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CASE STUDY

Telecoms Unit, Dublin

Contents

Overview

Dublin City Council established a "Telecoms Unit" in April 2022 to centralize and consolidate functions relevant to telecommunications and digital infrastructure into a dedicated unit within the City Council. The unit is a one-stop-shop for all telecoms-related activities, providing a single point of contact for citizens, industry and other public bodies to engage with. It is responsible for developing and executing Dublin City Council's telecoms strategy and supporting the rollout of digital infrastructure.

The Telecoms Unit engages collaboratively and proactively with industry, academia and citizens to future-proof the city, identify best practices and opportunities for collaboration and communicate the benefits of telecoms infrastructure investments. The unit has a dedicated team, which draws on the expertise of external industry advisers and provides support for telecom requests and interactions across internal departments and external stakeholders.

The unit manages the mapping of and access to the significant number of assets owned by the City Council for the purpose of telecoms deployments. It has developed and implemented a number of standard service-level agreements (SLAs), legal frameworks and rate cards to ensure fair and open access to the City Council's assets on a cost-recovery basis.

Strategy

What was the challenge or strategic driver for action?

Dublin positions itself as the tech capital of Europe. The city is home to some of the world's largest and most innovative tech companies and boasts a vibrant network of academic institutions and startups. The City Council recognized that the provision of world-class digital connectivity is the bedrock of Dublin's continued economic development and future competitiveness. The Telecoms Unit was established by the Chief Executive to support Dublin's future competitiveness and harness the potential of gigabit connectivity.

In 2017, the City Council's Smart Dublin programme developed a partnership with the national research centre for future connectivity and networks "CONNECT", based in Trinity College Dublin, to explore the potential of 5G and future connectivity innovations and to support the piloting of applications that enhance service delivery.

This partnership resulted in the development of an R&D neutral host telecoms testbed in the Docklands District, which was part of the Smart Docklands programme, a dedicated smart city testbed for Dublin. The challenges of deploying small cells on public assets were significant even in an R&D context, while there were also major

barriers in relation to accessing fibre and power to support future connectivity needs. It became clear to the City Council that it would have to play a much more proactive role in supporting future telecoms delivery.

Combined with the emergence of the coronavirus pandemic, which had a significant accelerating impact on hybrid working and remote learning, it underlined the importance of future-proofing connectivity infrastructure, resulting in a higher policy priority within the organization. In tandem, the European Union (EU) was also pushing ahead with the Telecoms Code, which was compelling public bodies to adopt a more proactive role in opening up access to assets to support telecoms rollout.

The council also wanted to ensure that future telecoms infrastructure was deployed in a manner that promoted good aesthetics and planning while also ensuring that all areas of the city benefited from good quality digital connectivity.

Press release: Irish Tech News, *Dublin City Launches Dedicated Telecoms Unit to Accelerate 5G Deployments*, 25 February 2022.

What was the policy initiative? What were its main features?

The policy initiative was the establishment of a dedicated, resourced Telecoms Unit within Dublin City Council. The unit consists of a mix of administrative and engineering skillsets based within the City Council and is also supported through the procurement of external industry expertise to manage operations and also to help shape its strategic direction.

The City Council sought to simplify how telecoms-related requests and interactions were managed internally by creating a central point of contact for all engagements and consolidating functions in a vertically-integrated structure within the council (aligning multiple departments internally).

The Telecoms Unit complements the work of the City Council's Smart City Unit and wider Smart Dublin programme in future-proofing the city, ensuring that capital investments and infrastructure projects are telecoms-proofed.

The unit has also provided certainty and transparency to the telecoms market in Dublin by engaging with industry and experts to publish standard rate cards, SLAs and streamlined permit processes for the use of local authority assets. For example, buildings, rooftops, parks, public lighting (in progress) and traffic columns (in progress).

Another important aspect was the mapping of City Council-owned assets suitable for telecoms deployment and publishing of this into an interactive catalogue of assets and open data.

Who were the key decision-makers and how did you get their support?

