

Corporate Issues and Reform Overview & Scrutiny Committee

Date: 19 January 2020

Subject: Greater Manchester Local Full Fibre Network Programme

Report of: Councillor Sean Fielding, Portfolio Lead Leader for Digital City Region; Sara Todd Portfolio Lead Chief Executive for Digital City Region

PURPOSE OF REPORT:

This report provides an update on to Greater Manchester's ambition for World Class Digital Infrastructure and specifically the GM Local Full Fibre Network programme which came to this committee in October 2019 and subsequently to the GMCA Board in January and December 2020.

RECOMMENDATIONS:

The Corporate Issues & Reform Scrutiny Committee is requested to note and support progress on the GM Local Full Fibre Network programme.

CONTACT OFFICERS:

Phil Swan (GMCA), Alison Gordon (GMCA), John Steward (GMCA)

Equalities Implications:

Improved digital connectivity across Greater Manchester is important for not only economic but social reasons. This full fibre investment underpins better connectivity access across community buildings, libraries, council offices and other locations with the potential to do so more cost effectively, to enable more people to access the internet, information and services more easily.

The outcome of the tendering process also included a range of social value investments which are summarized in section 2.10.

Whilst the Local Full Fibre Network programme is focused on the infrastructure, a linked business case is in the final stages of being developed which includes support for further community benefits as described in section 2.16.

Climate Change Impact Assessment and Mitigation Measures:

The Local Full Fibre Network Programme supports Greater Manchester's environmental objectives in several ways.

By re-using and re-conditioning a high proportion (approx. 90%) of existing ducting to install new fibre connectivity not only is the pace of deployment faster but the effort required is lower. As a consequence, the carbon normally generated by laying over 2,500km of new fibre is lower.

In addition, work aims to provide connectivity for use in GM environmental programmes such as public sector building environment management.

Risk Management:

Risks to delivery are being closely managed via the LFFN Framework Board and includes GMCA staff, local authorities, TFGM, finance and Virgin Media Business programme and executive leads. Issues are escalated through senior level sponsorship with Virgin Media Business and internally to the GM Digital Portfolio Leadership.

Legal Considerations:

None

Financial Consequences – Revenue:

None

Financial Consequences – Capital:

As reflected paper agreed by the GMCA in January 2020

Number of attachments to the report: 2

BACKGROUND PAPERS:

- Greater Manchester Local Full Fibre Network Programme – GMCA Report 7 January 2020
- Greater Manchester LFFN Programme – Public Sector Building Upgrade – GMCA report 18th December 2020

1 INTRODUCTION/BACKGROUND

- 1.1 When Greater Manchester's Digital Blueprint was launched in February it included a specific ambition to Extend Our World Class Digital Infrastructure as a cross cutting enabler to underpin the city regions economic and social ambitions. Whilst already important, the pandemic has highlighted the need for high quality digital infrastructure that can enable people to work, live and study differently.
- 1.2 Against this ambition, the GM Local Full Fibre Network Programme aims to increase fibre optic level connectivity across the city region. It aims to not only help future proof public services but incidentally stimulate better connectivity for residents and businesses.
- 1.3 Following a successful bid for DCMS funding in 2018, Greater Manchester secured £23.7M (25% of the UK's Local Full Fibre Network Wave 2 funding allocation) from the Dept of Digital Culture Media and Sport (DCMS) for several related activities under the umbrella of Greater Manchester's Local Full Fibre Network programme.
- 1.4 Overall, the programme aimed to connect over 1300 public sector sites across GM and based on similar projects in the UK, encourage further wider private sector investment, helping lift full fibre coverage from 2% then to around 25% within three years. Greater Manchester would then have the best high-speed digital infrastructure coverage of any city-region in the UK.
- 1.5 The GM LFFN programme included three elements:
 - An Anchor Tenancy component in which 7 GM Councils (Bolton, Bury, Oldham, Rochdale, Stockport, Trafford and Wigan) and GMCA (Fire & Rescue Service and GMCA/TFGM Urban Traffic Management Control systems assets (UTMC)) co-invested alongside DCMS, to secure greater impact and further develop networks in localities by bringing forward infrastructure connectivity budgets. The result of the tender for this was approved by GMCA in January 2020.
 - A specific, tactical public sector building upgrade (PSBU) component relating to Manchester City Council where there was already considerable fibre networks and risk of overbuild. This was later extended to Salford City Council to avoid overbuilding new fibre being built in the city by Openreach.
 - An extension to the existing Digital Infrastructure Cooperative work in Tameside which was allocated £2.5M of the grant award at the start of the programme to be managed directly between DCMS and Tameside Council.
- 1.6 This report provides an update on the first two elements of this programme.

