



dlr DIGITAL STRATEGY 2021-2024

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2021-2024



TABLE OF CONTENTS

1. A Message from the Chief Executive and An Cathaoirleach	4
2. Executive Summary	6
3. Introduction	7
Why we developed the dlr Digital Strategy	8
How we developed the dlr Digital Strategy	8
Internal Digital Transformation	8
Digital Readiness Assessment	9
Policy Context	10
Local dlr Policy	10
National Policy	10
International Policy	11
Engagement	11
4. Strategic Direction	12
Vision	12
Guiding Principles	12
Pillars	13
5. Digital Infrastructure	14
Digital Infrastructure: Goal	14
Digital Infrastructure: Objectives	15
Digital Infrastructure: Our Work-to-Date	16
6. Digital Economy	18
Digital Economy: Goal	18
Digital Economy: Objectives	19
Digital Economy: Our Work to date	19
7. Digital Skills	20
Digital Skills: Goal	20
Digital Skills: Objectives	21
Digital Skills: Our Work to date	22
8. Digital Government	24
Digital Government: Goal	24
Digital Government: Objectives	25
Digital Government: Our Work to Date	26
9. Smart dlr	28
Smart Dublin	29
Smart Dún Laoghaire	29
10. Governance and Implementation	30
Annual Work Plans	30
Governance	30
Implementation	30
Engagement	31
Appendices	32
Appendix 1. 2021 Work Plan	32
Appendix 2. Relevant Policies	33
Appendix 3. Engagement Output	33

MESSAGE FROM **THE CHIEF EXECUTIVE**

♦
Frank Curran



As the pace of technological and digital change grows ever faster it is imperative that we have a strategy in place that ensures we reap the rewards of an increasingly digital world. The Dún Laoghaire-Rathdown Digital Strategy seeks to place our local authority at the forefront of the digital revolution. We will achieve this through engagement, co-creation and the implementation of appropriate technologies that enhance our infrastructure, skills, economy and government.

We have a robust suite of Digital Projects in place across the county, projects such as the EV Charging sensor project, our Digital Inclusion work and the Fernhill AV/VR Climate Awareness Project currently being developed and delivered in partnership with our academic partners.

Many of the challenges facing local authorities involve a level of complexity that makes developing relationships with our partners across civil society, business & industry, academia and public institutions imperative. While we endeavour to meet these challenges in a data-driven fashion, it is increasingly through strong partnerships that the correct and timely data and research is made available and actionable. We look forward to developing further projects with the Digital Strategy and to delivering those already underway.

FRANK CURRAN

Chief Executive

MESSAGE FROM THE CATHAOIRLEACH

Lettie McCarthy



The dlr Digital Strategy is a document of foresight and ambition that I am delighted to recommend to the Council as it recognises both the strengths and challenges of Dún Laoghaire-Rathdown. As ever our strengths reside largely in our people, in their level of educational attainment, their level of innovation and entrepreneurship, and in the energy they bring to the collective task of the stewardship of our beautiful county.

There are of course many challenges, especially around digital access, infrastructure and skills. These and many other challenges will be met through engagement across the entire community including business, citizens, academia and industry. And this engagement will, in turn, lead to further digital projects that will enrich our county.

It is sometimes in times of crisis that we are at our best and new challenges are overcome in unforeseen ways. In the early days of the pandemic, when our elderly citizens relied on the council and volunteers in the 'Community Call' for their day-to-day needs, it became apparent that many of our citizens could be using digital technologies to stay actively in touch – and so now, over 18 months later, through our Libraries and the work of the 'Digital Inclusion' team in the dlr Community Department there are over 50 'Age Appropriate Acorn Tablets' being lent out and used by elderly citizens throughout the county. These Tablets can be used to stay in touch, do online shopping, share photographs, all the usual things that many of us take for granted, but for some were out of reach because of a lack of access of training.

We hope to see many more projects like these coming to fruition over the lifetime of the dlr Digital Strategy.

LETTIE MCCARTHY

Cathaoirleach

02 EXECUTIVE SUMMARY

The Dún Laoghaire-Rathdown County Digital Strategy brings together much of the work being carried out within 'digital' across the county and the organisation over the past few years and sets out a strategy for maximising the benefits of digital for the entire county over the next four years.

Digital by nature evolves extremely quickly. It would be impossible to predict the advances within the digital realm within the next ten or even five years, for this reason our strategy relies heavily on engagement and that engagement will follow a quadra helix approach; engaging across four broad cohorts: Citizens, Business, Government and Academia.

Using this approach we can ensure, to the extent that is possible, that citizens privacy is respected, business interests are aligned, our elected member are informed so they can represent the interests of citizens and rates-payers; and that we are applying a level of academic rigour that allows Dún Laoghaire-Rathdown County to develop digitally in a responsible and appropriate manner.

To understand the 'digital context' of dlr as a County and create a baseline, much work has been carried out in the form of consultations, surveys and engagement. It is particularly heartening to realise that the county stacks up very favourably in comparison to other counties. For example we have much fewer connectivity blackspots and we employ more people in ICT than many other counties.

This work led us to focus our efforts across four broad pillars; Infrastructure, Economy, Skills and Government. Within the strategy we highlight some of the projects ongoing within these areas.

To understand why these pillars have been chosen it may be useful to look at 'digital' through the lens of digital poverty, i.e. the exclusion and isolation of those left behind by the digital revolution. This new type of poverty can be understood in terms of connectivity (Infrastructure), devices (Economy) and know-how (Skills). The role of the local authority in this context is to ensure that the county takes full advantage of 'digital', while no one is left behind.

By leveraging the quadra helix approach to digital, the organisation becomes it's own research engine and we can ensure that our services are 'digital first but always accessible', ensuring again, that no one is left behind.

As well as setting out the strategy, this document also highlights some of the work already underway across the four pillars: for example the manhole sensors in Infrastructure, Trading Online Voucher Scheme in Economy, digital poverty interventions in Skills and the Voter.ie project within Government.

In order to ensure a strong pipeline of robust digital projects we will be maintaining an annual programme of engagement across the county. This we hope will provide many more solid ideas for digital projects to enhance Dún Laoghaire-Rathdown County.

“ Our strategy relies heavily on engagement and that engagement will follow a quadra helix approach; engaging across four broad cohorts: Citizens, Business, Government and Academia



03 INTRODUCTION

Why we developed the dlr Digital Strategy

In recent years, digital technologies have dramatically transformed how we live our lives; impacting how we communicate, how we travel, how we socialise and how we work. Across Ireland today, 92% of households have an internet connection, with over 80% of people using the internet every day or almost every day*. Essential services are increasingly accessed online, with over 75% of internet users banking online and over 50% accessing public services online*. The recent proliferation of 'smart technologies' has also seen growth in the use of household connected devices with 'virtual assistants' used in almost one in five Irish homes today*.

Dún Laoghaire-Rathdown County Council (dlr) recognises that a strategic, planned approach to manage these rapid technological advancements is critical in order to realise their full potential for our County. Using existing and emerging technologies, we can improve quality of life, strengthen our local economy and deliver better services to our citizens and communities.

This dlr Digital Strategy sets out an ambitious, multi-annual plan for the period 2021-2024, to make the most of the opportunities afforded by digital technology. Our strategy defines the key goals and objectives necessary to future-proof our County, build resilience and ensure that no-one is left behind.

The development of our Digital Strategy is also part of the wider, national digital agenda as an action for each Local Authority under the National Broadband Plan.

How we developed the dlr Digital Strategy

Internal Digital Transformation

In 2017, Dún Laoghaire-Rathdown County Council established a Digital Strategy Office to coordinate the Council's digital transformation activities. Following an assessment of the Council's needs, two initial priority objectives were identified, 1) upgrading the provision of digital services to citizens and 2) the strengthening of the democratic function of the organisation. From 2017-2020, these objectives were met through the provision of a future-proofed digital Civic Hub and the development of a modern, digitally enhanced Council Chamber and its attendant technologies. At the core of the dlr internal digital transformation

project is the concept of "Digital First but Always Accessible"; ensuring that services, where possible, are delivered digitally by default, but critically, also ensure accessible, equitable access to services for all citizens both on and offline.

The implementation of the Civic Hub Project (Customer Service Centre) brought all service requests and interactions with the organisation within one centrally managed arena. The Civic Hub captures, measures and analyses the interactions with our public and makes this information available to the Management Team and the Elected Members. The new Council Chamber with webcasting, electronic voting, teleconferencing and attendant technologies ensures our County Council has access to the most up to date information and innovative technologies.

The Civic Hub project and upgrading of the Council Chamber have significantly improved dlr's internal operations and built our digital transformation capacity. Looking to the future, this strategy will now build on these successes as we expand our ambitions beyond the internal development of the organisation to ensure that dlr takes full advantage of digital transformation opportunities throughout the entire County.