The work of the Telecoms Unit was sponsored directly by the Chief Executive of Dublin City Council and a high-level steering group that comprised a number of the city leadership team covering legal, planning and development, traffic and engineering, corporate services, digital and transformation. This cross-cutting team helped navigate internal silos and secure buy-in to the overall objectives of the Telecoms Unit. A number of factors helped to secure this high-level support including:

– The coronavirus pandemic, which changed mindsets on the importance of digital connectivity

– EU regulations such as the Broadband Cost Reduction Directive (BRCD) and telecommunications code (2018)

– Learnings from the City Council's Smart City programme and the Smart Docklands future connectivity testbed.

What was the outcome? How do you measure this?

The Telecoms Unit is making significant progress since its establishment in 2022. A series of key performance indicators (KPIs) have been established covering network management, asset mapping, network development pipeline and customer/telecoms engagements. Approaches are being evaluated on how to best measure city-wide fixed and wireless performance across the city council area and what datasets can best support this.

The Telecoms Unit's strategic approach has been data-driven, informed by the analysis of real-world metrics (leveraging mobile network performance data, big data network quality sources and ComReg mapping). The use of new and innovative datasets is a work in progress and the Telecoms Unit is exploring several ways to collect timely and accurate data that allows consistent monitoring of network performance improvements across Dublin.

The Telecoms Unit has enabled the City Council to align capital projects and investments with evolving telecoms requirements, and also to comply with

ongoing regulatory developments related to telecoms at both national and EU levels (which are likely to increase on the back of the pending EU Gigabit Infrastructure Act).

The unit has also mapped the City Council's extensive asset portfolio, unlocking access to a significant asset base including underground ducting, buildings and poles for telecoms use. It has also provided market access for telecoms deployments on a fair and transparent basis.

The best practice outputs of the Telecoms Unit have been welcomed by the telecoms sector in Ireland through the Irish Business and Employers Confederation (Ibec) Telecoms infrastructure Ireland lobby group. There has also been strong collaboration and information sharing with the national Department of Communications. Dublin has also been collaborating with organizations such as the Telecom Infra Project (TIP) and Cities Today Institute to develop new approaches to connected city infrastructure and city telecoms planning.
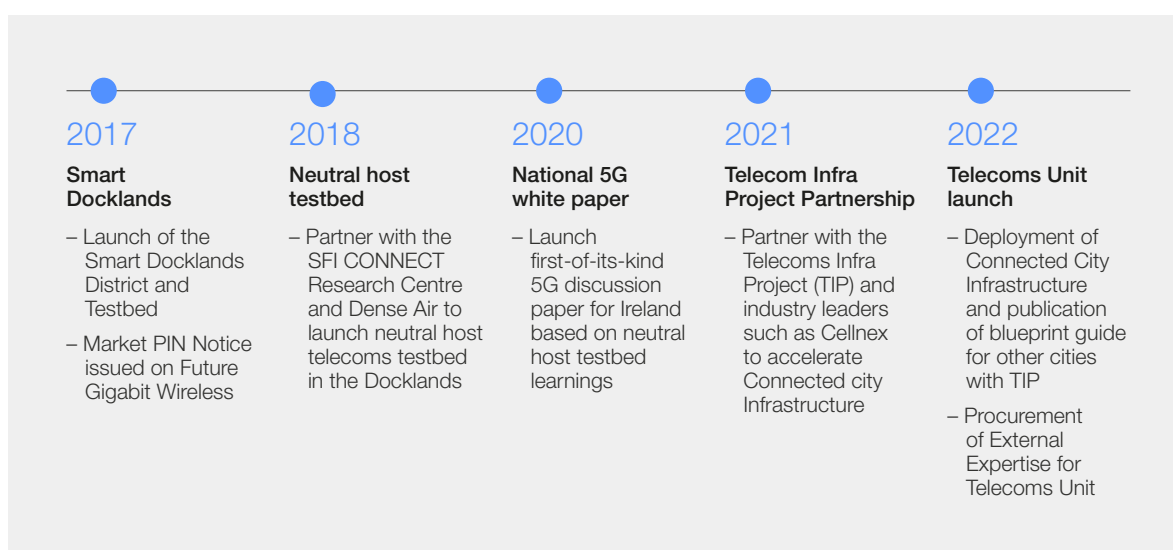
Implementation

How long did it take to implement? What did the timeline look like?

