SURREY COUNTY COUNCIL

MATT FURNISS, CABINET MEMBER FOR TRANSPORT, INFRASTRUCTURE & GROWTH DECISIONS

DATE:	**27 SEPTEMBER 2022**
LEAD OFFICER:	**KATIE STEWART, EXECUTIVE DIRECTOR ENVIRONMENT TRANSPORT AND INFRASTRUCTURE**
SUBJECT:	**DIGITAL CONNECTIVITY INFRASTRUCTURE ACCELERATOR (5G) MOBILE ACCESS AGREEMENT**
ORGANISATION STRATEGY PRIORITY AREA:	**GROWING A SUSTAINABLE ECONOMY SO EVERYONE CAN BENEFIT** **ENABLING A GREENER FUTURE** **EMPOWERING COMMUNITIES**

Purpose of the Report:

The Digital Connectivity Infrastructure Accelerator (5G) project seeks to improve digital connectivity across Surrey by facilitating the role out of 5G technology on Surrey County Council (the Council) infrastructure and assets.

Small-Cell 4G and 5G transmitters are needed to improve mobile connectivity at street level because Macro-Cell transmitters (on masts) cannot provide a reliable service to mobile users where buildings disrupt the signal, or where the high demand of voice and data services exceed the network capacity.

The Council intends to enter into an agreement with a neutral host (Freshwave) to facilitate the engagements and agreements with Mobile Network Operators (MNOs).

The benefits to residents, businesses and visitors to our county will be more reliable and faster mobile broadband access.

Recommendations:

It is recommended that the Cabinet Member:

1. Approves a non-exclusive open access agreement being signed between Surrey County Council and Freshwave Ltd, allowing Mobile Network Operators (MNOs) to install and operate small cell radio transmitter units (4G, 5G and/or future mobile technology frequencies) to an agreed list of SCC street furniture assets (e.g. lighting columns, illuminated signs, CCTV columns, traffic light columns).

2. Agrees to the use of the agreement for installation of small cell radio transmitter units (4G, 5G and/or future mobile technology frequencies) on bus shelters and/or other infrastructure for the Districts and Boroughs who have expressed an interest in being part of the agreement.

Reason for Recommendations:

The Digital Connectivity Infrastructure Accelerator (5G) project aligns with both central government and Council policy to significantly improve mobile connectivity where people live, work and travel. The deployment of gigabit speed connectivity and 5G is limited by the infrastructure available to support installation of the equipment required by Mobile Network Operators (MNOs) to facilitate its roll out.

Improving 5G connectivity would significantly improve access to digital services for residents across a far greater extent of the county. This includes access to health and care services and would contribute to the levelling up and inclusivity ambitions of SCC's vision for 2030.

This proposal supports the Council's digital infrastructure objectives set out in the Council's Greener Futures Agenda, the Surrey Transport Plan 4 and the Surrey Infrastructure Plan.

Executive Summary:

Background

1. The Government's ambition is for 85% of the UK to be able to access, faster, gigabit-capable (1000Mbps+) speeds by 2025, increasing to 'nationwide' coverage by 2030. This increase in speeds will predominantly be achieved through laying full fibre to homes and business premises; however, other technologies such as 5G will also be needed for the ambition to be achieved.

2. With this aspiration in mind, the Government has set a target for "the majority of the population" to have access to 5G signal by 2027, and extensive investment by EE and Three has meant that more of than 50% of the UK population can already access both of their 5G networks.

3. This proposal will help to ensure that Surrey residents and businesses continue to benefit from faster speeds and the proposal will increase the pace and ease of 5G roll out.

