SMART DUBLIN

SPC Smart Cities Update

Comhairle Cathrach Bhaile Átha Cliath
Dublin City Council

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Future Proofing Dublin

"New technologies are continuing to have major impacts on economy, society and the workplace and are fundamentally changing many traditional industries, processes and modes of communication. Being aware of and ready to take advantage of new trends in technology is essential.

Delivering a dynamic, sustainable city that is future ready

2

3

Notable Operations

4

Future is happening now in our cities and towns!

5

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SMART DUBLIN

AN INITIATIVE OF THE **FOUR DUBLIN LOCAL AUTHORITIES** TO ENGAGE WITH TECHNOLOGY PROVIDERS, RESEARCHERS AND CITIZENS TO SOLVE CHALLENGES AND IMPROVE QUALITY OF LIFE.

Comhairle Contae Fhine Gall Fingal County Council | dlr Comhairle Contae County Council | Comhairle Contae Átha Cliath Theas South Dublin County Council | Comhairle Cathrach Bhaile Átha Cliath Dublin City Council

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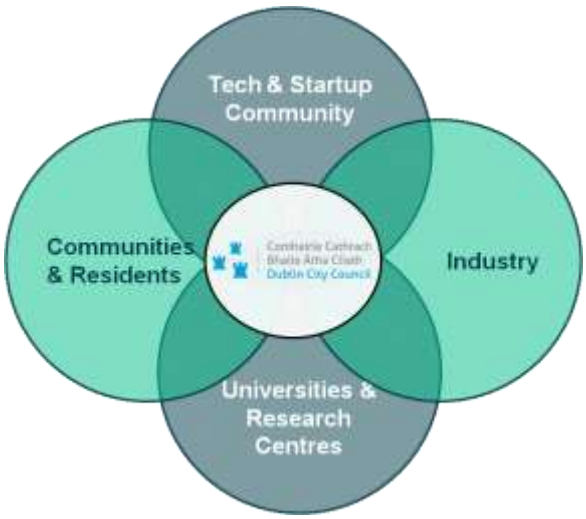
The City as a collaborator – challenge based approach



Jamie.Cudden@dublincity.ie

Comhairle Cathrach Bhaile Átha Cliath Dublin City Council

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DUBLIN AS A TESTBED

> WE ARE BIG ENOUGH YET SMALL ENOUGH TO BE THE IDEAL LOCATION TO PILOT NEW CITY SERVICES & SOLUTIONS

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DUBLIN CITY COUNCIL SMART CITIES

1. CONNECTIVITY PROGRAMME
Helping to build the digital infrastructure to **strengthen city connectivity.**

2. DATA INSIGHTS PROGRAMME
Delivering test cases to show how data can **strengthen Council decision making.**

3. EMERGING TECHNOLOGY PROGRAMME
Delivering test cases to show how technology can **strengthen Council service delivery.**

4. ENGAGEMENT PROGRAMME
Building resources, knowledge, networks and partnerships to **strengthen Council outreach.**

5. PROGRAMME SUSTAINABILITY
To ensure the operations and continuation of the Smart Cities programme.

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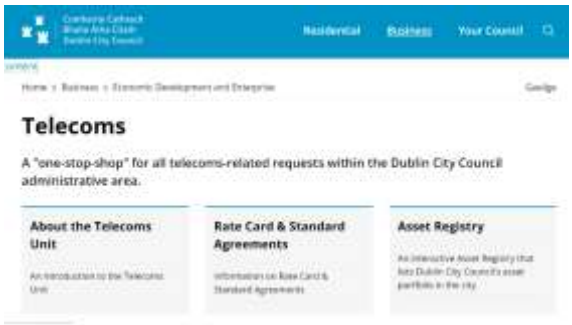
1. Connectivity

- Experimentations on Connectivity
- Pilots and test-bedding
- 5G Whitepaper
- Wifi4EU
- Telecoms Unit Established April 2022 - One Stop Shop
- Telecoms Infra Project (TIP)
- Dublin Regional Enterprise Plan
- World Economic Forum
- City Telecoms Association



