

# Digital Innovation and Efficiency Committee

<b>Report title:</b>	<b>Proposal to commission a mobile voice &amp; data study</b>
<b>Date of meeting:</b>	<b>8 November 2017</b>
<b>Responsible Chief Officer:</b>	<b>Tom McCabe – Executive Director, Community and Environmental Services, Simon George – Executive Director, Finance and Commercial Services</b>
<b>Strategic impact</b>  While the successful Better Broadband for Norfolk Programme has dramatically improved the availability and performance of fixed internet connectivity, the coverage of good mobile voice and data connectivity lags some way behind. This proposal represents the first step to enable the improvement of that coverage. The availability of ubiquitous, fast, reliable mobile voice and data coverage would provide significant benefits for economic development and improved quality of life for the people who live, visit and work in Norfolk.	

## Executive summary

The focus of Norfolk County Council and its partners on broadband provision in the county has seen superfast coverage improve from below 50% just a few years ago to nearly 90% today, with firm plans to rise to over 95% by 2020. Meanwhile mobile telecommunications facilities have failed to improve at anywhere near the same pace.

The existing coverage maps published by the mobile telecommunications providers appear optimistic and do not provide sufficient detail to provide a detailed understanding of how coverage needs to improve.

From personal experiences and anecdotally we know that mobile voice and data coverage across all the major networks is patchy with multiple locations across the county lacking 4G and many without voice and / or data coverage at all. Sometimes coverage exists outdoors, but not indoors and coverage may exist for a small number of users, but it can quickly become contended to the point of failure. However we do not have good evidence of overall service availability.

Unlike the Better Broadband for Norfolk infrastructure intervention, UK Government is not providing funding for upgrades, however there is still an opportunity for the County Council to use its influence and its assets to make a difference.

This paper proposes that the Council commence a procurement process to provide an independent review of mobile telecommunications coverage across the county. This will provide a baseline from which informed decisions can be made about what improvements are required and where they are needed.

Telecommunications providers clearly wish to provide good coverage in order to sell their services to Norfolk's residents and businesses. The information provided by the survey would help the Council to engage with the providers in a meaningful way to help inform

the business case for further infrastructure investment. It would also enable the council to assist the providers to find suitable locations for new infrastructure in the “not-spots” where coverage is lacking. For example this could involve offering access (for an appropriate fee) to council or other public sector owned assets such as council offices, fire towers, existing telecommunications masts or even wind turbines. The council might also be able to assist with streamlining the planning and access requirements of the providers in order to accelerate deployment.

**Recommendations:**

- 1. To consider the scope of the proposed survey.**
- 2. To delegate authority for the procurement and award of contract to the Head of Information Management & Technology.**

## **1. The Background and Context**

- 1.1. A need to understand the current mobile voice and data coverage across the county led to soft market testing and correspondence with other counties and devolved administrations. This activity has informed the tender specification and provided indicative costings for the exercise.

It is proposed that Norfolk County Council appoint a single provider through a competitive procurement process to undertake an independent benchmark assessment of mobile coverage in Norfolk. The commission will look to test the quality of the mobile user experience across the county, with the output acting as a benchmark from which to engage with the network operators, measure progress in improving coverage and determine how through public sector owned assets and infrastructure we could as a County Council engage with the market and be an enabler in improving mobile connectivity.

The commission should consider the user experience associated with making voice calls (by either 2G or 3G) and data access (by either 3G or 4G). This experience should also be measured for the key mobile network providers in Norfolk.

## **2. Scope of the proposed Exercise**

- 2.1. As highlighted above, the key requirement is to undertake an independent benchmark assessment of mobile coverage in Norfolk. This commission looks to test the quality of the user experience across Norfolk from a 2G, 3G and 4G perspective with a focus on understanding what potential users would want and the types of services, programmes and apps they wish to access through their mobile devices.

The commission should consider the following:

- Data access experience – assess such elements as latency, upload and download speeds and other key drivers that sit behind the quality of service (by either 3G or 4G) where, again, the signal strength, available capacity and cell handover play a major part in its overall success; and
- Voice call experience – assess the ability to make a clear call for a certain duration without the call dropping out (by either 2G or 3G) where the signal strength, channel availability and cell handover play a big part in its overall success.

It is also expected that services would be tested for all major networks providing respective services in Norfolk.

In terms of outputs, Norfolk County Council would require the following:

- A written report capturing the methodology, key metrics and findings from the assessment. This should include information presented in diagrammatic / mapping form e.g. heat maps and coverage plots. Such maps should show graded coverage footprints.
- An executive summary of the findings at a County as well as at a District/Borough specific geography level that are easily understandable and which can be shared widely to make the findings accessible for all. This should include experience of mobile users in such locations (use of social media, down loading multi-media services (BBC iPayer), internet access)
- A comparison of the performance of different mobile network operators (e.g. EE, Vodafone, etc.);
- Electronic access to mapping and findings. This may be in the form of a 'dashboard' approach, for example; and
- An electronic spatial data file(s) of the findings which can be utilised by Norfolk County Council's GIS System. Such information will be used to layer information into a wider consideration of Norfolk's digital capability.

In terms of coverage for the study, Norfolk County Council requires the following as a minimum:

- Any approach must ensure countywide survey.
- The A and B road network;
- Connectivity within the major urban destinations; City of Norwich, Kings Lynn and Great Yarmouth,
- Rail routes within Norfolk: Great Anglia Line, Norwich to Great Yarmouth; Norwich to Lowestoft; Norwich to Kings Lynn; Rail Stations as identified in Annex 2
- Tourism areas of significant interest in Norfolk.

Tenderers should use industry standard / typical handsets to undertake the benchmark testing and any tests should be based upon typical consumer behaviour. The testing methodology should also stand up to scrutiny from network operators and as such should reflect the types of testing they undertake themselves and / or be on a basis which would be considered acceptable to them.

## **2.2. Timing**

The commission should be completed by 30<sup>th</sup> January 2018.

## **3. Financial Implications**

- 3.1. Soft market testing and correspondence with other counties and devolved administrations has informed the likely cost of the exercise is expected to be in the order of £50 - £75k. This would be funded from within existing budgets. It is believed that the expenditure will be more than recovered through future rental of Council assets by mobile network operators seeking to extend their coverage.

## **4. Issues, risks and innovation**

4.1. No significant risk or issues have been identified.

## **Officer Contact**

If you have any questions about matters contained in this paper or want to see copies of any assessments, eg equality impact assessment, please get in touch with:

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