Digital Readiness Assessment

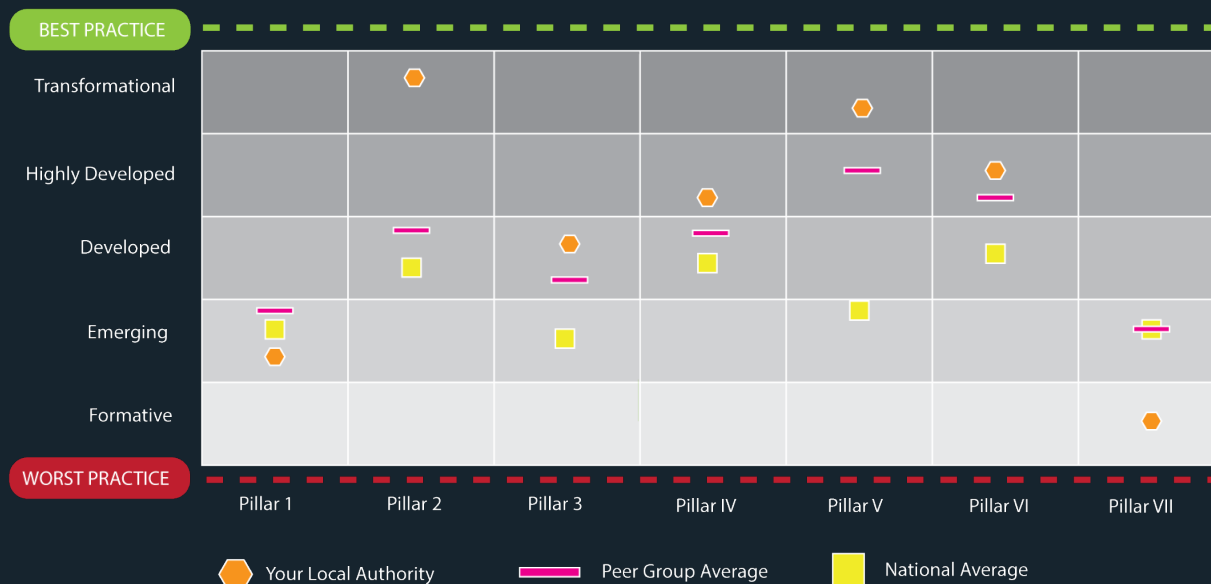
As stated, the creation of a Digital Strategy for the County is an action for each Local Authority nationally under the National Broadband Plan. To further that goal, a Digital Readiness Assessment of each Local Authority nationally was carried out in the first quarter of 2018 by Indecon Economic Consultants, on behalf of the Department of Rural and Community Development.

The assessment provides an insight into progress achieved to date on each Local Authority's digital development and relative digital maturity. It covers the activities of the Council as well as households and businesses across the county.

The Digital Readiness Assessment carried out by Indecon was developed using a seven pillar framework of digital maturity. Based on comparison against best practice, national position and peer groups of counties with similar characteristics, the following is a summary of the findings for Dún Laoghaire-Rathdown County Council.

(* Reference: <https://www.cso.ie/en/releasesandpublications/ep/p-iss/h/informationstatistics-households2020/>)

Digital Maturity Assessment Dashboard



Level 1 - Formative: Minimal take-up of digital technologies; focussed on Local Authority's own service provision; resource levels and commitment of organisation low and conducted in the absence of an explicit strong strategy.

Level 2 - Emerging: Take-up of digital technologies is evident across a number of Local Authority services but not in others; take-up variable; Limited out-reach to wider community; resource levels dedicated low, though commitment to long-term strategy; strategy being formed.

Level 3 - Developed: Take-up of digital technologies is the most important channel across a number of Local Authority services; active out-reach to wider community though limited actual change in behaviours being achieved; resource levels to promote digital strategy strong and in line with published long-term strategy.

Level 4 - Highly Developed: Ambitious programme of adoption of digital technologies; programmes to promote digital engagement in the wider community; explicit published digital strategy which is an integrated element of the Local Authorities overall planning.

Level 5 - Transformational: World-leading adoption of digital technologies both in terms of own processes; impactful engagement in the wider community; explicit digital strategy which is a core, integrated element of the Local Authorities overall planning.

Pillar 1 - Transition to Digital – the assessment rated dlr as 'Emerging' in this category with many areas of support for the move to digital. dlr has since appointed a 'Digital Leaders' group to align with best practice of staff engagement and has begun the process of introducing a paper light office strategy.

Pillar 2 – Digital Employment and Economy – dlr was classified as 'Transformational' under this pillar, primarily driven by its very high employment in the ICT industry. Investment is underway in the development of digital hubs and the provision of support for companies looking to develop digitally.

Pillar 3 – Digital Skills – dlr was rated as 'Developed' with regard to the availability and development of digital skills. The council also provides digital skills training to the public, mainly through its library network.

Pillar 4 – Digital Services – In this category dlr was recognised as being 'Developed / Highly developed' in relation to the provision of digital services. In line with best practice, dlr currently has a significant number of services that are delivered digitally, with additional services being brought online regularly.

Pillar 5 – Infrastructure – The report classified dlr as 'Transformational' in this area. The council has an established broadband network in place, covering approximately 97% of the county. dlr is in the process of installing Broadband Connection Points in identified black spot areas.

Pillar 6 – Innovation and Entrepreneurship – dlr is determined to be 'Highly Developed' under this pillar. At the time of the assessment there were 77 domains registered per 1,000 people. The council is also fostering relationships with private sectors and educational

Pillar 7 – Community and Culture – the assessment classified dlr as 'Formative' in this category. The organisation uses digital technologies to capture citizens' feedback and inputs, and is continuing to develop its partnerships with representative community groups and cultural organisations.

03

Policy Context

In developing this strategy we are cognisant of the policy context in which we operate. This strategy was developed to ensure strategic alignment with local, national and international policy, and to ensure that we can leverage opportunities and developments outlined in such plans.

Local dlr Policy

This Digital Strategy acts as an enabler in the advancement of other key dlr policies and strategies. dlr has incorporated digital transformation into its strategic policy frameworks and this Strategy is seen as an integral part of the county's social and economic development.

Built into the goals of our Corporate Plan 2020-2024 is the transformation of resources to deliver more accessible customer services, resulting in better outcomes for citizens through the adoption of digital technologies. The dlr County Development Plan 2022-2028 has already benefitted from the introduction of digital technologies through its online display and citizen space submission portal.

The dlr Digital Strategy will contribute to the delivery of a number of other key policies, such as our Local Economic and Community Plan or our Climate Action Plan, by working with departments across the organisation to identify technology solutions that advance their objectives.

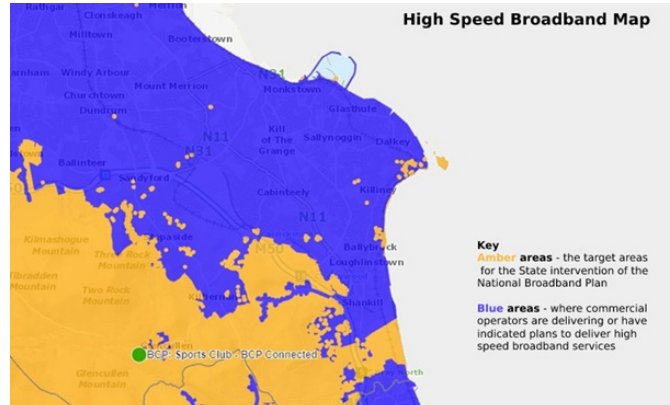
National Policy

The dlr Digital Strategy is also strategically aligned within a number of relevant national policies.

The Irish government has long recognised the importance of digital technologies and the availability of high speed broadband, both socially and economically, and launched the National Digital Strategy to develop these areas. The National Digital Strategy's three key thematic priorities were;

- 1.Trading Online and Entrepreneurship: 'to get 10,000 Irish businesses online for the first time'.
- 2.Citizen Engagement: 'to halve the number of 'non-liners' (People who have not yet engaged with the internet by 2016'.
- 3.Education and eLearning: 'to utilise ICT to its full potential across the education system'.

These priority themes are reflected throughout the dlr Digital Strategy.



The government has recently released the next iteration of the National Digital Strategy, incorporating the GovTech 2019 Priority Action Plan and building on its previous strategy document. This new policy, 'Connecting Government 2030', is again reflected in the dlr Digital Strategy with its focus on strengthening digital skills and innovation, harnessing data effectively and a focus on digital governance.

The National Broadband Plan is the national roadmap for the delivery of high speed broadband to all premises in Ireland. The dlr Digital Strategy sets out our commitment to facilitating the National Broadband Plan through the provision of connectivity to homes and businesses in Chapter 5.