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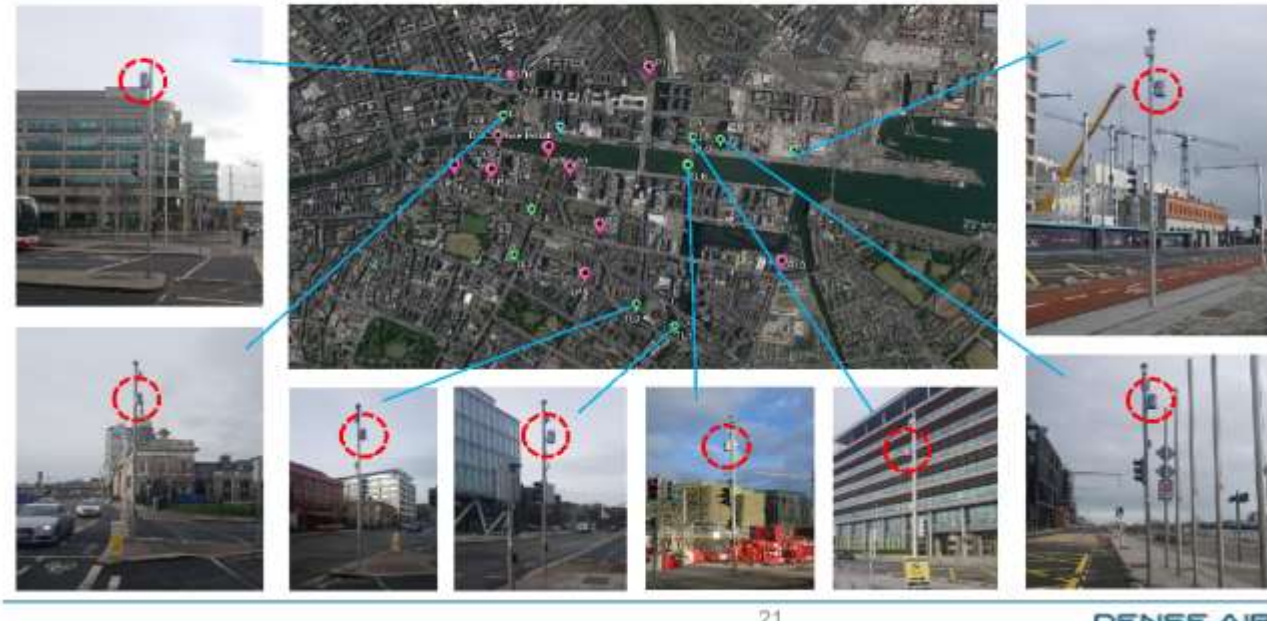
Docklands 5G Testbed – Future Telecoms



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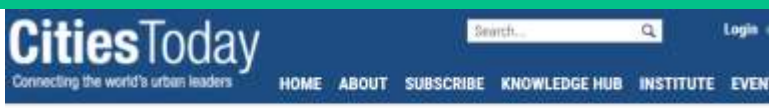

Home / Citizen Engagement

Dublin's Docklands becomes a centre for innovation

17th April 2019 Jonathan Andrews

TOP 5 FDI STRATEGY

RANK	CITY	COUNTRY
1	Smart Docklands	Ireland
2	Vilnius	Lithuania
3	Hamburg	Germany

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SMART DOCKLANDS

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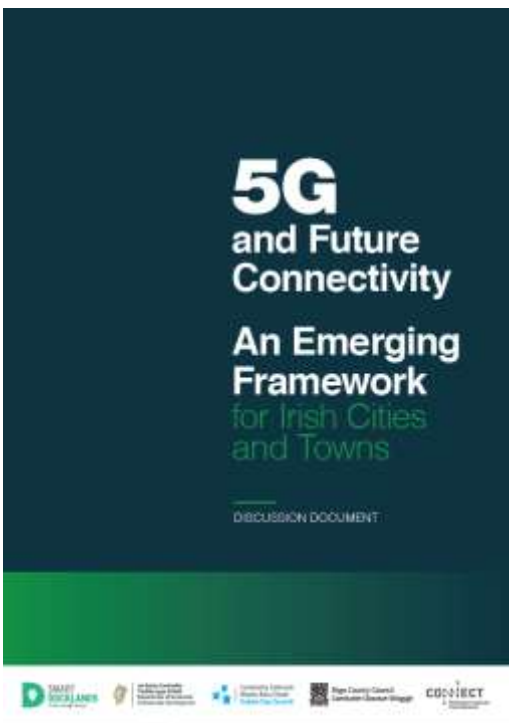