2 THE PUBLIC SECTOR ANCHOR TENANCY NETWORK

2.1 Following completion of the tender process and the associated DCMS Gateway C approvals, work on delivery commenced in March 2020. The tendering process encouraging bidders to provide additional value which included:

- Public sector partners to benefit from 30 years use of the infrastructure instead of 20 years for no additional cost.
- More than 200 additional local authority and GMCA(FRS) sites were included at no additional cost taking the total to more than 1500 public sector sites.
- In total over 2,700km of new full fibre would be delivered across Greater Manchester with all the areas interconnected so creating a joined-up network. With a large proportion pushing new fibre through existing ducting, the breadth of delivery could be increased, disruption minimized, and carbon emissions reduced.
- Residential and business premises passed would be more than 35% of GM rather than the 25% originally forecast
- Local public sector services would be free to procure services from any provider across the network.
- Social value commitments were secured as described below.

2.2 Delivery to date and forward plan

2.3 The Programme is currently mid-implementation however by the end of December 2020 had:

- Completed surveys, design and wayleave agreements for over 1200 public sites.
- Installed and signed off almost 500km of new fibre cable across GM.
- Connected and commissioned over 200 public sector buildings.

2.4 Whilst Programme team has made good progress, this has been in face of a number of challenges relating to the pandemic. The combined efforts of council officers, TFGM and GMCA staff, supporting contractors and VMB have needed to be considerable to enable Covid-secure access to sites such as schools and fire stations; and for wayleaves, permits, inspections and other work to be undertaken quickly and effectively whilst staff have been diverted or unavailable. A strong partnership approach has been adopted throughout this work with Executive level support from VMB throughout including at monthly Framework Board meetings in addition to weekly Project Team meetings with all the partners.

2.5 This would have been significantly more challenging if the Government had not stated that Telecoms was classed as critical infrastructure during the initial and subsequent lockdowns, enabling work to continue.

- 2.6 Against this backdrop the Programme, it has still been necessary to push the delivery timeline out by one quarter from March 2021 to June 2021 for DCMS funded sites, however the timeframe is considered more realistic based on detailed planning.
- 2.7 DCMS have confirmed that £1m of the overall £18.8M for the Anchor Tenancy element of the Programme can be carried into the 2021 /22 financial year. To ensure that the programme delivers in line with this, the Programme Team have agreed with DCMS that the value of the “trunk-build” fibre (the main spine of the fibre network) to be evidenced early and hence claimed by the end of March. This is c£5M of build value and is currently subject to final agreement between DCMS and GMCA, involving a revised Grant Funding Agreement. The Project team are expecting this revised Agreement to be confirmed by the end of January 2021 with all relevant documentation currently submitted to the DCMS for approval.
- 2.8 The Programme Team continues to work extremely closely with VMB and DCMS to tackle issues, manage expectations and enable grant funding to be drawn down in line with expectations.

2.9 Delivery of Social Value

- 2.10 As part of the Public Sector Anchor Tenancy tender, VMB proposed significant levels of social value which they have now started to deliver. The monetary value of the Social Value Plan (SVP) is in excess of £400,000 and this does not take into account some elements of the social value offer which are more difficult to quantify financially (e.g. volunteer hours).
- 2.11 The components of the SVP can be summarised under the following five areas:
- Donations to support social GM Priorities including homelessness, digital inclusion and schools
 - Free connectivity for homeless hostels for 5 years
 - Volunteering to support local communities
 - Support for digital skills and apprenticeships
 - Maximising the employment impact of the LFFN Programme through the use local subcontractors
- 2.12 Covid-19 has brought a strong focus on this and VMB responded positively to early requests from GM to support our response to the pandemic in line with the Social Value Plan. These were:
- The launch of the **GM Technology Fund** on 29th April which was support by £50,000 donation from VMB which, alongside funding from GMCA Skills Programme, led to 567 hardware packages being rapidly distributed to pupils from schools selected on the basis of Free Schools Meals data across GM.

- Speedy donation of £50,000 to the Mayor’s Charity to address immediate needs in **supporting homeless people during the pandemic.**
- Extending **Connectivity for Homeless Hostels** now to include community hubs. Homeless hostels in some local authority areas already benefit from high speed connection. In addition, it is was not possible to connect three homeless hostels in some Local Authority areas due to VMB network proximity challenges. VMB has therefore agreed to extend their free offer to include community hub locations on the same five-year term.