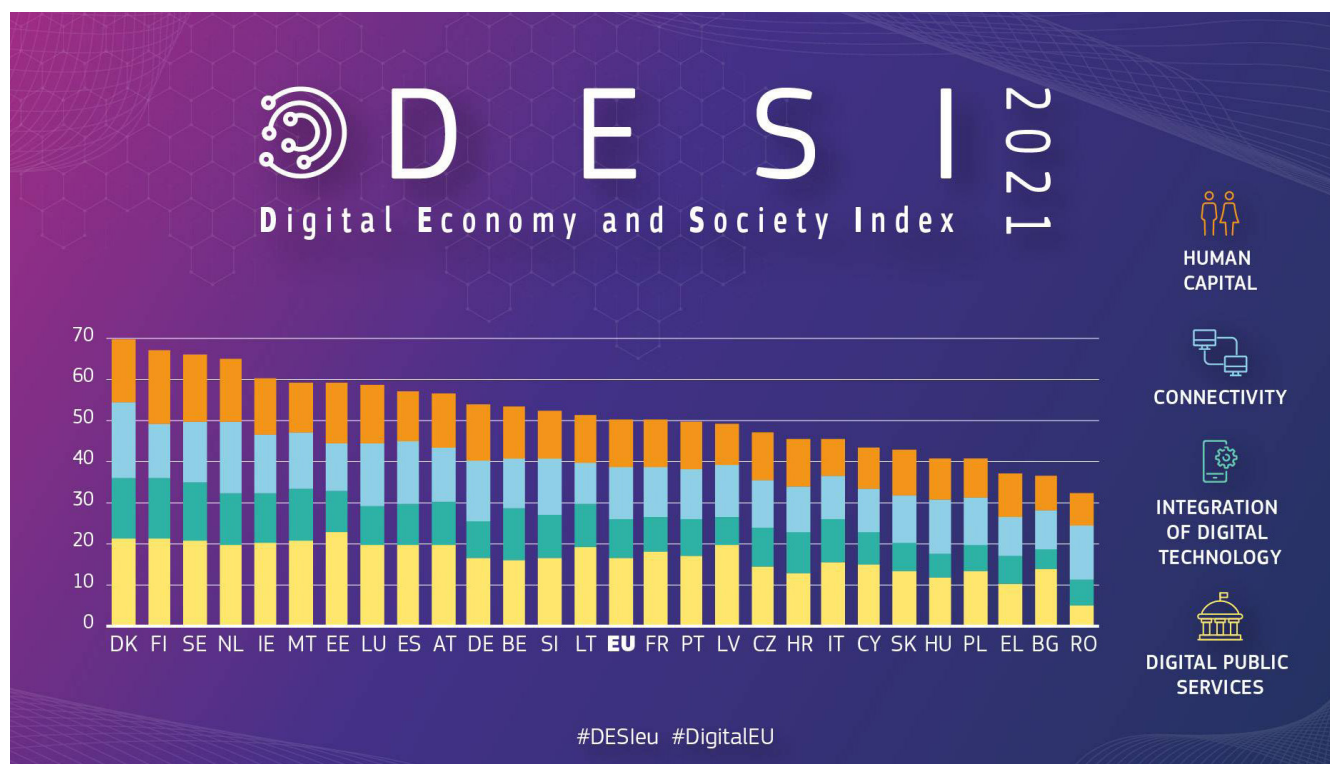
What is the National Broadband Plan?

The National Broadband Plan is the Government's plan to deliver high speed broadband services to all businesses, farms and households in Ireland.

www.broadband.gov.ie

Other key national policies which have informed the development of our Digital Strategy include:

- Our Public Service 2020
- eGovernment Strategy
- Public Sector ICT Strategy
- Public Sector Data Strategy



International Policy

At European level, the Commission's 'Digital Strategy 2020-2025' identifies three key aims that enable digital transformation congruent to our own Digital Strategy:

- Technology that works for people.
- A fair and competitive digital economy
- An open, democratic and sustainable digital society.

In conjunction with its Digital Strategy, the European Union has prioritised the creation of the Digital Single Market which aims to create an environment for digital networks and services to develop and grow to the benefit of its citizens. Marking this progress is the EU Digital Economy and Society Index (DESI), a composite index tracking the evolution of EU Member States' digital journey and progress. Over the past few years Ireland has improved its digital performance and rating on the DESI index and in 2021 was positioned 5th out of 27 states. Chapter 6 sets out dlr's commitment to enhancing our digitally enabled economy.

See Appendix 2 for a comprehensive listing of strategies and policies relevant to the dlr Digital Strategy.

Engagement

In developing this strategy the Digital Strategy Team set up structures to ensure that voices across the wider organisation were heard and that mechanisms are in place to ensure ongoing engagement. A number of workshops were facilitated with staff from across the organisation to identify key actions for the digital transformation of our organisation and County.

Public engagement workshops were also held with members of the dlr Public Participation Network. The purpose of these workshops was to understand digital priorities for the County from the perspective of local citizens. Workshops involved a wide spectrum of members including women's groups, local residents groups, active retirement groups and artists' networks. Broad themes that were highlighted in the workshops included; bridging the digital divide through upskilling, the need to develop a central, local repository for community news and events, the benefits of local co-working and digital hub spaces.

04 SMART DLR



'Smart' initiatives are used as a vehicle for implementation of new technologies and policies. In particular to test and validate innovative solutions before deployment across the county. DLR is committed to keeping pace with rapid developments in smart technologies and implementing comprehensive integrated strategies for transformation, guided by a clear vision and collaboration with partners in academia and industry. The far-reaching positive impact of smart transformation projects includes considerable progress in competitiveness indicators. Excellence in this area is helping catalyse economic and sustainable development objectives in DLR and bring significant reduction of operational expenses.

Under the UN Sustainable Development Goals, Goal 11 'Smart Cities' are those that make settlements inclusive, safe, resilient and sustainable. This is a key driver for our digital transformation and in particular

the areas of transportation and energy in relation to climate change are being targeted. Over the next twenty years, transportation is expected to be the major driving force behind a growing world demand for energy. At the 2002 World Summit on Sustainable Development, the role of transport was again highlighted in the Johannesburg Plan of Implementation (JPOI) policy document. JPOI provides multiple anchor points for sustainable transport, in the context of infrastructure, public transport systems, goods delivery networks, affordability, efficiency and convenience of transportation, as well as improving urban air quality and health, and reducing greenhouse gas emissions.

In the 2030 Agenda for Sustainable Development, sustainable transport is mainstreamed across several SDGs and targets, especially those related to food security, health, energy, economic growth, infrastructure, and cities and human

settlements. The importance of transport for climate action is further recognized under the UNFCCC - the transport sector is set to play a particularly important role in the achievement of the Paris Agreement, given the fact close to a quarter of energy-related global greenhouse gas emissions come from transport and that these emissions are projected to grow substantially in the coming decade. As part of the digital strategy DLR will work to develop innovative projects and policies to address these issues. Last year the Smart dlr research programme was established to address these challenges and to enhance innovation in the county.



Founded in 2016 by the four Dublin Local Authorities – Dun-Laoghaire Rathdown, Dublin City, Fingal and South Dublin; Smart Dublin is our regional ‘smart city’ initiative. The Smart Dublin goal is to future-proof the Dublin region by trialling and scaling innovative solutions to a wide range of local challenges. From tackling the climate crisis to bridging the digital divide, the Smart Dublin initiative brings together local authorities, technology providers, academia and citizens to collaborate and innovate.

To date, the dlr Smart Dublin Team have led on the delivery of a number of Smart City region projects, most notably a SBIR (Small Business Innovation Research) Challenge exploring IoT mesh network development in partnership with Enterprise Ireland. Engagement in the SBIR programme has embedded ‘Smart City’ expertise within dlr, while also supporting innovative, small businesses to develop and trial smart solutions within our County.

In order to accelerate innovation, Smart Dublin has adopted a ‘Smart District Approach’, concentrating new technology pilots in targeted locations across Dublin. To date, five Smart Districts operate across the Dublin region including dlr’s Smart Dún Laoghaire research programme.



The Smart Dún Laoghaire district programme is a partnership between DLRC and Enable Research Centre in Trinity College and was established to strengthen the town’s response to a variety of challenges. DLRC, as lead Local Authority, is responsible for planning and development in the town and Enable, a leading IoT research centre, provides expertise in emerging and cutting-edge technology.

This collaborative research project will build on the foundation of our Digital Strategy and Climate Action Plan as it seeks to answer the question: How can emerging technologies future-proof the town?

As a vibrant coastal town and home to roughly 30,000 residents, Dún Laoghaire attracts a significant number of national and international visitors year-round. However, due to its location and popularity it faces two key challenges.

Environmental resilience – as a coastal town it is vulnerable to the impacts of climate change.

Sustainable mobility – growing numbers of residents and visitors travelling into and about the town.