The establishment of the Telecoms Unit represented the culmination of several years of work by the City Council's Smart City Unit, aimed at better understanding how telecoms infrastructure could play an enabling role in supporting innovation in Dublin, improving digital inclusion and reducing the digital divide. It was also able to align with infrastructure projects in the Docklands that were established to improve access to city-owned ducting networks.

Figure 1: Overview of Dublin's telecoms journey

2017	2018	2020	2021	2022
Smart Docklands	**Neutral host testbed**	**National 5G white paper**	**Telecom Infra Project Partnership**	**Telecoms Unit launch**
– Launch of the Smart Docklands District and Testbed – Market PIN Notice issued on Future Gigabit Wireless	– Partner with the SFI CONNECT Research Centre and Dense Air to launch neutral host telecoms testbed in the Docklands	– Launch first-of-its-kind 5G discussion paper for Ireland based on neutral host testbed learnings	– Partner with the Telecoms Infra Project (TIP) and industry leaders such as Cellnex to accelerate Connected city Infrastructure	– Deployment of Connected City Infrastructure and publication of blueprint guide for other cities with TIP – Procurement of External Expertise for Telecoms Unit

Source: Dublin City Council, 2023

The timeline in Figure 1 captures this work:

– **2017** – Launch of the Smart Docklands District Programme and Testbed

– **2017** – Market PIN Notice issued on Future Gigabit Wireless

– **2018** – Partnered with CONNECT Research Centre and Dense Air to build out a neutral host telecoms testbed in the Docklands

– **2020** – Development of a national 5G white paper from the learnings of the Docklands telecoms testbed

– **2021** – Partnered with the Telecom Infra Project and Smart Docklands to accelerate Connected City Infrastructure in Cities

– **March 2022** – Delivered pilot deployments of Connected City Infrastructure in Dublin's city centre and published a blueprint for Connected City Infrastructure with Telecom Infra Project (TIP).

– **April 2022** – Launch of Telecoms Unit which included:

  – One-stop-shop website

  – Standard rate card for access to Dublin City Council (DCC) assets published

  – Published an interactive mapping asset register

  – Standard ducting rental agreements

– **December 2022** – Procurement of External Expertise to support the Telecoms Unit city wide.

Who were your key partners?

The origins of the Telecoms Unit were built through collaboration and included the following:

– Collaboration with industry, academia and government shaped the creation of the Telecoms Unit, building on the foundations established through the Smart City Unit. This included in particular working with Trinity College Dublin and partnering closely through the SFI CONNECT Research Centre to facilitate knowledge sharing and best practice leadership

– Strategic partnership with the TIP chairing their Connected City Infra working group to explore new telecoms deployment models

– Partnerships with mobile operators, tower companies and fibre providers, as well as other entities such as ComReg (Ireland's telecoms regulator), the Environmental Protection Agency (EPA), Ibec (business representative body) and the Department of Communications, to help inform the strategic direction

– The Telecoms Unit convenes a quarterly meeting of telecoms providers and industry to proactively engage with the market.

What kind of team and resources were needed?

The City Council resourced the creation of several new roles to support the Telecoms Unit. These included a strategic asset manager with senior engineering credentials, as well as specialized engineering, administration and clerical supports to facilitate the technical, revenue and finance functions of the unit. A core team of five full-time employees support the work of the unit. The establishment of the unit is drawing from a dedicated telecoms capital budget with a target of three years to achieve a cost recovery model. Revenues from asset lease agreements relating to ducting, rooftops and DCC owned sites are increasing.

At a national level there were strong supports from the national Department of Communications and also the Department of Rural and Community development who co-fund a broadband officer role to support digital connectivity within each local authority across Ireland.

Access to the Council's Smart City programme was a central resource that attracted external R&D supports and external investments such as the Dense Air telecoms testbed in Docklands.

New opportunities are emerging to access EU innovation funding to support the development of innovative use cases across the city in collaboration with partners across areas such as health and education.

Additionally, the City Council procured specialist skills to support the work of the unit;[1] this included expertise to manage the telecoms functions including billing and management of assets while also advising on its strategic direction.