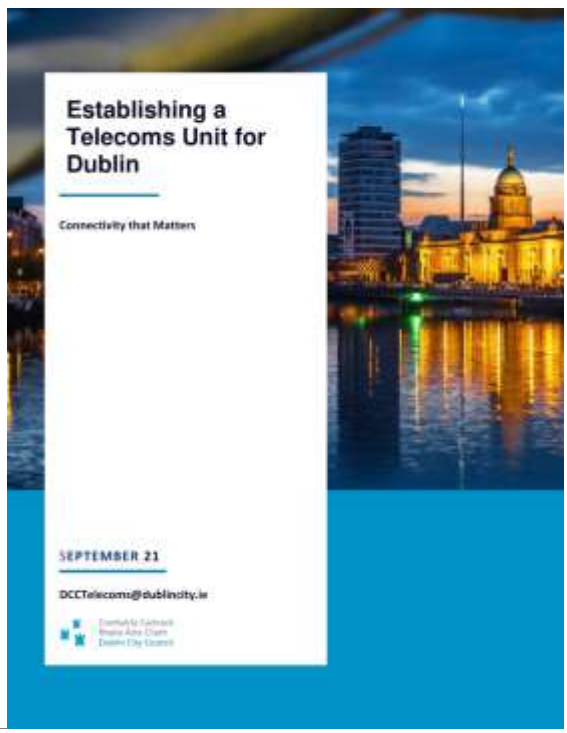

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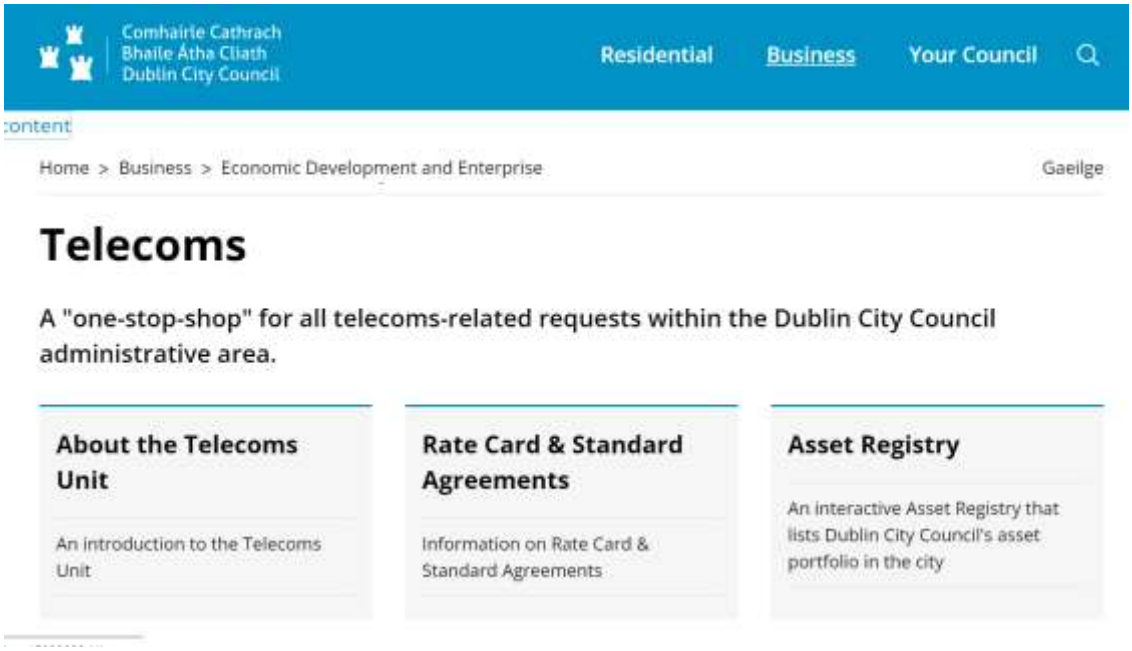

https://www.dublincity.ie/business/economic-development-and-enterprise/telecoms

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2. Data Insights Programme

- Mastercard Spend
- Big Belly Impact Analysis
- Wifi4EU performance
- Drones Monitoring
- Google AirView / Hackathon
- Smart Tourism – data insights
- Dublin Economic Monitor