As the DART, a primary transport artery, runs along the seafront the two main challenges facing the town are inextricable linked

and Smart Dún Laoghaire’s goal is to research the use of advanced technology to strengthen environmental resilience and sustainable mobility. The programme takes an applied research approach, involving data-driven decision making and on-the-ground technological innovation. At the heart of this is the idea of collaboration. We bring together government, industry, academia and citizens using a ‘quadra-helix’ approach, to work together and co-create solutions to the challenges facing the town.

The Smart Dún Laoghaire district programme brings technology to life for the benefit of the community and, working alongside European counterparts, it maintains strong regional, national and international collaborative partnerships, so that local interventions reflect global best practice.



EU Research Proposals

In order to bring best in class cutting edge research from across Europe to Dublin, Smart Dún Laoghaire, on behalf of dlr, has worked with Enable, other academics and international consortia to win European Commission Horizon 2020 funding for research projects. With stiff competition, dlr was awarded funding for three EU projects submissions, Probono, SCORE and PRECINCT. These multi-million euro projects include a research budget valued at over €350,000 for dlr.

In each project Dún Laoghaire will act as a smart city test bed (living lab) where new technologies will be tested. Research projects ensure novel technologies and approaches are developed and applied in the living labs. dlr, through Smart Dún Laoghaire, will be able to share and learn from others to the benefit of all of their stakeholders and citizens.

Smart Dún Laoghaire is designed to address challenges from across the county, analyse data and develop solutions in the Dún Laoghaire based test bed so they can be validated and developed at scale. The programme is being developed with Enable, a leading IoT research centre, who provide expertise in emerging and cutting-edge technology research.

05 STRATEGIC DIRECTION

VISION

The dlr Digital Strategy Vision is:

“To harness the opportunities afforded by ‘digital’ to transform our County; connecting communities, enhancing economic activity and enabling upskilling to deliver positive outcomes for the citizens of Dún Laoghaire-Rathdown”.

GUIDING PRINCIPLES

In striving to achieve this vision, this strategy is underpinned by three key guiding principles which inform all aspects of our work

1 Future-Proof the County

dlr is working to ensure that our County is ready to reap the rewards of digital transformation. We are working to deliver high-quality connectivity throughout the county and to ensure there are no blackspots.

We are actively investigating and, where possible, implementing new networks such as mesh, LoRa and NB-IoT which will enable our County to capitalise on new technologies, especially the Internet of Things (IoT).

We are constantly assessing emerging technology trends, such as edge computing or citizen-sensing, that will become part of the overall County infrastructure in coming years, and we work closely with citizens, industry and academic partners to make this a reality.

2. Build Resilience

The Covid-19 crisis has highlighted, like never before, the criticality of ensuring resilient, connected communities. The dlr digital strategy will enable our community to ‘Build Back Better’ by ensuring the connectivity of our citizens

and businesses, enabling online trading, enhancing digital learning opportunities and combating social isolation.

Further, as we seek to overcome and adapt to increasing climate challenges, this strategy sets out several opportunities to utilise technology and innovation to build sustainable, community and organisational resilience.

3. Leave no-one behind

dlr are committed to ensuring that no-one is left behind as our society and economy are increasingly digitised. We are committed to tackling ‘digital poverty’, understood as inadequate access to connectivity, skills and/or devices. This is a fundamental tenet throughout this strategy. A cross-departmental ‘dlr digital poverty working group’ has been established that will help to ensure the equitable and just realisation of this strategy’s goals and objectives.



PILLARS

Based on our engagement, research and assessment of relevant local, national and international policy, dlr has identified four key strategic pillars and corresponding goals that form the basis of this strategy.

By delivering on our ambitions under these four pillars we can ensure that dlr makes the most of the opportunities afforded by digital for our County.

1. DIGITAL INFRASTRUCTURE

Goal 1.

To ensure that suitable digital infrastructure is in place throughout Dún Laoghaire-Rathdown County

2. DIGITAL ECONOMY

Goal 2.

To enhance and support the Dún Laoghaire-Rathdown economy using digital opportunities

3. DIGITAL SKILLS

Goal 3.

To bridge the digital divide by ensuring that the citizens of Dún Laoghaire-Rathdown have access to digital skills training and education opportunities

4. DIGITAL GOVERNMENT

Goal 4.

To use digital opportunities to strengthen local democracy and public services for the citizens of Dún Laoghaire-Rathdown

06 DIGITAL INFRASTRUCTURE



DIGITAL INFRASTRUCTURE: GOAL

GOAL 1. TO ENSURE THAT SUITABLE DIGITAL INFRASTRUCTURE IS IN PLACE THROUGHOUT DÚN LAOGHAIRE-RATHDOWN COUNTY

'Digital infrastructure' means the foundational equipment and services that enable information technology capabilities. Digital infrastructure includes, but is not limited to; internet backbone, fixed broadband, mobile communications and telecoms infrastructure, data centres and cloud computing.

By national standards, Dún Laoghaire-Rathdown County currently has some of the best digital infrastructure in the state. According to the National Broadband Plan Map, less than 2% of premises in the wider County Dublin are considered within the intervention area, meaning that 98% of premises already access broadband in excess of 30Mb. The average percentage of premises outside of Dublin requiring

intervention is 31.4%.

We want to build on this strong foundation to ensure that all citizens and businesses throughout Dún Laoghaire-Rathdown County have the requisite access to participate in our increasingly digital society and economy. Beyond just internet connectivity, we also want to use our strong digital infrastructure to digitally enable our public realm, increasing our use of digital asset tracking and improving environmental data collection in our communities.

Lastly, we want to explore opportunities to innovate using our digital infrastructure. As technology trends and advancements happen at an increasingly rapid rate,

we want to ensure that our digital infrastructure is 'future-proofed'. This means exploring how we can deploy and use new networks and connectivity opportunities, in particular, to facilitate the growing demand to meet Internet of Things (IoT) connectivity requirements.

Whilst enhancing the digital infrastructure of the county we also want to ensure that we are safeguarding the digital privacy of our citizens in the roll-out of digital infrastructure. All of our digital projects and initiatives utilise a 'privacy-by-design' approach; ensuring the digital rights of citizens' are communicated, protected and upheld.

DIGITAL INFRASTRUCTURE: OBJECTIVES

OBJECTIVE 1.1: TO SUPPORT THE DELIVERY OF HIGH-QUALITY CONNECTIVITY THROUGHOUT THE COUNTY

Equitable access to internet connectivity is fundamental to the delivery of the dlr Digital Strategy. Throughout the towns, villages and communities that make up Dun-Laoghaire County, we will work to ensure that businesses and homes have access to high-quality internet.

dlr will work with the Department of Environment, Climate and Communications to facilitate the roll-out of the National Broadband Plan. In order to reach communities most excluded we will facilitate the installation of Broadband Connection Points (BCP) at strategic intervention locations. These BCP installations will focus on the provision of high-quality connectivity to community facilities, with the aim of providing improved access for homes and businesses, as well as potentially facilitating the establishment of remote-working hubs and other uses.

dlr will further roll-out the provision of free, public Wi-Fi to targeted areas within the County. In 2020, dlr successfully secured funding from both the European Commission and Department of Rural and Community Development, via the Wifi4EU initiative. This funding will help support the installation of public Wi-Fi equipment and support the ongoing service provision.

OBJECTIVE 1.2: TO DIGITALLY ENHANCE OUR PUBLIC REALM AND ASSETS

A strong digital infrastructure will allow dlr to digitally enhance our public realm and assets by deploying new 'smart' solutions throughout the County. This includes deploying more smart street furniture such as smart bins, benches and signage, and digitally enabling our assets with connected sensor devices that provide important real-time data, eg. to monitor the County's expanding Electric Vehicle (EV) charging points.

A total of 86 'smart bins' are currently deployed across the County. The bins are equipped with solar panels, powering an internal compactor that can compress rubbish and allow for significantly more waste to be held. Sensor devices within the smart bins provide real-time information to our waste management teams, informing when and if bins need to be emptied. Dlr will deploy more smart bins to targeted areas across the County, tackling illegal dumping and littering.

Digitally enabling our current assets through the deployment of low-cost sensor devices will improve efficiencies in service delivery and support proactive, data-driven interventions. dlr will explore how such technologies can improve our housing stock management, such as smart heating controls that empower residents to become more energy efficient. We will further explore how we can build on our current digital beach sign

deployments and scale these initiatives across the County to provide important local data and community information.

We will also deploy sensor technologies to collect important evidence to support new sustainable travel initiatives. Projects such as these will benefit from analysing traffic, air quality and usage data. We will work with our academic partners to ensure we are gaining the maximum learnings from any project undertaken. In this way the organisation can become its own research engine, partnering with academia and industry where appropriate in order to understand how to deliver optimal results for our citizens.

