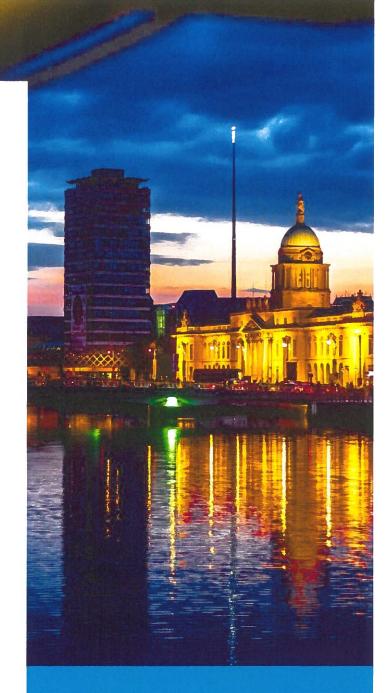
# National Digital Connectivity Strategy Consultation Response from Dublin City Council



**APRIL 8 2022** 

# DCCTelecoms@dublincity.ie



Comhairle Cathrach Bhaile Átha Cliath Dublin City Council

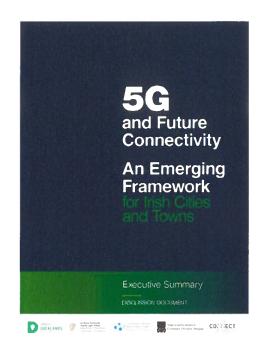
## **Consultation Question 1**

Is the ambition level set out in the State's Digital Connectivity Strategy appropriate?

The ambition is comprehensive and covers many areas we would expect to see including Smart Cities and acceleration of digital innovation. The recent experience of COVID has demonstrated the criticality of digital connectivity infrastructure and it has also exposed gaps in coverage particularly across urban areas where there are mobile blackspots, poor choice of services and in some cases limited/no availability of high-speed broadband.

From a Dublin City Council (DCC) perspective, we are supportive of the European Telecoms Code. However, the pace of adoption by Ireland and the lack of guidance and support in the interpretation of aspects relating to small cells and use of local authority assets is a challenge. We feel there should be more engagement with asset owners, such as local authorities, transport agencies and public infrastructure providers, to ensure that we are delivering practical solutions to support future rollouts.

In our recent discussion paper on 5G which was developed in partnership with a range of national stakeholders and the CONNECT center for future networks and connectivity we have articulated a number of these issues and concerns. Greater levels of co-operation and collaboration with the government departments on these aspects would be welcomed <a href="https://smartdocklands.ie/5g/">https://smartdocklands.ie/5g/</a>.



The national strategy does not specifically call out the use of local/city authority assets. However, it does mention the European Electronic Communications Code in section 4.5. It does also mention that public administrations need to develop infrastructure to support the benefits of 5G technologies – it would be useful to understand how the department envisages the role of asset owners such as LA's and public sector agencies in supporting rollout of 5G technologies. There are many challenges, from practical and operational to regulatory, which should be addressed at a national level in collaboration with the operatives and decision makers at the local authority level.

In our experience and working with the telecoms and infrastructure providers through the international 'Telecom Infra Project' there are many challenges in how mmWave, 5G and network densification will play out in urban centers such as Dublin. Challenges include - addressing heritage concerns, power, fiber, ducting, access to assets and appropriate space being available to cater for multiple networks all slowing down progress and increasing costs and complexity.

## **Consultation Question 2**

The Department invites commercial operators to submit details of their existing or future planned networks delivering broadband services to premises with at least 1Gbps download speed?

Details should include the list of premises that are or will be covered and the expected date by which the Gigabit broadband service will be made available to each premises.

Not applicable to DCC – targeted at the commercial operators.

## **Consultation Question 3**

Are the strategic enablers set out in the State's Digital Connectivity Strategy appropriate? Do these strategic enablers need to be amended? Are further strategic enablers, initiatives or measures needed?

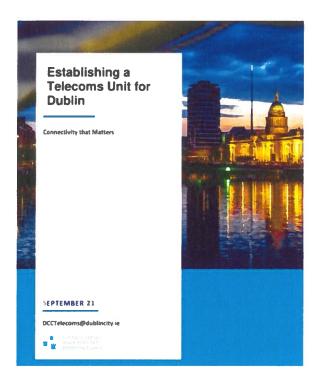
Whilst it is encouraging to see such an ambitious national approach to digital infrastructure the reality is for much of this to be realized, particularly the urban densification of 5G, it will require a level of collaboration and

co-operation with Local Authorities that has not been traditionally required historically. Much greater emphasis and supports are required to support and build out expertise within the local authority sector to change internal cultures and also to encourage more openness to working with Telcos and infrastructure providers.