mastercard

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2. Data Insights Programme

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SMART DUBLIN

Google

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Dublin City Council

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SMART DUBLIN

Google

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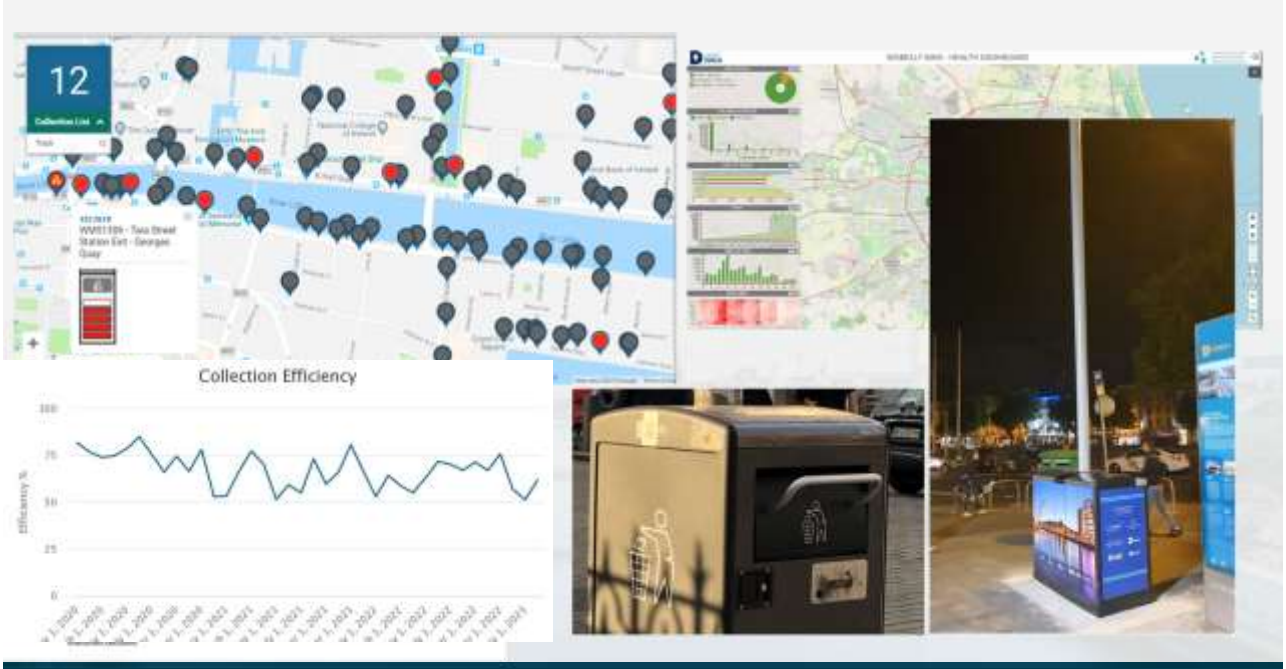

Big Belly Bins Docklands – Data Insights (20k records)

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3. Emerging Technology Programme

- DCC Drones Strategy
- Digital Twin Programme
- Ring Buoys
- Gully Monitoring
- Smart Mobility Hub
- Kerbside Management
- Last Mile Deliveries
- AR and Tourism

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Accelerating the Potential of Drones for Local Government

Available on smartdublin.ie

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Jamie.Cudden@dublincity.ie

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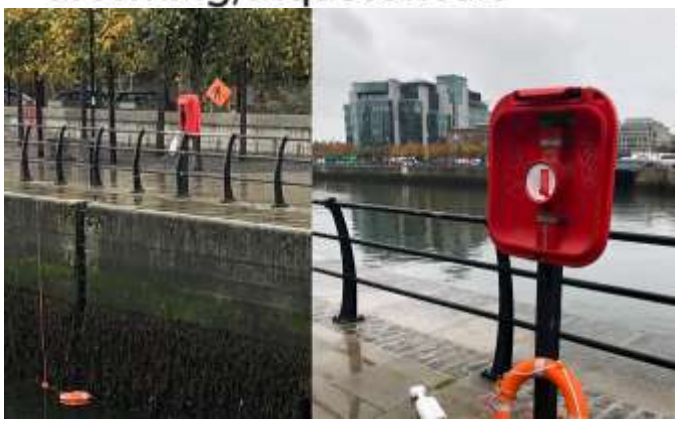
SOLVING CHALLENGES LOCALLY & SCALING

Missing lifebuoy hampered efforts to save actor from drowning, inquest hears



Buoy toys: vandalism of safety floats rings up €50,000 cost

Dublin floats idea of tracker chip deterrent as young men on stag dos are blamed for theft and destruction of safety kit

Local authorities across the country are spending more than €50,000 a year to replace an estimated 1,500 lifebuoys that are stolen or vandalised.