OBJECTIVE 1.3: TO USE OUR DIGITAL INFRASTRUCTURE TO CO-CREATE NEW INNOVATIVE SERVICES AND PROJECTS

Persistent, rapid innovations in the technological world mean that over the life-time of this strategy new, transformative and disruptive developments will likely emerge. The dlr digital strategy seeks to ensure that our County is engaged and informed on such developments, and ready to make the most of these opportunities. We will explore how cutting-edge, emerging technologies can tackle actual local problems, such as expedition of the monitoring and reporting of bathing water quality.

From 2021-2025, dlr will work closely with our academic partners to deliver two large EU funded Horizon 2020 research projects, **SCORE** and **PRECINCT**, which will explore how innovative, emerging technologies can help tackle local challenges. These successful applications were made via our Smart Sandyford programme; a smart city test-bed partnership between dlr and Enable Research Centre (Trinity College Dublin). See Chapter 9 for more on the Smart Districts programmes.

SCORE 'Smart Control of the Climate Resilience in European Coastal Cities' is a research project that offers new frameworks and approaches to managing the County and improving resilience. The ecosystem-based approach adopted in SCORE will ensure sustainable management, conservation, and restoration of ecosystems that can generate social and economic benefits. The project will provide the Council access to cutting edge technologies, including digital twin and flood sensor technologies.

PRECINCT 'Preparedness and Resilience Enforcement for Critical Infrastructure Cascading Cyber-Physical Threats' is a research project that aims to connect private and public infrastructure stakeholders to a common cyber-physical security management approach that will yield a protected territory for citizens and infrastructures. The goal is to supervise and control complex interdependent networks and Cyber Physical Systems of Systems with distributed ownership and management structures. Such CPSoS include several collaborative computational entities such as sensors and actuators, typically communicating with each other (and with humans) over IoT and security protection technologies.

Dublin Mountain Community Centre / Stars of Erin BCP

Under the National Broadband Plan, Broadband Connection Points (BCPs) are public locations such as libraries, sports facilities, enterprise hubs, tourist locations and other public spaces that have been strategically selected to receive high-speed connectivity. BCPs provide high-quality broadband services to areas that otherwise experience poor connectivity.

In 2020, dlr selected the Stars of Erin GAA Club in Glencullen as a BCP location. Nestled in the Dublin Mountains, Glencullen village is situated on the outermost southern border of dlr County. Due to its mountainous location, the local community is poorly served by broadband services.

The Stars of Erin GAA Club is an important facility for the Glencullen community, making it an ideal BCP location. In late 2020 the BCP was installed bringing high-speed broadband to both inside and outside the club facilities. It is envisioned that this facility may be used as a remote-working hub in the future; a particularly critical facility for this community which experiences hazardous road conditions during adverse winter weather. The facility will also support community groups who use the club facilities to engage digitally such as Scouts, local history groups etc.

Monna Smart Bench

In 2019 dlr installed two 'Monna' smart benches; one outside the People's Park and another in Sandyford Business Park. These smart benches bring smart technology to life in the community. These innovative examples of smart street furniture, powered by solar panels, include a range of services for the public including; two wireless charging pads and two ports for phone-charging, two smart electrical sockets that provide energy for charging electric bicycles, bike repair tools and sensors that collect data on temperature, humidity, energy production and how much energy the bench consumes. With approximately 25,000 people having used the benches' bicycle parking facilities in 2020, the smart benches have proven to be a popular addition to our public realm.

Manhole Sensors

dlr owns and manages an extensive duct network which is used for traffic management and the connectivity of our various depots and buildings. In order to better maintain a record of access to this duct and chamber infrastructure we have deployed a small number of 'manhole sensors' which are triggered when manholes are accessed. Ultimately dlr would like to avoid 'road openings' as much as possible and so duct infrastructure is included in the design of road upgrades and new builds. To maximise the potential of this infrastructure dlr aims to achieve a greater understanding of how technology and the built environment can interact to minimise disruption for the public.

IoT Energy Monitoring Trial

Reducing our energy consumption is an important action in the fight against climate change. In 2019, dlr conducted a pilot project to explore how data could be used to drive that change. The canteen in County Hall was chosen as the initial test site to establish an Internet of Things (IoT) network to capture valuable environmental data. The IoT network comprised 12 sensors, placed at strategic locations around the canteen and kitchen. They measured and monitored consumption of electricity and environmental conditions such as lux (light), temperature and humidity.

Based on the insights gained from the data collected, remedial actions and behavioural changes have delivered energy savings in electricity and heating fuel consumption. This project further made a significant contribution to the Dún Laoghaire-Rathdown Energy Team's successful application for ISO 50001 recertification. The IoT Energy Monitoring trial was a small scale project to test the viability of the technology and concept. The success of the trial has meant that similar networks can now be deployed to measure environmental data throughout dlr's buildings.

*Photo below
Monna Smart Bench*



“ With approximately 25,000 people having used the benches’ bicycle parking facilities in 2020, the smart benches have proven to be a popular addition to our public realm.

07 DIGITAL ECONOMY



DIGITAL ECONOMY: GOAL

GOAL 2. TO ENHANCE AND SUPPORT THE DÚN LAOGHAIRE-RATHDOWN ECONOMY USING DIGITAL OPPORTUNITIES

Dún Laoghaire-Rathdown (DLR) is a county of contrasts: Located to the south and south east of Dublin city, it has both urban and rural areas and boasts access to the mountains as well as the sea. 218,018 people live in the county, making it the sixth largest local authority area in the Republic of Ireland.

For several years, DLR has been recognised as one of the most affluent counties in Ireland. However, this prosperity is not shared equally by all the population and what we see is that specific areas of DLR continue to be more vulnerable to higher unemployment levels, lower incomes, and economic contractions, resulting in a risk of continuing pockets of increased deprivation levels within some

communities*.

With its highly educated and skilled labour force, the County enjoys a thriving and growing economy with over 95,000 people currently in employment. This is primarily driven by larger towns such as Blackrock, Dún Laoghaire, Dundrum, Stillorgan and Sandyford. Major employers include international IT and pharmaceutical companies, as well as financial and service industries.

Our Local Enterprise Office aims to 'promote entrepreneurship, foster business start-ups and develop existing micro and small businesses to drive job creation and to provide accessible high-quality support for your Business

ideas.' The dlr Digital Strategy will support businesses to reap the rewards of digital and drive entrepreneurship and investment across the County.

* <http://southsidepartnership.ie/dlr-demographics/>

* <https://www.localenterprise.ie/DLR/Publications-Resources/Local-Economic-Community-Plan-2016-2021-/Local-Economic-Community-plan.pdf>

DIGITAL ECONOMY: OBJECTIVES

OBJECTIVE 2.1: TO ENABLE LOCAL BUSINESSES TO PARTICIPATE IN THE DIGITAL ECONOMY

This objective will enable local businesses to participate in the digital economy. A number of schemes will be developed and enhanced to promote accessibility and digitalisation of companies in DLR. Schemes include the Trading Online Voucher Scheme which first launched in June 2014 as part of the National Digital Strategy to help smaller retailers trade more online, boost sales and reach new markets.

Since its inception 1170 vouchers have been given out. Within dlr in 2020, 70 vouchers were allocated in the months pre covid-19, with close to 800 being processed since. In 2020 the 770 total of approved vouchers came to a value of €1.7m. This funding will help retailers with coaching, adding online payment facilities, funding for websites and digital marketing strategy development.

This scheme is managed by dlr LEO and funded by the Department of Enterprise Trade and Employment to support businesses working with Enterprise Ireland.

OBJECTIVE 2.2: TO FOSTER AND SUPPORT LOCAL ENTERPRISE, INCLUDING STARTUPS

Through the Local Enterprise Office (LEO) and the dlr Business and Economic Development Unit, we will continue to foster and support local enterprise including technology and digital start-ups and support innovative new business practices, such as circular economy models. The LEO continues to provide training across Social Media and Digital Marketing resulting in a greater digital offering by local businesses.

There are a wide range of supports available through the Business Development Unit including, but not limited to, Business Financial Supports, Shop Local, Business development Programmes, the Small Business Assistance Scheme for Covid-19 and the Outdoor

Dining Scheme. For more information please see <https://www.dlrco.ie/en/business-economic-development>

In line with the County Development Plan we will continue our collaboration with Further and Higher Education Institutes in the creation and fostering of enterprise through research and innovation, and the development of these activities through to their commercialisation.

OBJECTIVE 2.3: TO PROMOTE INWARD INVESTMENT

Through the dlr Business & Economic Development Unit we continue to work with both public and private partners to provide and promote Remote Working Hubs throughout the county. Our engagement with the Sandyford Business Improvement District through Smart Sandyford, and our ongoing work with Digital Dún Laoghaire and Smart Dún Laoghaire aims to further enhance the attractiveness of the County for investment

This objective will continue the promotion of innovative solutions to existing challenges and support economic activity through the creation of a 'smart' ecosystem aimed at providing opportunities for businesses through increased collaboration and engagement via our Smart Districts programmes.