DCC recognises that digital connectivity infrastructure plays a critical and increasingly important role in Dublin's social, cultural and economic development.

COVID-19 has reinforced the importance of connectivity in our cities and towns. Having the right type of connectivity is also essential for Dublin's future competitiveness. We are entering a new era of super connectivity with the emergence of fifth generation (5G) mobile networks, so we need the right structures in the Local Authority to support these network rollouts.

The DCC Telecoms Unit was established to collaborate with the industry in an open, proactive and transparent way, to help realise Dublin's connectivity potential by removing barriers to deployment. Put simply, it is a "onestop-shop" for all telecoms-related requests within the council. https://www.dublincity.ie/telecoms



The Telecoms Unit was established to encourage and increase telecoms investment in Dublin through:

- Creating a central point of contact within the organisation and allow for better use of city council owned assets both above and below the ground. The remit of the unit will ensure that all future capital investments and infrastructure projects are telecoms proofed.
- Making available the use of public assets such as ducting, buildings and street furniture, and a related asset catalogue, to facilitate the deployment of telecoms networks and equipment such as small cells.

- Adopting and implementing the new European Electronic Communications Code (EECC), which includes Article 57(2) Directive (EU) 2018/1972 that concerns the "Deployment and Operation of Small-Area Wireless Access Points".
- The creation and publication of a rate card that sets out fair, standardised prices for access to council-owned assets for the purpose of deploying telecoms equipment.
- Proactive engagement with industry partners and the provision of a centralised escalation route to ensure prompt resolution of issues and queries.

We would like to see how greater levels of cooperation could be encouraged across public sector agencies, across a region or local authority –for example the DCC telecoms unit only covers the use of DCC assets. Operators struggle to deal with multiple asset owners with a multitude of approaches/policies/rates to enabling access and supporting rollouts.

A single point of contact covering all asset owners such as TII, NTA, LUAS, OPW, and DCC for example could be transformative for the sector (for example TFL in London has been able to act as an aggregator for the whole of London and support a large scale rollout of digital connectivity infrastructure).

We also feel that all Local Authorities or groups of Local Authorities should have a dedicated telecoms unit to support rollout of digital connectivity. Telecoms and digital connectivity should be treated as important as water or electricity and deserve resources to make sure we support the wider sector.



We are also supportive of extending our Public Wifi schemes across the city targeting communities that need it most, building on the success of the Wifi4EU initiative. We would encourage a review of what government and EU supports might be available in the future to enable delivery of Wifi for such communities (and also supporting digital skills development)

We are supportive of the growth of EDUroam and are planning to add this to our Wifi4EU service across the city (though a partnership with the Wireless Broadband Alliance and Virgin Media)

#### **Consultation Question 4**

The Department welcomes any views on the State structures, agencies and resources needed to oversee and ultimately secure the delivery of the Digital Connectivity Strategy?

Dublin city is facing huge demand on public infrastructure to support the development of future connectivity 5G, Smart Cities and urban broadband networks. These will involve large-scale build projects that will happen regardless of whether DCC is involved or not – how these happen will be very much influenced by how

open DCC will be in relation to accessing assets both under and over ground.

The investment path of the operators will be influenced with how local authorities like DCC can help to reduce costs, time and friction in how this infrastructure is deployed. DCC also have a role to play in how it can encourage greater co-operation and move towards neutral host type solutions in areas that are difficult to service such as city centre and busy retail areas, which have heritage status and limited space on the public realm to support cabinets and small cells etc.

DCC also have an opportunity to control this process to ensure the market is served in an open and fair manner with minimal impact to the operation of the city. For example DCC have assessed the benefits to the city and the market of providing existing and new duct infrastructure and other infrastructure to support these projects. However, sometimes the biggest barriers can be internal ones.

A national strategy/guidance documentation with clear objectives would help to remove these barriers and ensure a more time and cost efficient role out.

