

Report of Senior Responsible Officer – Leeds Full Fibre Programme

Report to Director of Resources

Date: 5th February 2021

Subject: 5G Implementation and Pilot Rollout

Are specific electoral wards affected? If yes, name(s) of ward(s):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Has consultation been carried out?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Are there implications for equality and diversity and cohesion and integration?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Will the decision be open for call-in?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Does the report contain confidential or exempt information? If relevant, access to information procedure rule number: Appendix number: Appendix number 1, 5G License Agreement between BT Plc and Leeds City Council	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Summary

1. Main issues

- Improving access to and take up of good quality connectivity options by residents will allow the Council and its partners to explore more widespread digital and telehealth solutions, initiatives to reduce social isolation, and enhanced use of sensors to support independent living.
- Alongside the creation of a full fibre digital infrastructure is the requirement to deliver broadband and 5G services to residents and businesses. This aligns with the Council's inclusive growth ambitions to bring a choice of connectivity types and providers to residents and businesses in Leeds.
- The proliferation of Full Fibre across the region will not be possible across all areas. As part of the delivery of the Leeds Full Fibre Programme, the implementation of the UK's first 5G standalone network will help to bring further connectivity solutions to those areas and alongside the implementation of Leeds City Council's Full Fibre Network enable the proliferation of digital technologies and the reduction of both social isolation and gaps in the delivery of education to the most vulnerable.
- As part of the delivery of 5G, BT have committed to cover 70% of the Leeds Metropolitan District and 80% of its Social Housing stock. The ability to deploy 5G services to residents and businesses aligns with the Council's inclusive growth ambitions to bring a choice of connectivity types and providers to residents and businesses in Leeds.

2. Best Council Plan implications (see the [latest version of the Best Council Plan](#))

- Connectivity is recognised as a foundation layer which underpins the Council's wider digital inclusion objectives and is referenced in the Best Council Plan 2018 to 2021.
- It also delivers against the 21st Century Infrastructure and Leeds as a Digital City 12 Big Ideas from the Inclusive Growth Strategy.

3. Resource implications

- All identified resources are covered under the DIS ESP Essential Services Programme.

Recommendations

The Director of Resources is recommended to:

- a) Note that this decision is a direct consequence of implementing previous Key Decision (D48405, dated 13th February 2019) and was in the contemplation of the decision maker at the time the decision was taken and the award of contract to BT Plc, commencing in March 2020 for a period of 10 years with an estimated total value of £20.3M; and
- b) Approve the authorisation of the 5G License Agreement to implement a pilot of 20 5G Micro Cells on CCTV and UTC furniture from April 2021.

1. Purpose of this report

- 1.1 Note that this decision is a direct consequence of implementing previous Key Decision (D48405, dated 13th February 2019) and was in the contemplation of the decision maker at the time the decision was taken and the award of contract to BT Plc, commencing in March 2020 for a period of 10 years with an estimated total value of £20.3M
- 1.2 This report seeks approval from the Director of Resources to authorise the 5G Licensing Agreement between BT Plc and Leeds City Council to deploy a 5G pilot network across 20 identified CCTV and UTC locations from April 2021.
- 1.3 Development of a gigabit capable 5G network will further support the ambition of Leeds City Council to become one of the best connected cities in the United Kingdom and provides the Council with an opportunity to influence the digital infrastructure position of the city which will have positive effects for businesses and residents. The proposed solution will deliver significant benefits across the district and will enable the delivery of future proofed services for both residential and commercial purposes and will help improve access to and take up of good quality connectivity options by residents will allow the Council and its partners to explore more widespread digital and telehealth solutions, initiatives to reduce social isolation and gaps in the delivery of education to the most vulnerable.

2. Background information

- 2.1 The award of the Leeds Full Fibre contract to BT Plc took place in March 2020 for a period of 10 years with an estimated total value of £20.3M.

- 2.2 As part of this award BT Plc committed to the delivery of a 5G network across the Leeds MD which would deliver 80% network coverage to its Social Housing stock and a total district coverage of 70%. This is in addition to the delivery of its Full Fibre infrastructure build to every ward in the Leeds MD across 1400 Corporate and Health Partner locations.
- 2.3 Further, BT have since provided confirmation that Leeds will be the first city in the UK to implement a standalone 5G network (where previous implementation are reliant on a 4G uplift / upgrade in order to deploy 5G technology). This will support Leeds City Council's ambition to be one of the best connected cities in the UK and will help in the delivery of services and future proofed solutions to its residents. It will also provide additional, greater attraction to businesses wanting to establish bases in Leeds and will also help to boost the Leeds economy and standing in the region and nation.
- 2.4 The Leeds Full Fibre Programme Team have been working closely with resource from both the CCTV and UTC Teams to identify those sites that will support a pilot rollout out.

