Good Work Pledge
Condition 6	In the event of any cost overruns beyond the amount proposed, the amount required will be met by the applicant and its partners.
Condition 7	NTCA to insist on an external project evaluation if a wider programme wide evaluation is not being undertaken.

5G Immersive Innovation Lab

The following conditions will be included as part of any funding agreement:	
Condition 1	Confirmation of break clause at 18 months for Eldon square location
Condition 2	Re-submission of a full risk register, with particular attention on financial risks
Condition 3	UK subsidy control satisfactory position for each partner before any GFA
Condition 4	Justification of at cost basis process for commercial partners during the lifetime of the project.