The trends influencing these projects can be considered as urban (population growth), Smart Cities (IoT) and telecommunications (5G, fibre further into the network). Densification of networks and rollout of 5G will help position Irish cities and innovation centres and hopefully will support the next generation of smart innovations, which will create new jobs and also supporting new services that can deliver more

efficient city services and deliver better outcomes for our citizens.

Integral to this process is making the infrastructure available on an open access basis and understanding the needs of the market, i.e. some mobile operators may be in the process of identifying their requirements for 5G connectivity while still trying to meet the increasing demands of their existing networks.

Therefore, DCC recommend taking an approach similar to that utilised on their own infrastructure development projects, i.e.

- Identify an area where construction is planned (i.e. Public Realm or Bus Connects) and where the commercial operators have requirements for connectivity.
- Meet the stakeholders (i.e. telecom operators, utilities, other DCC depts., Smart Cities & developments) involved, understand their requirements and establish a process for a coordinated construction project.
- Design the infrastructure and procure the construction of same, or utilize the construction partners already engaged on the other projects (i.e., Public Realm or Bus Connects)
- Lease access to the ducts to the commercial operators and other interested parties on an IRU basis contracts to be agreed prior to construction.
- In this way the DCC infrastructure and asset is expanding in areas where there is a benefit to the city and the commercial operators are getting

access to ducts at a price that is more favorable than if they constructed their own duct infrastructure. Future road works for telecom purposes are also minimised as any construction will include duct space for future requirements.

# There are several benefits to this approach.

- Network operators with access to infrastructure build networks faster.
- The city reduces ongoing disruption while securing a more sustainable road network.
- A platform is established to enable a smart Dublin.
- It is cheaper for operators to expand their networks to meet the needs of a growing population in Dublin.

# The advantages for the Telecom Operators are:

- They do not have to go through the T1/T2 process.
- They do not have to engage their own construction company and project management of same.
- They do not bear the full cost of a construction project such as this, including high fees for traffic management.
- They can lease their requirement based on an IRU which allows them to show the connectivity as an asset on their company balance sheet.
- The infrastructure is available to them on the same basis as their competitors.
- They only need to lease the amount of duct they need.
- There is spare capacity should they need it in the future.

## The advantages for DCC are:

- They have full view of all the Telecom Operators needs in an area.
- They are starting to build a picture of where Telecom Operators have their infrastructure around the city. This can be aligned with knowledge of other services networks which is valuable information for any construction project.
- DCC are in control of the road network and traffic flows. There is a cost to the city for disruption of traffic flows which can be somewhat countered

- by DCC taking control of coordinated dig projects.
- The integrity of the road network is being maintained as there is less requirement for digs. Though the value of this is hard to ascertain there is a positive effect as less digs means more control of road maintenance budgets.
- ☑ This approach conforms to the 'Dublin City
  Centre Public Realm Study & Implementation
  Plan', i.e. to improve the quality of the public
  realm.

We welcome supports across government departments and agencies to support our telecoms work, to encourage better asset sharing and making smarter decisions on installation of telecoms infra on all capital works schemes. We believe that the role of government is to reward local authorities that are pro-active in this space and to dedicate appropriate funding to ensure that cost is not seen as an excuse for not investing for the future.

# "The cost of not installing ducting or catering for telecoms is much greater if we don't design it into all schemes"

There are also supports required to address legacy issues such as accessing power to small cells from unmetered supply (see attached paper cover this challenge). Rollout of small cells will not be possible if individual power connection/mini pillars have to be installed.

We are supportive of existing SFI investments in centers such a CONNECT and also projects such as Smart Docklands which is co-funded by DCC. www.smartdocklands.ie

These investments are essential if we want to ensure that Ireland is positioned as a world leader in 5G and are well positioned to realise the innovation and economic potential that this will bring to Ireland.

We need to unlock greater investments that can support faster rollout of pervasive connectivity zones across cities like Dublin. Whether it is along connected corridors, smart districts, or for private networks we need to make sure that we have areas where the latest innovations and close to market solutions are pioneered. DCC should be supported nationally to better prepare for and win investments that support this.

At the moment Ireland is slightly behind compared to innovation investments in the UK by the DCMS and Scotland 5G center for example with a wide range of testbeds and funded projects in place.

5G TESTBEDS AND TRIALS
PROGRAMME

Ireland needs to have more visibility on all things 5G and the innovations, testbed infrastructure and opportunities there are to thrive for both existing and new 5G investments as well as supporting local business and enterprise.