3. Main issues

- 3.1 As noted above, the award of the Leeds Full Fibre contract to BT Plc took place in March 2020 for a period of 10 years with an estimated total value of £20.3M.
- 3.2 As part of this award BT Plc committed to the delivery of a 5G network across the Leeds MD which would deliver 80% network coverage to its Social Housing stock as well as 5G district wide coverage of 70%.
- 3.3 The ability to deploy 5G services to residents and businesses aligns with the Council's inclusive growth ambitions to bring a choice of connectivity types and providers to residents and businesses in Leeds.
- 3.4 The Leeds Full Fibre Programme Team together with BT Plc are now at a stage where 20 CCTV and UTC sites have been identified. As part of this work 5G micro cells (small infrastructure cells) will be installed on these 20 CCTV and UTC posts in certain areas of the city in order to deliver a pilot 5G network.
- 3.5 The pilot will seek to identify and refine installation processes that will be used in the wider rollout as well as how to report on the coverage and network proliferation utilising these CCTV and UTC sites.
- 3.6 A 5G Licensing Agreement has been drawn up that will provide the framework under which both parties will operate for the pilot.
- 3.7 There are no health concerns around 5G, with the World Health Organisation, NHS and other experts finding no link between it and ill-health. Additionally, there are strict guidelines in place for the rollout of all wireless technologies, including 5G, which are based on medical studies and reviewed on an ongoing basis.
- 3.8 The rollout of 5G technology across the city will follow these guidelines, which are governed by the ICNIRP, the international body acting as health watchdog for the mobile industry. This means that the mobile airwaves used for 5G will be transmitted safely, as has been done with the 2G, 3G and 4G networks before it.
- 3.9 Additionally, a unique aspect of the multi-network 5G infrastructure which will be rolled out is how it will use council-owned buildings as anchors to help accelerate the wider roll-out of faster, more reliable broadband across the city. By using these existing locations, Leeds City Council will be able to improve connectivity across the

city whilst removing any potential impact on biodiversity which would have been caused by building new sites to house full fibre infrastructure.

4. Corporate considerations

4.1 Consultation and engagement

4.1.1 The Senior Responsible Officer has briefed and consulted Councillor James Lewis, the Leader of the Council, The Director for City Development and the Director for Communities and Environment

4.2 Equality and diversity / cohesion and integration

4.2.1 No individuals or groups will be discriminated against as part of the public services network proposal which essentially has a remit to provide improved and upgraded connectivity between public sector buildings and assets.

4.2.2 Instances may arise where particular areas (yet to be determined) receive a degree of access to enhanced broadband connectivity and commercial broadband services as part of the ongoing rollout, once work commences on the network build. Although the Council and health partners cannot specify or lead a commercially-driven roll out or necessarily influence the areas where private, commercial investors wish to offer services, it is envisaged that a by-product of this programme would be to assist in the availability of better connectivity to some of the most deprived areas of Leeds.

4.2.3 While not a core element of the Council services being procured, it is anticipated that the Full Fibre Programme will deliver opportunities to improve digital inclusivity in areas (such as rural or deprived areas) that may otherwise suffer digital exclusion.

4.3 Council policies and the Best Council Plan

4.3.1 Connectivity is recognised as a foundation layer which underpins the Council's wider digital inclusion objectives and is referenced in the Best Council Plan 2018 to 2021.

4.3.2 It also delivers against the 21st Century Infrastructure and Leeds as a Digital City 12 Big Ideas from the Inclusive Growth Strategy.

Climate Emergency

4.3.3 Widespread proliferation of 5G and Full Fibre Networks will also:

4.3.3.1 Allow greater use of environmental sensors in LCC property, social housing stock, traffic management and air quality monitoring and support the recent Climate Emergency Declaration made by the Council in reducing emissions to net zero by 2030.

4.3.3.2 Reduce the number of car journeys and improve air quality – making it easier for businesses to explore greater use of remote and home working.

4.3.3.3 Support greater use of telecare to help reduce travel associated with the management of medical conditions.

4.4 Resources, procurement and value for money

- 4.4.1 In support of the delivery of a Leeds 5G network, BT Plc have guaranteed a further revenue stream of £2M over the life of the contract in support of Leeds City Council working with BT Plc and its Partners to deploy a standalone 5G network across the Leeds MD.

4.5 Legal implications, access to information, and call-in

- 4.5.1 This decision is a direct consequence of implementing previous Key Decision (D48405, dated 13th February 2019) and was in the contemplation of the decision maker at the time the decision was taken. As such, this is a significant operational decision that is not subject to call-in.
- 4.5.2 A 5G Licensing Agreement has been created and following the approval of this report will provide the framework under which both parties will operate for the purpose of the pilot.

4.6 Risk management

- 4.6.1 The programme will be delivered using the Council's agreed project management methodology and a programme risk log will be maintained and risks managed, monitored and escalated through the governance process as necessary.

5. Conclusions

- 5.1 Engagement with services and directorates has been a core part of the Leeds Full Fibre Programme.
- 5.2 Updates have also been provided to senior officers through presentation and discussion at the 100% Connectivity Board chaired by Martin Farrington, Director for City Development.

6. Recommendations

The Director of Resources is recommended to:

7. Note that this decision is a direct consequence of implementing previous Key Decision (D48405, dated 13th February 2019) and was in the contemplation of the decision maker at the time the decision was taken and the award of contract to BT Plc, commencing in March 2020 for a period of 10 years with an estimated total value of £20.3M; and
- 7.1 Approve the authorisation of the 5G License Agreement to implement a pilot of 20 5G Micro Cells on CCTV and UTC furniture from April 2021.

8. Background documents¹

- 8.1 None.

¹ The background documents listed in this section are available to download from the council's website, unless they contain confidential or exempt information. The list of background documents does not include published works.