Dublin city council had to replace 500 lifebuoys in 2018 at a cost of €20,000. As the council is in charge of more than 140 lifebuoy locations, it is the equivalent

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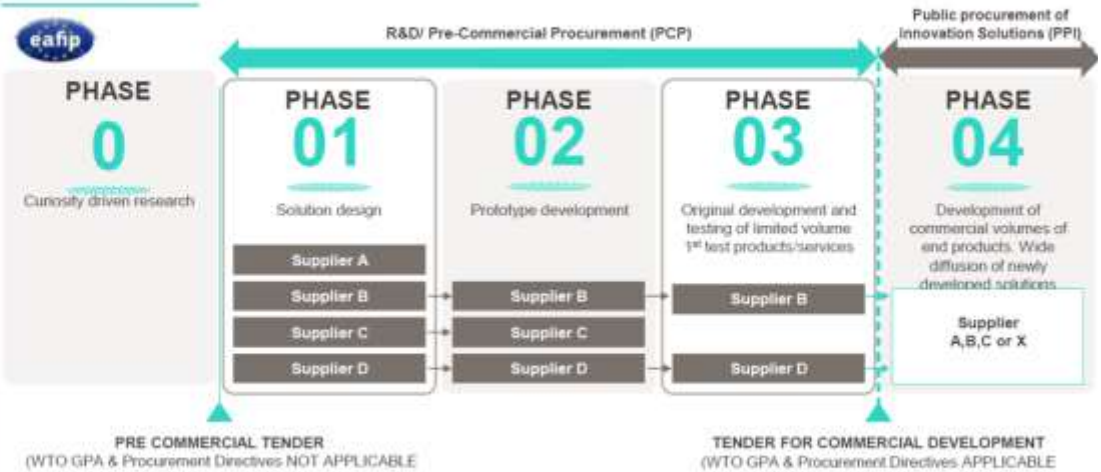
A&L Goodbody

Focus on innovation



https://eafip.eu/

1

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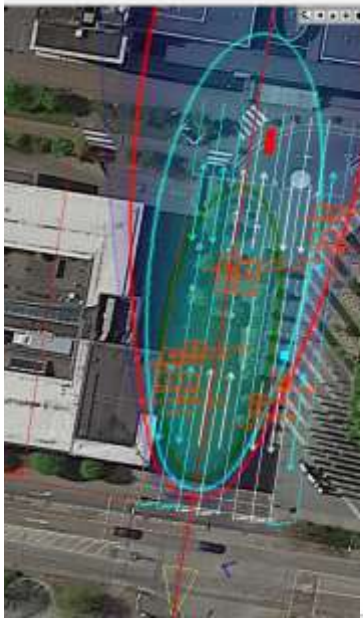
SMART RING
BUOYS PROJECT
SMART
DUBLIN
100s of
Ring Buoys go
missing each year
across Ireland
640+
Sensors
INSTALLED IN
8
LOCAL AUTHORITIES
€145,000
Funding
ON AVERAGE
110
DROWNINGS
PER YEAR

29

30

DCC partnership for Radar sensors at the three main entrance to Glasnevin



Enables real time classification of vehicles, speed, direction and the flow of pedestrians/traffic passing and on off the campus

Enhance the Digital Twins

Real-time occupancy:

- Optimisation of campus as a resource
- Catering planning
- Effects of new bus timetables/routing
- Event timetable/planning
- Predictive analytics
- Unusual patterns

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Dublin City Council

CIVIC

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MOBILE APP FOR HERITAGE TRAIL(S) TENDER

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Dublin City Council

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Discover
portals to
the past

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DiscOvAR
Dublin
Immersive
Storytelling
Interactive
Content
Worldclass AR

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4. Engagement Programme

- Smart Districts Approach fundamental
- Academy of the Near Future
- UN Digital Rights /Public Sector Duty