There is a gap across state agencies on this currently compared to other countries that we are competing against for investment.

There is a much greater role for government and state agencies to better capture best practice that can be re-shared across the sector.

DCC now has strong engagements with a host of international cities and the EU on telecoms and 5G work. We would appreciate more supports from the department on this work moving forward. For example, DCC are leading an international project to create playbooks for how cities and Local Authorities can support telecoms deployments as we move towards 5G.

https://telecominfraproject.com/tip-playbookeases-urban-5g-network-deployment-throughcollaboration-between-cities-and-operators/

See link for deliverables - <a href="https://telecominfraproject.com/connected-city-infrastructure/#deliverables">https://telecominfraproject.com/connected-city-infrastructure/#deliverables</a>

See project video: <a href="https://vimeo.com/680503129">https://vimeo.com/680503129</a>

There needs to be a much better process of capturing planning, development practices, barriers and opportunities – and moving to a culture of showcasing best practice across LA's which would help change internal culture etc. but also bringing local communities along on this journey.

There is no shortage of good practice and innovation happening across LA's but unfortunately, it's the negative press that gets picked up by the media.



# **Consultation Question 5**

The Department welcomes any views on how to ensure a sufficiently skilled workforce, with the necessary competence and experience, is available to industry and the State so that Digital Connectivity Strategy can be delivered? The Department would welcome suggestions on the State's role in encouraging the development of this workforce?

We are supporting the SFI CONNECT research center and using our Smart Docklands initiative to collaborate with industry to support training and skills in all things digital and connectivity. Our academy of the near future program is building out an education program targeting transition year students and local authority staff to teach them about new and emerging technologies and how they can be applied in their organisations, communities, cities and towns <a href="https://nearfuture.ie/">https://nearfuture.ie/</a>.

The Department could also play a role in upskilling relevant staff and departments in the local authorities, to highlight the importance of good connectivity and support them when challenges arise, such as access to power connections.

## **Consultation Question 6**

The Department welcomes any other general observations and views on the State's Digital Connectivity Strategy and how it can be improved?

The state should try to encourage and support consistency across all the LA's and how they support telecoms development and policies. For example our recent Development Plan chapter relating to digital connectivity captures our ambition for DCC. It would have been of benefit to have more supports to ensure consistency across other local authorities.

The work of the mobile phone and task force should be strengthened with stronger alignment against the work of the LA's.

We think that a strong emphasis on promoting innovation and new services that can be delivered as a result of enhanced connectivity will be key in bringing the market along to invest in this infrastructure, but also to grow demand and accelerate Ireland as a digital leader. So ensuring that there are appropriate funding streams to support LA's, SME's, and communities to drive this will be critical to future success.

There needs to be an evaluation on why there are such barriers to accessing ducting assets from companies such as EIR or local authorities that can support accelerated rollouts. This is really holding back inner city street level small cell deployments in Dublin.

There is a lack of engagement with the LA's in particular on the longer-term vision to deliver 5G services that support government and state agencies. This needs to be addressed by building a much stronger network of collaborators across the public services to bring together like minded individuals trying to innovation and think differently on how we support digital connectivity.

At a national level, there is a requirement to align on objectives and goals in order to successfully deploy pervasive 5G connectivity across Irish cities and towns:

- Creating a working group and forum for Ireland's 5G ambitions. A working group should be established to include national and local stakeholders to agree a 5-10 year roadmap overseeing this roll out.
- It should include Local Authorities, the Department of Rural and Community Development, the Department of Business, Enterprise and Innovation (DBEI), the Department of Communications, Climate Action and Environment (DCCAE), Commission for Communications Regulation (ComReg), Environmental Protection Agency (EPA), Electrical Supply Board Networks (ESBn), Irish Business and Employers Confederation (IBEC), as well as Science Foundation Ireland (SFI), and their research centers such as CONNECT, the Science Foundation Ireland Research Centre for Future Networks and Communications.