Furthermore, VMB has agreed to connect a further site in GM. Now 21, instead of the 20 contracted. This enables three homeless hostels or community hubs to be connected in each of the seven contracted local authorities. In addition, bandwidth to be provided has been increased from 100Mbps to 350Mbps, utilising its Voom wifi product. Long lists of premises have been provided by each LA and these have now been shortlisted by VMB in line with the proximity of their network.

- **Consultancy support for School LAN audit/planning in seven locations.** Local Authorities have each been asked to nominate a school it would like to benefit from a comprehensive local area network audit package undertaken by Virgin Media Business. However, due to current site access challenges it is proposed to push back this work to Spring 2021. The value of this consultancy is estimated to be in the region of £30,000 for each school. Note that this does not include the costs of implementation

2.13 The LFFN Programme Team has also sought to maximise benefit and value in respect of the other elements of the Social Value Plan by building upon existing initiatives, where possible. In addition, the Team is engaging with Virgin Media at corporate level about longer-term sustainable actions to address digital inclusion in Greater Manchester.

2.14 The GMCA is continuing to work closely with contracted local authority digital and economic development leads to ensure that we take full advantage of the VMB social value offer and seek flexibility where needed moving forward.

2.15 Lighting the Fibre

2.16 The LFFN programme is building out fibre optic cabling infrastructure and as such each individual contracting public organization must set up network services across it in order to use it – essentially bringing the fibre into use. This is referral to as “lighting the fibre”.

2.17 The Programme’s public sector partners have recognized the potential benefit in a joint approach to this. Exploratory work between the public sector partners engaged in the Anchor Tenancy programme commenced in 2020 to understand to benefits of taking a joint approach to network services in order to:

- Drive down costs for network services.
- Deliver more agile, faster and more resilient network services that enable more effective business support and community access.
- Drive R&D and local innovation.

2.18 An outline business case for this work will be completed in January 2021 with the intention that it will be presented to the GMCA in March.

3 PUBLIC SECTOR BUILDING UPGRADE WORK

3.1 As anticipated, the success of the DCMS bid (the largest allocation in the UK) triggered further wider market investment in fibre connectivity in the City Region. Whilst coverage in most of the local authority areas outside of Manchester and Tameside remained below 5%, in Salford coverage increased from 10% in 2018 to over 45% in 2019 as a result of investment by Openreach. This led to a discussion with DCMS about the LFFN grant being used to overbuild fibre that has already been delivered without intervention in both Manchester and Salford.

3.2 The approach agreed with DCMS and both Manchester City Council and Salford City Council was that each local authority would receive a flat rate grant contribution of £5000 per eligible nominated local authority site which is calculated on the average cost of equipment and cabling upgrades, as an average across all sites proposed.

3.3 Manchester City Council proposed 167 sites utilising £835,000 of the DCMS LFFN grant, and Salford City Council proposed 18 sites utilising £85,000 of the same. This was supported by GMCA in January 2020.

3.4 Both Manchester and Salford City Councils agreed that the PSBU elements of the GM LFFN programme would be delivered outside of the LFFN Anchor Tenancy procurement and would be directly contracted or procured by each Council utilising the Crown Commercial Services (CCS) Frameworks.

3.5 Salford City Council subsequently wrote to the DCMS to withdraw from this element of the programme and will NOT receive £85,000 DCMS LFFN grant for PSBU. However, Salford locality will still benefit from the GM LFFN programme through the Anchor Tenancy connections of the GMCA's Fire and Rescue and Urban Traffic Control sites which are located within Salford City Council's local authority area and which will be connected by the GMCA under the Anchor Tenancy element of the overall programme.

3.6 Manchester City Council PSBU Programme

3.7 The GM LFFN Programme Board – including Manchester City Council - agreed that Manchester City Council would be responsible for procuring its own contract with a provider

to deliver Manchester City Council's required PSBU works, within the overall GM LFFN Programme.

- 3.8 Following extensive discussions with DCMS, in June 2020, MCC engaged with interested organisations for the provision of PSBU services as part of a wider strategic ICT procurement. Tenders were subsequently invited in August 2020 and responses received from suppliers on 26th October 2020. Following evaluation by MCC the outcome of the evaluation process was announced in December 2020. The decisions and award recommendations were ratified by MCC internal Programme Board and notified to GMCA for information.
- 3.9 The outcome of the Tender process and relevant artefacts associated with the procurement was used to compile the evidence bundle for submission to DCMS as part of their "Checkpoint C" assurance process. This was completed successfully on 17th December 2020, with all documents and internal approvals submitted to DCMS by 03rd December 2020.
- 3.10 The DCMS "Checkpoint C" process provides an assurance gateway for DCMS to confirm that projects have complied with all necessary LFFN programme requirements and been procured in accordance with contracting regulations. GMCA and MCC worked closely with DCMS throughout the tender stage to ensure the approach adopted aligned with the DCMS expectations, such that the Checkpoint C process could be completed in a timely manner and the Grant Funding secured without condition.
- 3.11 Following approval of the related key decisions by the GMCA in December 2020, the DCMS PSBU Grant Agreement was signed by DCMS as the Grantor, GMCA in its role as Grant Administrator, and Manchester City Council as the Grant Recipient. This enables works to deliver the PSBU programme to commence on 01st February 2021, with the PSBU element completed by September 2021. The wider MCC Wide Area Network contract is expected to be awarded to be over a longer-term period.