4. Public benefits of mobile connectivity include:

    a. **Improvements to healthcare,** which will utilise all types of connectivity to facilitate items such as connected wearables, home sensors and video consultations;
    b. **A reduction in social isolation** through provision of virtual forums for people to connect with family and friends;
    c. **Improvements to social care** by keeping social workers connected to their patients, this could include sensors to monitor falls and changes in behaviour of vulnerable people and video links to qualified pharmacists;
    d. **Improvements to public safety** through enhanced communications by the emergency services though the Emergency Services Network and body worn cameras;
    e. **Support for greater remote/flexible working,** enabling employees to work from home and on the move; and
    f. **Attraction of investment** by enhancing the offer of places in Surrey to businesses through better connected areas

5. The Department for Digital, Culture, Media and Sport (DCMS) set up a Digital Connectivity Infrastructure Accelerator (DCIA) programme in 2021 to facilitate interactions between local authorities and the telecoms industry to speed up the rollout of 5G.

6. The Council is part of the DCIA's Early Adoption Group who are supporting us with the development of our own project to stimulate demand for more advanced mobile network services to create a richer mobile experience for local communities.

7. The Council intends to support the deployment of mobile network infrastructure by allowing Council assets to be used for the installation of 4G and 5G enabled small cell radio transmitter units. This infrastructure will be cost neutral to the Council.

8. Existing Macro-cell sites are becoming congested due to the increased demand on network capacity by mobile devices and an increase in data traffic over voice transmission. This demand will only intensify as the emergence of the internet of things (IoT) increases demand and services and networks become increasingly interconnected, relying on real-time data.

9. Clusters of Small-Cell 4G and 5G transmitters are needed to improve mobile connectivity at street level. This is because the Macro-Cell transmitters (on masts) cannot provide a reliable service to mobile users where buildings disrupt the signal.

Benefits of using an intermediary company to liaise with MNOs

10. Council teams currently respond to MNO requests on an ad-hoc basis, delaying deployment and requiring additional workload to assess individual applications.

11. Neutral hosts can facilitate access and act as an intermediary for multiple MNOs, reducing the requirement for multiple contact points between MNOs and local authorities and management of MNO requirements.

12. By working with an intermediary company who have relationships with all of the MNOs in the UK (Vodafone, Three (3), EE/BT and VMO2), SCC will enable all the MNOs to have visibility of the Council's assets available for small cell deployment.

13. Visibility of available assets and having an existing agreement and deployment process in place will encourage MNOs to include Surrey in their upcoming budget allocations from 2023 onwards.

Reasons for choice of partner Freshwave

14. Engagement with MNOs has been undertaken through the DCIA's Early Adoption Group, and through this engagement, MNOs have confirmed that Freshwave is a company with which they are happy to work. In fact, at least one MNO only works through companies like Freshwave rather than directly with local authorities.

15. The arrangement with Freshwave will be non-exclusive and therefore if the council chooses in the future to enter into arrangements directly with MNOs or through other intermediaries there is nothing within the Freshwave agreement to prevent it.

16. By agreeing to collaborate with Freshwave and potentially other similar companies in the future (who act as an intermediary), the Council can better manage how the deployment of small cell infrastructure is managed, including reducing the need for additional street furniture by utilising our existing assets.

17. Freshwave is a leading end to end digital infrastructure provider with over 2,000 indoor systems deployed, over 300 live outdoor small cells, and over 6,400 macrocell sties locations. It has consistently provided industry leading services in the UK, on some of the country's most complex and demanding projects with high levels of assurance to all UK MNOs (i.e. Olympics 2012, most congested rail stations, City of London, etc.).

18. Further, Freshwave's open access multi-operator and multi-technology neutral host infrastructure has been designed to meet the technical requirements from all UK MNOs at no cost to local authorities.

19. Having an agreement in place with Freshwave, including providing visibility of available Council assets for deployment and having agreed terms and conditions to install and maintain the Small-Cell devices, will reduce demand on SCC service teams and speed up deployment when MNOs chose to expand their portfolio in Surrey.

20. The same principles of the open access framework with Freshwave could be used with other infrastructure providers in the future, providing SCC with enough flexibility to adopt new technologies and work with new service providers.