- In addition, we should create a forum where local authorities can discuss 'future connectivity proofing' of projects with their funding bodies (National Transport Authority, various Government Departments, etc.). This will ensure that additional capital costs for future proofing infrastructure can be included in budget allocations when determining longer-term investment opportunities.
- Enhancing alignment with national R&D centers to support future 5G applications. This should focus on supporting emerging application areas and testbeds in mobility, connected health, emergency response, safety and other emerging applications. The development of dedicated physical testbeds should be facilitated to support this national R&D agenda, of which stakeholders will be able to congregate, discuss. and test hypotheses. stakeholders should include actors such as Science Foundation Ireland (SFI), its research center CONNECT, the Irish Development Agency (IDA), and Enterprise Ireland (EI)
- Continue to monitor safety concerns of 5G.
   The government, together with local authorities, must continue to monitor the latest scientific guidance from the World Health Organisation (WHO) and Environmental Protection Agency (EPA) on 5G health concerns. There also needs to be more consistency in communication across government bodies, local authorities,

- vendors and mobile operators in regards to these concerns.
- Address unmetered power issue with ESBn The challenges of accessing power in an affordable manner for small cells of unmetered power supply is a make or break issue for future deployment of 5G. There must be continuous communication with ESBn via the Mobile Phone and Broadband Taskforce to resolve unmetered power issues for the installation of small cells on unmetered supply. A review of ESBn's policy document must be undertaken by all other actors in order to fully understand the suggested approaches to address the power issue. This should avoid the requirement for additional infrastructure installations such as mini pillars, which would add further street clutter and additional costs that could make small cell deployments commercially unfeasible.

### LINKED DOCUMENTS

5G and Future Connectivity in Ireland Discussion Paper <a href="https://smartdocklands.ie/project/5g-future-connectivity-discussion-document/">https://smartdocklands.ie/project/5g-future-connectivity-discussion-document/</a>

5G and Future Connectivity in Ireland Discussion Paper Executive Summary <a href="https://smartdocklands.ie/wp-content/uploads/2020/06/5G-and-Future-Connectivity-in-Ireland-Discussion-Paper-Executive-Summary.pdf">https://smartdocklands.ie/wp-content/uploads/2020/06/5G-and-Future-Connectivity-in-Ireland-Discussion-Paper-Executive-Summary.pdf</a>

Establishing a Telecoms Unit for Dublin <a href="https://www.dublincity.ie/sites/default/files/2022-02/establishing-a-telecoms-unit-for-dublin.pdf">https://www.dublincity.ie/sites/default/files/2022-02/establishing-a-telecoms-unit-for-dublin.pdf</a>

Mobile Connectivity Playbook for Cities

<a href="https://cdn.brandfolder.io/D8DI15S7/at/qkv9knpgpgrhktq5fwbrqwm/TIP\_C">https://cdn.brandfolder.io/D8DI15S7/at/qkv9knpgpgrhktq5fwbrqwm/TIP\_C</a>
<a href="mailto:onnected\_City\_Infrastructure\_Mobile\_Connectivity\_Playbook\_for\_Cities\_V1">https://cdn.brandfolder.io/D8DI15S7/at/qkv9knpgpgrhktq5fwbrqwm/TIP\_C</a>
<a href="mailto:onnected\_City\_Infrastructure\_Mobile\_Connectivity\_Playbook\_for\_Cities\_City\_Infrastructure\_City\_Infrast

Reference for Deploying Telecoms Equipment on Street Assets
<a href="https://cdn.brandfolder.io/D8DI15S7/at/qwsh5w878r3qvj3xf4hhbg/TIP\_Con-nected\_City\_Infrastructure\_Reference\_for\_Deploying\_Telecoms\_Equipment\_on\_Street\_Assets\_v10\_FINAL - GREEN - Public\_Access.pdf">https://cdn.brandfolder.io/D8DI15S7/at/qwsh5w878r3qvj3xf4hhbg/TIP\_Con\_nected\_City\_Infrastructure\_Reference\_for\_Deploying\_Telecoms\_Equipment\_on\_Street\_Assets\_v10\_FINAL - GREEN - Public\_Access.pdf</a>

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<a href="mailto:onnected\_City\_Infrastructure\_Mobile\_Connectivity\_Playbook\_for\_Cities\_V1">https://cdn.brandfolder.io/D8DI15S7/at/qkv9knpgpgrhktq5fwbrqwm/TIP\_C</a>
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<a href="mailto:nected\_City\_Infrastructure\_Reference\_for\_Deploying\_Telecoms\_Equipment\_on\_Street\_Assets\_v10\_FINAL\_- GREEN\_- Public\_Access.pdf">Public\_Access.pdf</a>