4 GM PROSPECTUS - ACCELERATING WIDER ROLL OUT OF FULL FIBRE ACROSS GM

- 4.1 In January 2020, all GM local authorities agreed the GM Prospectus, which set out to achieve consistent standards and protocols to accelerate roll out of full fibre across the City Region. This included streamlining the approach to wayleaves, standardising resurfacing and working with other utility providers to "dig once" where possible. The document was prepared following wide consultation with local authorities and was also shaped by providers.
- 4.2 The GM Prospectus is an important statement of intent from GM local authorities that we will make it as easy as possible for full fibre providers to roll out their infrastructure and has been widely welcomed by players across the industry including by Openreach (Part of BT Group), City Fibre, Gamma and Hyperoptic as well as Virgin Media.

- 4.3 The principles have since been applied during the implementation of the LFFN PSAT Programme. This has proved to be an invaluable test which notably led to wayleave approvals timescales being reduced from two weeks to around three days.
- 4.4 It is expected that the Prospectus will evolve to take account of changing regulations and legislation such as is being reflected in the Planning White Paper.

5 LOOKING AHEAD

- 5.1 The Covid-19 pandemic has accelerated an existing trend in demand for digital connectivity – this is evidenced through a doubling of Openreach’s broadband data traffic in 2020¹.
- 5.2 This has been occurring in an industry landscape that has evolved considerably over the past 18 months: there have been significant initiatives announcements by incumbents plus new, smaller providers are investing strongly in the UK leading to the UK now having one of the highest growth rates in fibre coverage².
- 5.3 Alongside this, the Spending Review included changes to Government funding for digital infrastructure and timescales for investments, particularly with incentives shifting towards areas of higher rurality which are less economic to connect. The GMCA continues to engage closely with DCMS and industry to make the case for investment in Greater Manchester’s semi-rural areas which sit outside current investment plans.
- 5.4 Greater Manchester’s Local Full Fibre Programme signalled to industry the city-region’s strategic intent and has stimulated digital infrastructure investment activity across the sector both directly and indirectly, generating significant social value in the process. This is important given studies by the likes of Regeneris³ have shown that 100% full fibre coverage in Greater Manchester would add £14Bn to the GM economy over the next 15 years.
- 5.5 Whilst there are commercial sensitivities relating to specific market investments, it is clear that significant further investment in both fixed and wireless gigabit connectivity is being rolled out across Greater Manchester and that the GM LFFN programme has significant industry impact in that context.
- 5.6 This work is happening whilst the need to urgently address digital inclusion and to enable better public services is recognised. The proposals being developed through the One Network programme aim to help address this alongside plans and investments in individual localities, the work of the GM Digital Inclusion Taskforce, the Local Data Review and other activities strengthening the city regions digital foundations.
- 5.7 The potential to further explore how Greater Manchester can leverage these assets is not being ignored, in particularly through initiatives often referred to as “smart” technologies

¹ [Openreach Saw Broadband Traffic Double Across 2020 | usave.co.uk](https://www.usave.co.uk/news/openreach-saw-broadband-traffic-double-across-2020)

² [Digital infrastructure challengers flourish with sustained investment in 2020 | total telecom](https://www.totaltelecom.com/news/digital-infrastructure-challengers-flourish-with-sustained-investment-in-2020)

³ The Economic Impact of Full Fibre Infrastructure – Regeneris Consulting – March 2018

including areas like traffic optimization, carbon reduction and living well at home – many of which were considered as part of the ground-breaking CityVerve initiative delivered by Manchester City Council. To lead this, the Full Fibre Programme Board has evolved into the Smart GM Places Group, chaired by Stockport Council, with industry guidance being provided by via a refreshed Digital Infrastructure Advisory Group.

- 5.8 In summary, this report demonstrates the current scale of activity and, as 2021 commences, the GMCA digital team is focused on working with and supporting locality partners to deliver the Local Full Fibre Programme and ensure that the opportunities it creates are achieved.