21. Freshwave are backed by Digital Bridge Group, Inc. Digital Bridge is one of the world's largest digital infrastructure firms investing across five key digital infrastructure verticals: data centres, macro cell towers, fibre networks, small cells, and edge infrastructure. According to their website, they have $48B Digital Assets Under Management.

22. Freshwave have signed similar agreements with other Local Authorities, namely, Oxford, Croydon, Southwark, Coventry, Wolverhampton, Lewisham, Bromley, Barking and Dagenham, Newham, and City of London (via Cornerstone) among others. They are currently supporting five out of the eight DCIA pilots.

Initial deployment and volumes

23. Initially, small cells will be installed on Surrey Streetlights which are managed via a PFI arrangement with Milestone Infrastructure.

24. Milestone have confirmed that the proposed arrangement is deemed satisfactory in respect of the rights retained by SCC to ensure the assets may be maintained without disruption should the Agreement/lease/licence, as appropriate, be entered into. The equipment will not interfere with the normal operation of the lighting columns or any signage or street furniture the equipment it is affixed to.

25. Milestone have confirmed that the PFI contract allows for telecommunications attachments and that final agreement is with the Special Purpose Vehicle, Surrey

Lighting Services. The Council will therefore be requesting a formal low value change request with Surrey Lighting Services. Surrey Lighting Services have indicated that some minor changes will be needed to the PFI contract. The low value change request will allow the Council, with Surrey Lighting Services, to collectively identify the required changes and implement them alongside the initial deployment.

26. Milestone have a PFI arrangement with London Borough of Croydon, where Freshwave have successfully deployed over 50 small cells across the Borough. Freshwave have confirmed they will use Milestone to conduct all works on SCC assets, thus the Council and Milestone will have full visibility on all the works conducted on their assets.

27. Milestone will work with Freshwave to train their staff to carry out all installation/de-installation works.

28. The expected volumes of deployment are:

    - 2023-24: 5 to 10 small cells deployed on SCC Streetlights with a single MNO
    - 2024-25: 30 to 40 small cells deployed on SCC Streetlights with 1 or 2 MNOs
    - Beyond 2025, volumes and assets will be dependent on MNO requests which will be dictated by available financing and consumer demand
    - Full rollout of 5G nationally is anticipated to commence at scale in 2-3 years

District and Borough's

29. All 11 of Surrey's Districts and Boroughs have been informed of the project and the Council's proposal to enter into an open access agreement with Freshwave. As a result of this engagement, the Council is actively talking to several of the Districts and Boroughs who have expressed an interest in the opportunity to improve digital connectivity in their areas through installation of small cells on their assets.

30. It is the Council's intention to name the Districts and Boroughs in the open access agreement with Freshwave, to enable them to take out their own contracts with Freshwave utilising the terms and conditions of the Councils arrangement.

Consultation:

31. The Highways Team has consulted with Surrey Districts and Boroughs and other Local Authorities outside of Surrey, other intermediaries offering similar proposals and the Department for Digital, Culture, Media, & Sport (DCMS).

32. The Freshwave proposal has been extensively reviewed by the Council's operational team responsible for street furniture and by Milestone Infrastructure who manage Street Lights for the Council under a PFI arrangement.

33. The proposal was also reported to the Resources and Performance Select Committee on 13 July 2022.

Risk Management and Implications:

34. Some members of the public worry about whether 5G is safe; however guidance issued by both the UK Health Security Agency (5G technologies: radio waves and health - GOV.UK (www.gov.uk) and the World Health Organisation (Radiation: 5G mobile networks and health (who.int)), states that there is no credible scientific evidence for concern as to the safety of Small-Cell 4G and 5G transmitters.

