

Corporate Issues and Reform Overview & Scrutiny Committee

Date: 8 March 2022

Subject: GM Local Full Fibre Network programme update and GMFRS Wider

Area Network refresh

Report of: Cllr Bev Craig, Portfolio Lead Leader for Digital City Region; Tom

Stannard, Portfolio Lead Chief Executive for Digital City Region; Phil

Swan, Director for Digital, GMCA.

Purpose of Report:

The purpose of this report is to provide an update on the GM Local Full Fibre Network programme and the GMCA(FRS) Wide Area Network re-procurement.

Recommendations:

The Corporate Issues and Reform Overview & Scrutiny Committee is requested to:

Review and support the proposals in this paper.

BOLTON	MANCHESTER	ROCHDALE	STOCKPORT	TRAFFORD
BURY	OLDHAM	SALFORD	TAMESIDE	WIGAN

Contact Officers:

Phil Swan, GM Digital Chief Information Officer; Jon Burt, Lead Enterprise Architect,

GMCA.

Equalities Implications:

Better and more resilience digital connectivity is important for Greater Manchester both

economically and socially. This proposal improves our public sector connectivity by

leveraging the Full Fibre investment and supports better services 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 GMCA Wide Area Network refresh supports effective working across the

organization for all staff.

Climate Change Impact Assessment and Mitigation Measures -

The wide area network capabilities proposed in GM One Network not only reduce the

equipment requirements for individual organisations but provide a platform to support

effective digital ways of working into the future including hybrid working.

Risk Management:

Risks relating to GM One Network are closely managed via the GM One Network

Programme Board chaired by Stockport Council which reports into the GMCA Digital

Portfolio Executive and Steering Group which are chaired by the Portfolio Leads.

Legal Considerations: See Section 2.

Financial Consequences – Revenue:

The revenue cost implications of the proposals in this report will be met from within

existing resources for GMCA.

Financial Consequences - Capital:

GMCA will incur capital expenditure as agreed by the GMCA in the Capital Programme on behalf of other partners and recover through the financial agreement contained in the collaboration agreement between partners.

Number of attachments to the report: 0

BACKGROUND PAPERS:

- Greater Manchester Local Full Fibre Network Programme GMCA Report 7
 January 2020.
- Corporate Issues & Reform Scrutiny Committee 19 January 2021
- Economy, Business Growth & Skills Overview & Scrutiny Committee 4 Jan 2022
- GMCA Capital Programme Report GMCA Report February 2022

1 Introduction

- 1.1 Since March 2020 a programme led by the GMCA working collaboratively with districts, GMFRS and TFGM has overseen development of new broadband infrastructure called the GM Local Full Fibre Network (LFFN). This is now in the final stages of laying up to 2,700km of new fibre optic cabling across Greater Manchester leveraging approximately £20M of Government funding and a combined £10M investment from GMCA(FRS), TFGM and seven of the councils.
- 1.2 Household and industry consumption of data is doubling every three years¹ and if this trend continues will be approximately eight times higher by 2030. For Greater Manchester to continue to thrive in a digital age, it is therefore essential that the city region is at the forefront of both fixed and wireless digital infrastructure investment.
- 1.3 The progress of the GM Local Full Fibre Programme alongside wider industry activity and engagement through the GM Digital Infrastructure Advisory Group has catapulted forward Greater Manchester's digital infrastructure since 2019, as shown in Figure 1, and at present 78% of the population has access to Gigabit level connectivity (including via cable services) with Full Fibre ("Fibre to the Premise") increasing rapidly. The overall intent is that all areas in Greater Manchester should have access to gigabit broadband and at least 30mbps.
- 1.4 Progress is however uneven and the GMCA will be continuing to work with localities and the telecoms sector to address gaps in performance.

^{1 •} Total data volume worldwide 2010-2025 | Statista

GM Fixed Connectivity Coverage Dec 2021 (2019)					
	Gigabit (1,000Mbps)	Full Fibre Coverage	Superfast (Min. 30Mbps)		
Bolton	89.87%	13.55% (0.84%)	99.3% (99.3%)		
Bury	74.75%	65.92% (4.07%)	99.4% (99.4%)		
Manchester	71.66%	32.65% (10.92%)	96.1% (95.7%)		
Oldham	81.49%	23.29% (7.11%)	99.1% (99.06%)		
Rochdale	62.22%	10.14% (3.1%)	98.8% (98.79%)		
Salford	86.11%	64.92% (45.14%)	97.8% (97.2%)		
Stockport	88.35%	12.49% (0.56%)	99.22% (99.22%)		
Tameside	76.35%	62.01% (6.46%)	99.6% (99.57%)		
Trafford	67%	5.27% (1.95%)	99.2% (99.16%)		
Wigan	87.69%	6.73% (1.31%)	99.3% (99.23%)		
GM Average	78.4%	29.7% (8.1%)	98.8% (98.6%)		
England	66.35%	28.8% (8.73%)	97.4% (96.5%)		

Figure 3. Fixed connectivity speeds in GM, Dec 2021 vis Sept 2019.