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1. "Single Party Framework for the Provision of Telecommunications Management and Related Services to Dublin City Council", *Office of Government Procurement*, n.d., https://irl.eu-supply.com/ctm/Supplier/PublicPurchase/215780/0/0?returnUrl=&b=ETENDERS_SIMPLE.
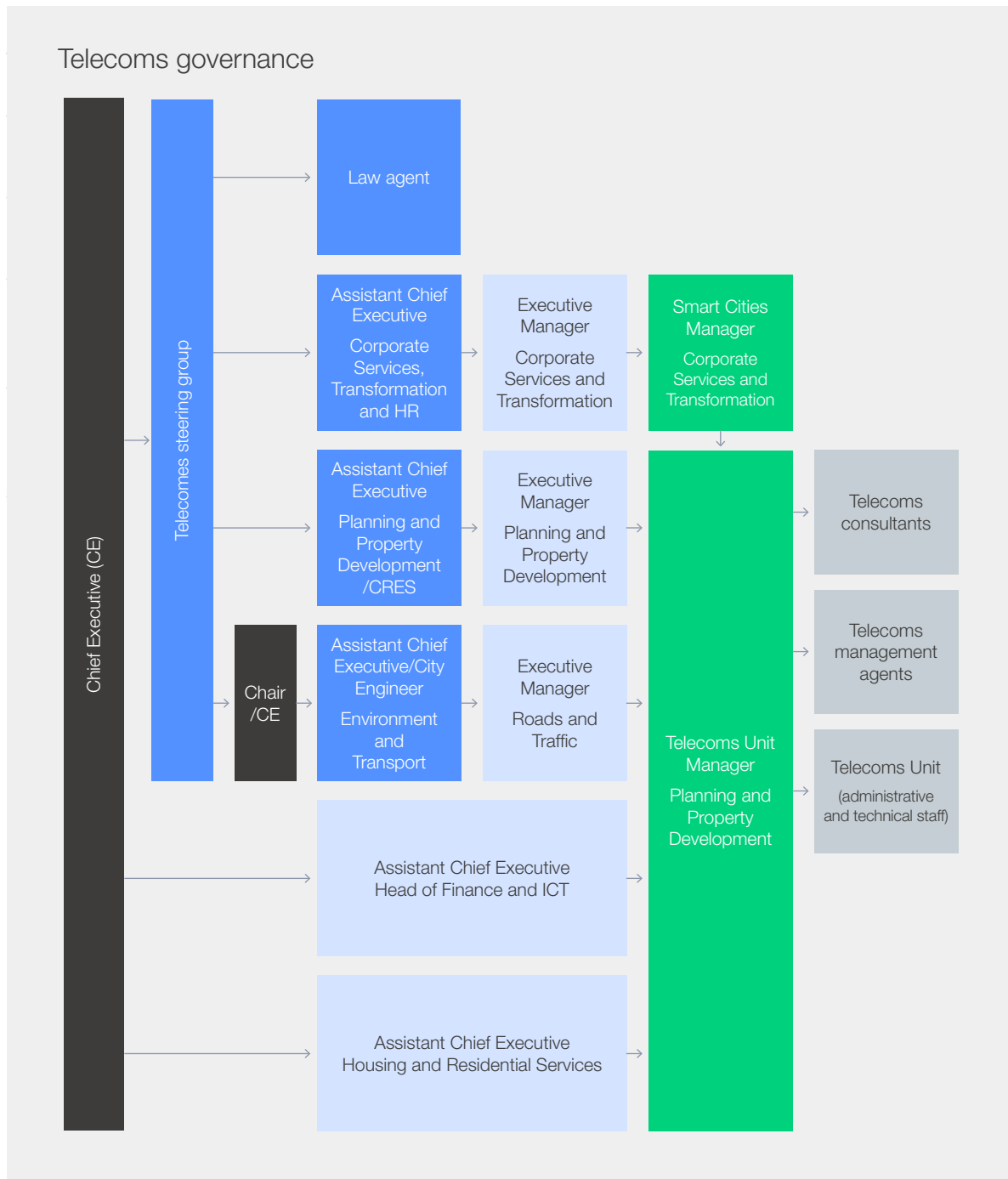
What governance arrangements were in place?

Upon establishing the Telecoms Unit, the City Council created a structured framework for effective management, accountability and decision-making.