07



Photo above

dlr Teen Entrepreneur STEM Camp

Photo above

dlr LEO Webinar

eCargo Bike Scheme

dlr, Smart Sandyford and Bleeper's bike scheme enabled local businesses to trial eCargo bikes for the delivery of their products and services around the county. The project gives local businesses access to electric cargo bikes, enabling them to replace delivery trips which would have been taken by car or van with more sustainable means.

The scheme is about cutting carbon emissions and helping local businesses to beat traffic and make more efficient and sustainable deliveries. The scheme will also enable research and provide data on the use and future potential of eCargo bikes for deliveries, in terms of environmental and economic impacts.

dlr Economic and Community Monitor

The Economic & Community Monitor brings together in one place a range of economic and demographic data and presents it in an easily digestible way across a range of themes including Economy and Employment, Income and Living Standards, Property Market, Live Register, and Households and Families to name a few.

The Monitor provides data on the social, economic and living conditions of the citizens of Dún Laoghaire-Rathdown on a local level. Using census data, the Monitor can play a pivotal role in the tracking and sharing of socioeconomic data for the County and is a reflection of the role of the Council in the provision of easily accessible and reusable open data.

Business Promotion Through Education

A STEM bootcamp for 2nd level students organised through the Lexicon Library set challenges for students that saw them build out tech products (sensors, 3d printers). The initiative was open to all schools in the county and students entered in order to develop technology skills and business acumen. The program which ran for 10 weeks, culminating in an awards event in the Royal Marine Hotel, was joint funded by Science Foundation Ireland and dlr.

Our Local Enterprise Office provides training and mentoring for local businesses to ensure they are best positioned in the digital marketplace. Complimenting this training is their partnership with Google Digital Garage in delivering a series of expert-led, educational webinars covering topics that are vital to businesses online success, including Search Engine Optimisation, Online Analytics and Digital Marketing Strategy.

Tourism

A number of initiatives underway aim to augment dlr's Tourism offering by making it 'smart'; including the development of a digital Tourism Trail, the use of QR codes for wayfinding and targeted heritage information, smart signage at beaches and other locations, and the use of footfall analytics to best understand the market and drive the commercialisation of dlr's unique offering.

dlr, in conjunction with Smart Tourism, uses data analysis, technology and digitalisation to help better understand visitor behaviour and inform the tourism experience. Using sources such as Dublinked and the Dublin Economic Monitor, dlr and Smart Tourism aim to build a more accessible, inclusive, smart destination delivering better outcomes for local businesses.

Digital Dún Laoghaire

Digital Dún Laoghaire was established in 2016 and is an initiative of DigitalHQ clg. With support from DLRCC and Bank of Ireland, DigitalHQ has created a 'Digital First Communities' framework of tools and techniques to attract investment, workers, home buyers, shoppers and visitors to a locality. This work of national significance was done in their living lab in Dún Laoghaire Town and is overseen by the Digital Dún Laoghaire steering group drawn from key stakeholders in the economic development of the town.



Photo below
eCargo Bike Scheme

07



“ The scheme is about cutting carbon emissions and helping local businesses to beat the traffic

08 DIGITAL SKILLS



DIGITAL SKILLS: GOAL

GOAL 3. TO BRIDGE THE DIGITAL DIVIDE BY ENSURING THAT THE CITIZENS OF DÚN LAOGHAIRE-RATHDOWN HAVE ACCESS TO DIGITAL SKILLS TRAINING AND EDUCATION OPPORTU-

In order to participate fully in our digital society and economy, citizens must be equipped with the requisite digital skills. Digital skills not only include the ability to operate information technologies, but also the ability to navigate safely online and to evaluate the quality and trustworthiness of information and resources accessed. While Dún Laoghaire-Rathdown has the highest levels of educational attainment of any County in Ireland, the Covid-19 crisis has demonstrated that for many in our community, digital exclusion remains a reality. As both commercial and public bodies rapidly transitioned to online service delivery, citizens with limited digital skills, in particular older citizens, faced barriers to accessing critical services. Through the work of our Covid-19

Community Response Forum, Digital Poverty Working Group, our libraries network, and with extensive support from our Public Participation Network members and other civil society actors, dlr have delivered and supported initiatives throughout the crisis that bridge the digital divide and ensure that no-one is left behind. Building on this work to date, we are committed to ensuring that across the County, citizens have access to digital training opportunities, particularly communities who traditionally experience digital illiteracy and exclusion. Working with our local community organisations and through our library network, we will support the development and delivery of digital education resources and initiatives.

We will also work to identify new opportunities for citizens and communities to engage with and learn from digital projects in their own communities. We will explore how we can use citizen science initiatives or our new Dlr Beta Projects to upskill citizens in emerging tech such as IoT sensors, increase data literacy and empower communities to be part of the digital future of our County. Our digital ambitions for the County are also dependent on our own dlr staff having relevant skills and capacities. We will work to support data literacy initiatives across the organisation, building our Data Driven Decision-Making (DDDM) capacity and culture, and enabling further service digitisation.

DIGITAL SKILLS: OBJECTIVES

OBJECTIVE 3.1: TO SUPPORT DIGITAL UPSKILLING INITIATIVES ACROSS THE COUNTY

We believe that everyone should be able to participate in the digital world and to realise their full potential in a more connected and inclusive society. The education sector has been transformed over the past decade as a result of the digital revolution. The provision of education and training is no longer confined to the institutions we once attended in person in order to learn. Through our Smart Dún Laoghaire research programme and with other local academic partners, we will work to identify participatory opportunities for communities to engage directly with digital projects and learn new skills. We are particularly interested in sourcing new opportunities for communities to engage in 'citizen science' initiatives that empower citizens with the skills and technologies to collect and use important environmental data about their own communities.

We will also support digital upskilling initiatives delivered by trusted partners in the community. We will work with our local community sector, through our PPN and other civil society networks, to develop training content that helps reach those most digitally excluded. Through our Digital Inclusion Working Group we will develop a 'Digital Inclusion Toolkit' which will include the design of best-practice guidance and resources to deliver more impactful digital inclusion interventions.

OBJECTIVE 3.2: TO PROVIDE DIGITAL LEARNING OPPORTUNITIES THROUGH OUR LIBRARY NETWORKS

The mission of dlr Libraries is to 'connect and empower people, inspire ideas and support community potential'. Now, more than ever, the key to achieving this objective is ensuring the ability to stay connected digitally and this is premised on increasing digital literacy amongst all of our citizens. Through our library network we will continue to deliver services essential to improve digital literacy, while also providing access to devices in the libraries themselves. Digital literacy classes are held in libraries for users of all ages and abilities, and we have also moved to providing an online learning portal through our libraries website. Our aim is to ensure that, not only do people have access to devices, but that they have the skills and confidence to get full value from their technology.

Through the dlr library website we deliver on-line courses where people can engage with learning networks for personal growth and development, as well as upskilling and re-skilling. Where online learning platforms present us with readily accessible resources the dlr Digital Strategy aims to ensure that those with lower digital skills are also catered for and that all members of our society will have equal access to these learning resources and the opportunities they provide.

OBJECTIVE 3.3: TO PROMOTE DIGITAL UPSKILLING AND DATA LITERACY AMONGST DLR STAFF

The rapid digitisation of the labour market and technological advances in our daily work lives means that today's workers must be equipped with strong digital skills. Within dlr, we must ensure that our teams are empowered with the skills knowledge required to fulfill our digital strategy ambitions. As we further digitise our services, we will work with staff across the organisation to deliver training and supports in new software and systems, enhancing our organisation's ability to deliver better more efficient services.

With the digitisation of services and the deployment of sensing technologies throughout the County comes the opportunity to collect important operational data. In order to use this data most effectively we must build strong data literacy capacity across dlr teams. Through showcase events and training webinars, we will disseminate learning from data-driven projects and initiatives to raise awareness and train colleagues in data collection, analysis and insights.





DIGITAL SKILLS: OUR WORK-TO-DATE

PPN 'How-To' Training Supports

Throughout the Covid-19 crisis, the dlr Public Participation Network has delivered a wide range of essential support to keep our community safe and connected. This included the development of free and accessible online digital skills training courses for beginners. The courses included how to use smart phones, popular social media platforms and video-call software.

The dlr Digital Strategy office worked with the PPN to develop short, 'how-to' video content to support the course material. The videos walk users through a step-by-step guide in how to access and use platforms such as Zoom. The beginner digital skills courses were an important resource that supported those with limited digital skills to stay connected to friends, family and services throughout the lockdown.

dlr Lexlcon Lab

The dlr Lexlcon is our Central Library and Cultural Centre. With over 80,000 items in the adult and junior libraries, 60+ computers, 100 study spaces and a floor dedicated to Local Studies, the Lexlcon is a state-of-the-art community education resource for our County.