35. Officers have sought advice from Legal and Procurement Teams within the Council and within DCMS regarding the use of Open Access Agreements as opposed to carrying out a tendering or concession exercise. Following review of the DCMS guidance (Engaging with industry to promote and encourage the use of public sector land and assets for digital deployment - GOV.UK (www.gov.uk)) the Council's Procurement and Legal teams have confirmed their support for the proposal to enter into agreements with code operators through the use of a lease/licence and an open access agreement, as appropriate.

Financial and Value for Money Implications:

36. There is a small amount of revenue generated for the Council under the proposed Agreement, with £300/per annum payable for the first MNO contracting to use an asset and a reducing scale of charges for additional Operators with a maximum annual income of £650/per annum payable if all 4 MNOs use an asset.

37. The income is expected to cover any officer time that is needed to manage the processes required and depending on the scale of interest in the Council's assets by the MNOs in the coming years, the proposal may generate a modest revenue for the Council.

38. Freshwave will cover all the legal fees to conclude the open access agreement with SCC and will also cover the cost of electricity used by the small cells.

39. If the Council enters into any open-access agreements with other neutral hosts or directly with MNOs in the future, they may be on the same terms as the agreement with Freshwave.

Section 151 Officer Commentary:

40. Although significant progress has been made to improve the Council's financial position, the medium-term financial outlook beyond 2022/23 remains uncertain. With no clarity on central government funding in the medium term, our working assumption is that financial resources will continue to be constrained, as they have been for the majority of the past decade. This places an onus on the Council to continue to consider issues of financial sustainability as a priority in order to ensure stable provision of services in the medium term

41. The proposal referred to in this report will require no expenditure for the council and costs of officer time will be covered with a modest income possible in future years, as such, the Section 151 Officer supports the recommendations.

Legal Implications – Monitoring Officer:

42. Contracts for services of this value do not need to be competitively tendered for under The Public Contracts Regulations 2015 (PCRs). In this case, the open Access Agreement only involves the conferring of a right, and not the procurement of services.

43. Furthermore, the rental/fee will be paid per site based on the leases/licences completed for the individual sites. Rental of land or which concerns interests in or rights over the same falls outside the procurement rules (Regulation 10 of the PCRs).

44. Legal Services will provide such assistance as is required.

Equalities and Diversity:

45. Following completion of the EIA screening tool, the proposals do not significantly or disproportionately impact on any of the groups protected under the Equality Act 2010. Equality impacts will continue to be considered throughout the project and where relevant an Equality Impact Assessment will be produced.

Other Implications:

46. The potential implications for the following Council priorities and policy areas have been considered. Where the impact is potentially significant a summary of the issues is set out in detail below.

Area assessed:	**Direct Implications:**
Compliance against net-zero emissions target and future climate compatibility/resilience	The provision of digital infrastructure may help toward reducing vehicle emissions through improved management of traffic flows that will be possible with improved digital infrastructure. Improved infrastructure will also enable more flexible working reducing the need to travel.
Public Health	Improved digital infrastructure will enable connectivity to facilitate items such as connected wearables, home sensors and video consultations, improving and assisting with the provision of health care.

What Happens Next:

47. Following endorsement by the Cabinet Member, officers will proceed with implementing the proposed project for delivery commencing during the current financial year.

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Consulted:

DCMS Digital Connectivity Accelerator Pilot

Surrey County Council's Digital Infrastructure Steering group, chaired by Michael Coughlin

Other Local Authorities including; Surrey Districts & Boroughs, Oxfordshire County Council and West Sussex County Council

Sources/background papers:

Surrey Infrastructure Study - Surrey Infrastructure Study - Surrey County Council (surreycc.gov.uk)

Local Transport Plan 4 - Delivering our transport plan and measuring its success - Surrey County Council (surreycc.gov.uk)

The Electronic Communications Code – The Electronic Communications Code - GOV.UK (www.gov.uk)

Guidance on Engaging with Industry to promote and encourage the use of public sector land and assets for digital deployment.- Engaging with industry to promote and encourage the use of public sector land and assets for digital deployment - GOV.UK (www.gov.uk)