The Telecoms Unit itself sits under the Property Development function within the organization.

As Figure 2 demonstrates, a steering committee is chaired by the City Council's Chief Executive with senior level representatives from corporate services and transformation, engineering and transport, legal and planning and property development, to oversee progress, and assess performance on a quarterly basis.

Figure 2: Telecoms governance model – mapped against the City Council Senior Management Team

Telecoms governance

- Chief Executive (CE)
- Telecomes steering group
- Law agent
- Assistant Chief Executive Corporate Services, Transformation and HR
  - Executive Manager Corporate Services and Transformation
  - Smart Cities Manager Corporate Services and Transformation
- Assistant Chief Executive Planning and Property Development /CRES
  - Executive Manager Planning and Property Development
- Chair /CE
- Assistant Chief Executive/City Engineer Environment and Transport
  - Executive Manager Roads and Traffic
- Assistant Chief Executive Head of Finance and ICT
- Assistant Chief Executive Housing and Residential Services
- Telecoms Unit Manager Planning and Property Development
  - Telecoms consultants
  - Telecoms management agents
  - Telecoms Unit (administrative and technical staff)

Lessons learned

What were the key success factors?

The establishment of clear objectives and well-defined goals for the Telecoms Unit played a central role in opening access to council-owned assets for telecoms deployment. This was made possible through strong leadership and governance with the oversight of the City Council's Chief Executive and a high-level telecoms steering committee. This helped to break down the silos across all the various asset owners within the City Council itself and ensure an innovative, corporate approach to telecoms within the organization.

We assembled a skilled and knowledgeable team with domain-specific skills in telecoms, project management and stakeholder engagement to execute the unit's functions. The procurement of external telecoms consultants also played an important role in ensuring the unit was properly advised and understood the requirements of telecoms infrastructure.

The development of collaborative partnerships and proactive stakeholder engagement was instrumental to support the work of the Telecoms Unit. The unit engaged in and hosted knowledge-sharing workshops with industry, academia and government, as well as participating in research collaborations exercises and contributing to international thought leadership publications to build relationships, gather feedback and shape outcomes.

What could be done differently?

The establishment of the Telecoms Unit has been a significant internal change management initiative within Dublin City Council. Breaking down the internal silos and bringing asset owners along on this journey has been the most challenging aspect. Internal engagement and communication are absolutely critical to this journey.

There have also been challenges in building trust with communities and elected representatives on the benefits of supporting telecoms infrastructure in their local areas. Communicating these benefits while emphasizing the safety aspects is something that the Telecoms Unit is investing in. There have been significant levels of misinformation in relation to 5G and telecoms installations over the past number of years, and therefore we are working with the sector to improve trust such that communities don't lose out on investments to support enhanced connectivity in their localities.

Quantifying the overall impact of the Telecoms Unit on the rollout of telecoms infrastructure in Dublin is a challenge because there are limitations to the datasets that city authorities have access to. As part of its data-driven strategy, the Telecoms Unit is starting to make better use of crowd-sourced network performance data. It is hoped that this will enable the unit to better understand overall telecoms trends in Dublin, identify locations that remain underserved by network operators, and support informed decision-making on telecoms deployments in sensitive urban environments where multiple companies are seeking to locate infrastructure.

The unit is cognizant of the importance of supporting a future connectivity innovation agenda and continuing the strong levels of engagement with external stakeholders in industry, academia and government. This foundation will be built upon by hosting workshops and forums, and by supporting research and thought leadership studies to explore new deployment models. In particular, network use cases that can demonstrate the benefits that densification of mobile networks will bring to citizens and communities over the coming years will be examined.

Appendix

Further reading

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About the G20 Global Smart Cities Alliance

Established in June 2019, the G20 Global Smart Cities Alliance on Technology Governance unites municipal, regional and national governments, private-sector partners and cities' residents around a shared set of principles for the responsible and ethical use of smart city technologies. The World Economic Forum, the International Organization for Public-Private Cooperation, serves as secretariat for the alliance.

Through the Alliance, global experts from government, private-sector partners and civil society are compiling and analysing policies from around the world to identify model policies necessary for successful, ethical smart cities.

You can find more model policies and more details about the alliance at: https://globalsmartcitiesalliance.org/.