The Lexlcon delivers a wide range of training events and workshops, and is committed to advancing digital opportunities for the County. The innovative Lexlcon Lab initiative provides public access to exciting new 'maker' technologies. With advances in programming, embedded systems (Raspberry Pi, Arduino etc.), Computer Aided Design (CAD), 3D printing and other creative technologies, it has become easier than ever to realise creative ideas, such as computer generated interfaces, physical constructs and complex computer systems. The LexlconLab is a place where community members can work together to apply these new technologies and turn ideas into reality.

Age-friendly Ireland Acorn Project

dlr is a signatory to the Dublin Declaration on Age Friendly Cities

and Communities in Europe, and is affiliated to the WHO Global Network of Age Friendly Cities & Communities. This means that dlr is committed to becoming an Age Friendly County by creating an inclusive, equitable society in which older people can live full, active, valued and healthy lives.

In 2020 Age Friendly Ireland supported local authorities throughout Ireland to deliver Acorn tablets and support to older citizens. The Acorn tablet is a unique device that was co-designed in partnership with older citizens, ensuring that the product is easy to use and meets the needs of those with limited digital skills. Through the dlr Age Friendly Alliance, (key agencies in the County who are tasked with overseeing and progressing the dlr Age Friendly Strategy), devices were distributed to citizens along with relevant training and support. This initiative has allowed older citizens experiencing social isolation due to public health lockdown measures, to connect with family, friends and services safely from their homes.

*Photo below
dlr Lexlon Lab*



“ *The innovative Lexlon Lab initiative provides public access to exciting new ‘maker’ technologies.*

09 DIGITAL GOVERNMENT



DIGITAL GOVERNMENT: GOAL

GOAL 4. TO USE DIGITAL OPPORTUNITIES TO STRENGTHEN LOCAL DEMOCRACY AND PUBLIC SERVICES FOR THE CITIZENS OF DÚN LAOGHAIRE-RATHDOWN

Digital Government refers to how the public sector can use information technologies to deliver better value and services for citizens. Technological advancements allow us to 'digitise' services that were traditionally paper-based or required in-person delivery. The internal digital initiatives led by our Digital Strategy Office since 2017, and the dramatic transfer to remote service delivery during the Covid-19 crisis, have demonstrated the agility and capacity of dlr to digitally transform to meet our citizens' needs.

The digitisation of services enables efficiencies both for the members of the public who wish to access services and for dlr in the delivery of these services. Our commitment to 'Digital First but Always Accessible' means that customer-facing services, such as our grants schemes, can be accessed by the public any time, from anywhere. Internally, the digitisation of services provides dlr with better

information and data about the impact of our work, allowing us to identify issues and opportunities to improve how we serve the County.

We will drive a culture of Data Driven Decision-Making (DDDM) by working with staff across the organisation to identify opportunities to extract and utilise operational data. DDDM is the process of collecting relevant data related to our services and analysing this information to create insights that inform actions. This ensures that decisions are led by evidence, delivering the most value to the organisation and the public.

dlr recognises that with the increased 'datafication' of our services comes the increased responsibility to ensure that all personal data processed by our organisation must be done so in a way that is compliant, fair, secure and transparent. dlr is committed to upholding

the rights and protections of all those we engage with digitally, and to our responsibilities as data custodians. We are further committed to exploring the impacts of emerging technologies from a risk and rights-based point-of-view, such as the deployment of surveillance technologies or automated decision-making (ADM), and to ensuring that we develop the requisite policies and procedures to manage such developments in a way that protects citizens and builds trust.

Digital Government also encompasses how we can improve our communication and engagement with the public. Digital platforms have transformed our ability to connect with citizens, enhance consultation processes and strengthen transparency. We will explore how new technologies and engagement initiatives can enable more effective feedback loops to citizens.

DIGITAL GOVERNMENT: OBJECTIVES

OBJECTIVE 4.1: TO CONTINUALLY DIGITISE SERVICES AND IMPROVE EFFICIENCIES ACROSS THE ORGANISATION

Building on the internal digital transformation initiatives already completed to date, we will continue to identify opportunities to digitise our services. Through engagement with our Digital Leaders Group, comprising representation from across dlr departments, we will analyse current business processes and develop a road-map of prioritised services suitable for digitisation. Using key learning from our 2019/2020 successful digitisation of the dlr grants scheme, the approach to digitisation will be iterative, allowing for flexibility and the opportunity to amend and correct to meet user needs as the service is developed.

Cognisant of our commitment to Digital First but Always Accessible we will also work closely with our Age Friendly Officer, Digital Inclusion Working Group and PPN to ensure that services that are digitised reflect best-practice in accessibility, and to ensure that other avenues for access to services offline remain available to those who need them.

OBJECTIVE 4.2: TO ENHANCE DATA DRIVEN DECISION-MAKING AND PROMOTE A CULTURE OF OPEN DATA

The work to date of our Geographic Information System (GIS) team has demonstrated dlr's strength in the collection, analysis and use of data, with extensive comprehensive mapping of the County ongoing. Working through our Digital Leaders Group, we will identify opportunities to work with individual departments to build analytics dashboards – data visualisation tools that provide staff with dynamic information to support data driven decision-making.

Through strengthening our DDDM capacity we will also further our commitments to the publication of Open Data. Open Data is non-personal data generated by public bodies which can be made accessible for reuse and redistribution. Working with our Smart Dublin colleagues, dlr publishes relevant data sets via the Dublinked Open Data Portal, enabling citizens, researchers and businesses to reap the benefits of access to the region's open data, in line with the National Open Data Strategy.

OBJECTIVE 4.3: TO ENSURE CLEAR FEEDBACK LOOPS FROM COUNCIL TO CITIZEN

The dlr Civic Hub is our core customer-service portal, capturing, measuring and analysing how dlr interacts with the public. We will continue to improve and develop this service and use this information to deliver better, more efficient services. In order to enhance and deepen our engagement with the public we will launch a new citizen engagement initiative through our Smart

Dún Laoghaire programme which will provide opportunities for citizens to participate in local challenge identification and the co-creation of new solutions.

Through our Smart Dún Laoghaire initiative we will also commence three major EU funded research projects to build County-wide resilience to climate change and other adverse events. As part of these initiatives we will explore emerging technologies, such as 3D models and digital twins, and how we can use these technologies to engage and consult with citizens on future developments.

Digital Grants Scheme

dlr provides a wide range of Grants to community groups to assist with actions and projects being undertaken in their local area. These grants are intended to sustain community activity and promote active citizenship. Historically, the grant application procedure was paper-based, with thousands of applications processed manually by staff annually.

As part of a wider internal digital transformation programme, this process has now been digitised end-to-end, ensuring a smooth online process for applicants. The new system has the added benefit of auto-populating much of the information required by repeat applicants.

For the Council's application evaluators, the digitisation process has reduced resources required, improved process oversight and reduced paper usage, while for community applicants, the new process is now user-friendly and always accessible.

dlr Economic & Community Monitor

The dlr Economic and Community Monitor is a localised data tool that provides detailed socioeconomic data for the County. Drawing on both national census and local dlr data, the monitor is publically available for use by dlr staff, citizens, Councillors or researchers via the dlr website.

The dlr Economic and Community Monitor provides data visualisations across 15 key themes including population, housing, health and employment. The data provides users with an evidence-based assessment of how the County is performing nationally, regionally and locally.

The Monitor also displays up-to-date information about dlr annual expenditure, with a user-friendly and searchable dashboard of the Council's most recent annual accounts. The dlr Economic and Community Monitor is an example of how a culture of open data within the organisation enhances accessibility and transparency, allowing the public to conveniently assess our County's performance.

<https://www.dlrcoco.ie/en/economic-community-monitor>

Community Forum GIS Data Response

In late March 2020, as the nation went into lockdown in response to the Covid-19 pandemic, Local Authorities across Ireland were mobilised to lead local Community Response Forums. In Dun-Laoghaire Rathdown, the multi-agency Community Response Forum, chaired by the Council, was rapidly stood-up over one weekend, with a corresponding helpline to ensure the continuity of services, provision of essential goods such as food and medicine, and protection of the most vulnerable in society.

From the out-set of this service dlr recognised the need to utilise data to deliver the most impactful response. Building off the strong foundational work completed pre-pandemic by our GIS team, dlr were able to rapidly map key data across the County. This included identifying location of grocery shops, pharmacies and emergency services to efficiently direct community response agencies, geographic mapping of helpline calls to better understand areas and communities most in need and further, and to utilise the data to facilitate a comprehensive external evaluation of the community response in October 2020 and implement key recommendations to enhance and strengthen the service. The use of data and evidence to drive dlr's Community Response has ensured that communities remain safe throughout the crisis.