- 1.5 This Local Full Fibre Network infrastructure is helping open up parts of Greater Manchester to having better fibre connectivity and through the work itself has delivered over £11M of economic and social value in its first year as shared in a recent report by Virgin Media2, particularly against the pressing issue of Digital Exclusion.
- 1.6 The GM Local Full Fibre Network work will be complete by Q1 2022/3 and will connect approx. 1,600 public sites across the city region. It will also establish Greater Manchester wide fibre links between 33 BT Exchanges, putting in place a resilient backbone against which those sites connect and enabling sharing of services like internet access at lower cost.

2 GMCA(FRS) Wide Area Network Refresh

2.1 The January 2020 GMCA approval of the GM Local Full Fibre Programme included financial provision to "light the fibre" connecting Greater Manchester's Urban Traffic Control Signals. This recognised that the current equipment was dated and the potential to use these city-region wide end points for a range of purposes – such as

² Greater Manchester Combined Authority | Virgin Media Business

- to help improve traffic flows and improve air quality through AI enabled optimisation was considerable.
- 2.2 Given the shared nature of the Full Fibre infrastructure, in 2020, four of the councils (Bury, Rochdale, Oldham and Stockport) together with TFGM and GMCA (FRS) explored the potential to jointly procure the connectivity service that would light the fibre. This led to the development of a business case for a joint procurement under the title "GM One Network" which was shared with Wider Leadership Team in April 2021, after which point a Public Contract Regulations 2015 compliant procurement exercise commenced.
- 2.3 This was overseen by a Project Board chaired by Stockport Council and reporting into the GM Digital Steering Group which was chaired by Cllr Andrew Western, CA Portfolio Lead for Digital and Leader of Trafford Council, until December 2021 and is now chaired by the new Digital Portfolio lead, Cllr Bev Craig, Leader of Manchester City Council.
- 2.4 Following a rigorous process a preferred bidder has been identified for a 10 year proposition. Provision for GMCA to act as Lead Authority in GM One Network was included in the GMCA Capital Programme that was approved by the GMCA on 11th February 2022.
- 2.5 From a GMCA(FRS) Wide Area Network perspective, the cost of the new contract is within the revenue cost of the current arrangement; significantly improves the connectivity speeds to GMCA(FRS) sites; and significantly improves the resilience of the network through the connection to the pan GM fibre "backbone".
- 2.6 A Collaboration Agreement has been defined with legal support and agreement by the partner organisations in GM One Network. This confirms the funding contributions; the governance arrangements; the support that will be provided by the GMCA based GM One Network team to each participating organisation; the

- operating practices and responsibilities of the GMCA and each partner; and the general agreed contract management approach
- 2.7 These proposals are currently being taken through governance of each of the four councils, TFGM and GM Fire & Rescue with the intent to bring to the GMCA at the end of March 2022.

3 Further opportunities

- 3.1 GMCA will continue to work with localities to maximise the benefit of the GM Local Full Fibre Network and improve connectivity to residents and businesses across Greater Manchester. In parallel, lighting the fibre via GM One Network creates both savings and social value opportunities in a manner that is scalable and open to other GM public sector organisations.
- 3.2 Several opportunities exist to leverage the GM Full Fibre Network which will be explored further in 2022. These include:
 - CCTV Between the ten councils, GMP and TFGM, Greater Manchester currently has over 6,000 CCTV cameras many of which have their own connectivity arrangements and this number is increasing.
 - Potential extension of the TFGM led smart traffic optimisation pilot that is linking traffic signals on a section of the A6 in Salford with internet based machine learning capabilities in order to test the ability to improve flow.
 - Smart energy and environmental monitoring initiatives across the ten boroughs in line with the city region's carbon neutral ambitions.
 - Potential to offer open access connectivity in support of GM's digital inclusion ambitions and as expressed in the Young Person's Guarantee and GM Inequalities Commission report.