



Subject:	Smart Belfast update: 5G Connected Communities application
Date:	22 June 2018
Reporting Officer:	Ronan Cregan, Deputy Chief Executive and Director of Finance & Resources
Contact Officer:	Deborah Colville, Smart Cities Portfolio manager Mark McCann, Business Research and Development manager

Restricted Reports	
Is this report restricted?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
If Yes, when will the report become unrestricted?	
After Committee Decision	<input type="checkbox"/>
After Council Decision	<input type="checkbox"/>
Some time in the future	<input type="checkbox"/>
Never	<input type="checkbox"/>

Call-in	
Is the decision eligible for Call-in?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

1.0	Purpose of Report or Summary of main Issues
1.1	In support of the objectives of the Smart Belfast programme, and within the context of the Belfast Region City Deal, an application has been made to the Department for Culture Media and Sport's 5G Urban Connected Communities project. The project will provide substantial funding to one large urban area to deploy a next generation 5G wireless network.
1.2	Members should note that a DCMS briefing session for this competition was held in Belfast in mid-May and that the closing date for applications was 12 June. Due to these compressed timescales for the preparation of an application, officers were unable to bring this proposal to Committee beforehand.

2.0	Recommendations
2.1	<p>The Committee is asked to:</p> <ol style="list-style-type: none"> 1. To retrospectively approve the submission of a Belfast application to the DCMS 5G urban Connected Communities project. 2. To note the importance of 5G to the future digital innovation ambitions of the city.
3.0	Main report
3.1	<p>The UK Department for Culture Media and Sports (DCMS) are making substantial capital and revenue funding available to one large urban area to deploy a 5G network. The aim to establish one of the world's first large-scale urban 5G networks to trial and show-case wireless innovations, products and services (and to attract commercial investment from network operators and international investors.)</p>
3.2	<p>Why is 5G important to cities? 5G networks will provide ultra-fast (+100Gb) ubiquitous, wireless connectivity. Over time such networks are likely to replace existing technologies (eg, WiFi, Bluetooth, 4G mobile, Lorawan, and even wired broadband) and to become the backbone for most consumer, industrial and city products, services and processes.</p>
3.3	<p>The Government in its national 5G strategy has identified 5G as a key infrastructure for the economy over the next decade. With this in mind, cities need to be thinking now about how they will deploy such networks and how they can integrate 5G opportunities into forthcoming infrastructure projects (eg) street-scaping, street lighting renewal programmes, road, rail, electricity, water and bus-stop investments, public estate investments, new buildings, commercial development sites, etc.</p>
3.4	<p>At this point DCMS are engaging with local authorities in their search for a city. They will first choose their ideal urban location and only then will engage with Equipment Manufacturers and Mobile Networks Operators on deployment.</p>
3.5	<p>The successful city needs to show a commitment to a shared vision for digital innovation in which public, business and academic partners are committed to working together to test, trial, deploy and showcase how 5G can have an impact on their city. Following engagement with our two local universities, Invest NI, NI Government Depts, and others—an outline application has been made proposing that Belfast is an ideal innovation location for this investment.</p>

3.6	Belfast's outline concept proposes a phased development focused initially on the Harbour, Titanic Quarter and city centre (with later phases incorporating the entire Belfast City Council area and then urban parts of surrounding local councils). The rationale for these initial locations is that there is a density of organisations, expertise, and physical development opportunities that would support deployment and exploitation. (Members should note that 5G is at such an early stage of development and, as such, there are few consumer devices or handsets available. Therefore most initial projects are unlikely to focus on services for the individual resident and will concentrate more on business to business.)
3.7	Deployment of such a complex network will be challenging. If successful, it is likely that the city will utilise the new Full Fibre Network investment; but also build on opportunities offered other infrastructure investments, private developments and public transport projects. This will need substantial joint work and commitment between the Council, NI Government Departments and other.
3.8	Possible 5G-enabled project proposals for Belfast (developed with QUB's ECIT and Ulster University) include: industrial digitalisation with advanced manufacturers; freight management/supply chain tracking from the port and airport; enhanced immersive tourism experience including the new visitor attraction; city transport management; connected health; assisted living; city centre management; disaster resilience; providing network access at large events; support for film and television; etc.
3.9	The successful city will be notified by DCMS in July 2018. Work is expected to commence in the successful city before beginning of Q1 2019.
3.10	<p><u>Financial & Resource Implications</u></p> <p>In addition to funding from DCMS the successful city is likely to attract substantial co-investment from a wide range of national and international partners. DCMS will work with the successful city to develop such opportunities.</p>
3.11	<p><u>Equality or Good Relations Implications</u></p> <p>Equality and good relations implications will be taken into consideration and it is proposed that we will take this through equality screening; however, it is anticipated that any collaborative efforts should have a positive effect on Section 75 groups.</p>
4.0	Appendices – Documents Attached
	None