Photo below
George's Street, Dún Laoghaire



“ The dlr Economic and Community Monitor is a localised data tool that provides detailed socioeconomic data for the County

10 GOVERNANCE AND IMPLEMENTATION

Annual Work Plans

The dlr Digital Strategy document sets out our overarching vision, principles, goals and objectives to digitally enable our County. An annual corresponding work plan will be developed and published each year which identifies interventions, projects and targets. The annual work plan will be developed and published each year following engagement activities. This approach will allow for agility and responsiveness to new priorities, contexts or technological developments.

See Appendix 1 for Work Report 2021. Future work plans will be published via the dlr website.

Governance

The dlr Digital Steering Group was established to guide, support and oversee the development and delivery of this strategy. Comprising Directors of Services from across the organisation and chaired by the Chief Executive, the Digital Steering Group is responsible for the resourcing of the digital programme and sign-off of the strategy's annual work plans. The Digital Steering Group meets quarterly to assess progress against agreed targets. Subsequent updates will be made available to the Elected Members. A Summary Report on the Digital Strategy will issue on an annual basis and form the basis of an annual review where projects will be evaluated and continued/discontinued based and key learnings and results.

Membership of the Digital Leaders Group is comprised of:

- Chief Executive
- Directors of Service
- Head of IT
- Digital Strategy Officer
- Broadband Officer

Implementation

The dlr Digital Strategy implementation will be coordinated by the Information Technology Department's Digital Strategy Team, but to meet our objectives requires whole-of-organisation delivery. A Digital Leaders Group has been established comprising representation from a number of key dlr departments right across the organisation. The Digital Leaders Group is chaired by the Digital Strategy Officer and functions as a mechanism for onboarding and overseeing projects which are brought to the Steering Group for sign-off and resourcing. The Digital Strategy Team within the ICT Department is responsible for the overall Project Management of the Digital Strategy and its attendant work programme.

Membership of the Digital Leaders Group is comprised of:

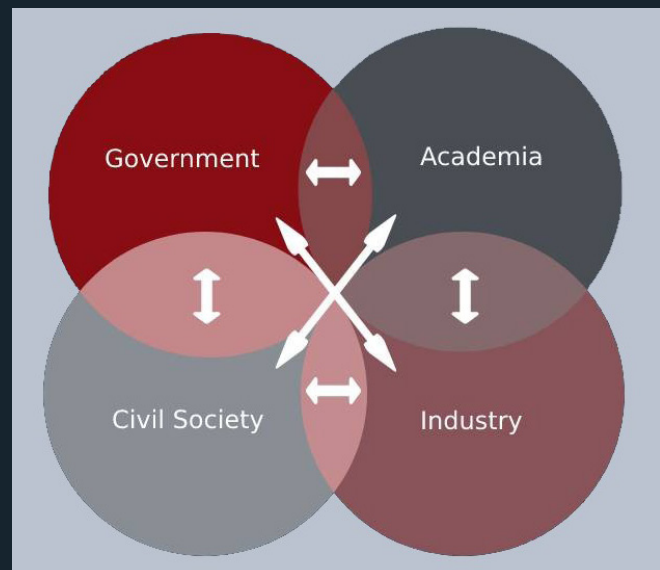
- Digital Strategy Officer
- Subject matter experts from Finance, IT, Corporate Affairs, Economic Development, Community, Climate Change, Municipal, Architects, GIS, Libraries, Tourism, Parks and Housing departments

Engagement

In order to ensure that the projects and interventions implemented as part of this strategy remain reflective of the needs and priorities of the County, continuous and responsive engagement activities will be conducted throughout the life-time of this strategy. Building on the success of our engagement activities conducted in developing the strategy, we will engage both internally and externally by applying the Quadruple Helix model of open innovation. This means bringing together key stakeholders from four cohorts: public sector, citizens and civil society, academia and industry. This is a tried and tested methodology, utilised by our Smart Dublin and Smart Dún Laoghaire initiatives, that ensures a plurality of voices, experiences and expertise from across society can contribute to the direction and delivery of the strategy.

Internally, we will engage regularly throughout the year via our 'dlr Innovation Webinar Series'. These events are open to all staff from across the organisation and will provide updates on strategy implementation, spotlight new innovation and technology projects, upskill and disseminate knowledge, and provide opportunities for our staff to participate in initiatives, share ideas and feedback. Through reports from our Digital Leaders Group, updates will be provided to the dlr Elected Members with presentations to Council and Strategic Policy Committees as required.

We will also engage with other local authorities across the island of Ireland through our participation in the All Ireland Smart Cities Forum and the National Broadband Officers Network. These forums provide regular opportunities for dlr to share updates on the delivery of this strategy and to learn key lessons from our colleagues across the country. Working with our colleagues from the other Dublin local authorities, we will participate in quarterly



Smart Dublin regional events, open to staff from the four Dublin Councils, which showcase how our digital strategy is applying new technologies to deliver better services.

Beyond our own organisation and sector, we will engage with a wide network of external stakeholders. Tapping into the industry network of our Local Enterprise Office, academic network of our Smart Dún Laoghaire district, and civil society network of our Public Participation Network, open events will be facilitated to share updates on strategy delivery, and to provide opportunities for feedback and deeper participation.

The contributions from these internal, sectoral and external engagement activities will be key inputs in the design of our annual work plans.



“ To harness the opportunities afforded by ‘digital’ to transform our County; connecting communities, enhancing economic activity and enabling upskilling to deliver positive outcomes for the citizens of Dún Laoghaire-Rathdown

APPENDICES

Appendix 1.

Work Status Report 2021

PROJECT NAME	CATEGORY	STATUS	COMMENTS
WiFi4EU	Digital Infrastructure	In Progress	Tender to close and work commence mid 2022
IoT Sensors	Digital Economy	In Progress	Deployed and data gathering and analysis commenced
Cycle Parking Analysis	Digital Economy	Complete	Data gathered. Analysis and recommendations presented
eCargo Bikes	Digital Economy	In Progress	Successfully launched. Analysis in progress
Mobility Hub	Digital Government	In Progress	On-going sustainable transport staff project
Digital Inclusion Project	Digital Skills	In Progress	On-going community outreach and internal development
Climote	Smart Projects	In Progress	Units installed and data gathering and analysis underway
Open Data	Digital Government	In Progress	On-going data harmonisation and publication
Probono	Smart Projects	Planning	In planning phase
Score	Smart Projects	Planning	In planning phase
Precinct	Smart Projects	Planning	In planning phase
Duct Management	Digital Infrastructure	In Progress	On-going sensor trial for duct management
LoRa Connectivity	Digital Infrastructure	Planning	Development of LoRa network in planning phase
Ring Buoys Sensor Technology	Smart Projects	In Progress	Pilot in progress. Planning for future roll-out
Big Belly Bins	Digital Infrastructure	In Progress	On-going management of sensor enabled bins
Sustainable Transport Data	Digital Government	In Progress	Data gathering and analysis on-going
Broadband Connection Points	Digital Infrastructure	Complete	Rolled out and BCP now live
Fernhill AR	Digital Skills	Planning	In planning phase
Online Grants	Digital Government	In Progress	On-going development of online grant platform and interface



APPENDICES

Appendix 2. Relevant Policies

- dlr Corporate Plan - https://www.dlrcoco.ie/sites/default/files/atoms/files/final_corporate_plan_2020-24_0.pdf
- dlr County Development Plan - <https://www.dlrcoco.ie/en/county-development-plan/county-development-plan-2022-2028>
- dlr Local Economic and Community Plan - https://www.dlrcoco.ie/sites/default/files/atoms/files/dlr_lecp_annual_report_2016_2.pdf
- National Broadband Plan - <https://www.gov.ie/en/publication/c1b0c9-national-broadband-plan/>
- The National Digital Strategy - <https://assets.gov.ie/27518/7081cec170e34c39b75cbec799401b82.pdf>
- Our Public Service 2020 - <https://www.ops2020.gov.ie/app/themes/ops2020/dist/pdfs/Our-Public-Service-2020-WEB.pdf>
- Government Strategy - <https://egovstrategy.gov.ie/wp-content/uploads/2017/07/eGovernment-Strategy-2017-2020.pdf>
- Public Sector ICT Strategy – Digital First, Data as an enabler - <https://ictstrategy.per.gov.ie/ictstrategy/files/Public%20Service%20ICT%20Strategy.pdf>
- Public Sector Data Strategy – https://data.gov.ie/uploads/page_images/2019-01-03-110200.740673Public-Service-Data-Strategy-2019-2023.pdf
- EU Digital Strategy https://ec.europa.eu/commission/presscorner/detail/en/fs_20_278 & <https://ec.europa.eu/digital-single-market/en/content/european-digital-strategy>
- Digital Single Market <https://ec.europa.eu/digital-single-market/en/news/digital-single-market-benefit-all-europeans>
- United Nations Development Programme Digital Strategy <https://digitalstrategy.undp.org/introduction.html>

Appendix 3. Engagement Output



**DIGITAL STRATEGY
OFFICER**

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