dogpatch LABS

ADAPT
Engaging Content
Engaging People

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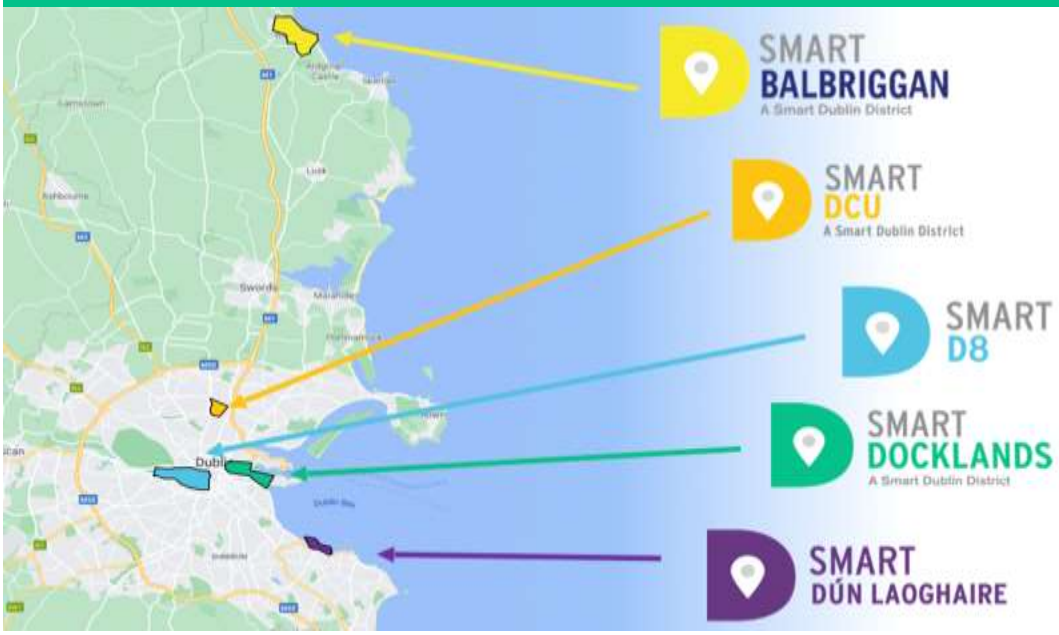
The Smart Dublin Districts



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Not just a University, a Microcosm of a city (100% controlled by the University)

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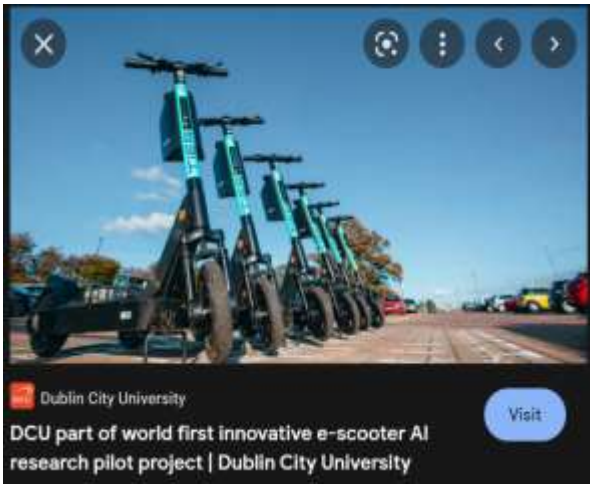
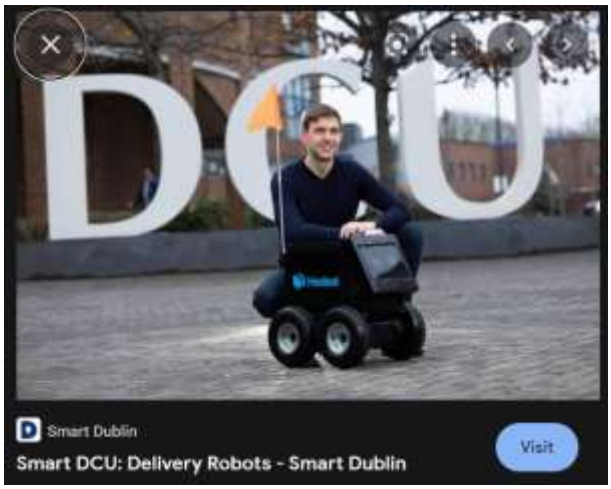
Smart DCU Testing Environment





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SMART D8
A Smart Dublin District

GOVERNMENT
ACADEMIA
INDUSTRY
CIVIL SOCIETY

Citizen Health & Wellbeing

SMART DUBLIN
THE DIGITAL HUB
ST JAMES'S HOSPITAL
Comhairle Cathrach Bhaile Átha Cliath Dublin City Council
Health Innovation Hub Ireland
GEC
HSE Digital Transformation
Tyndall
NCAD DUBLIN
Trinity College Dublin
St Patrick's Mental Health Services

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Call for Pilots 2023 +

Seeking Innovative Approaches to Health and Wellbeing Challenges

Citizen Health & Wellbeing

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Smart D8 : Selected Pilots 2023 +

Menopause and The City | Brace
MoveAhead | OSA Identifier App

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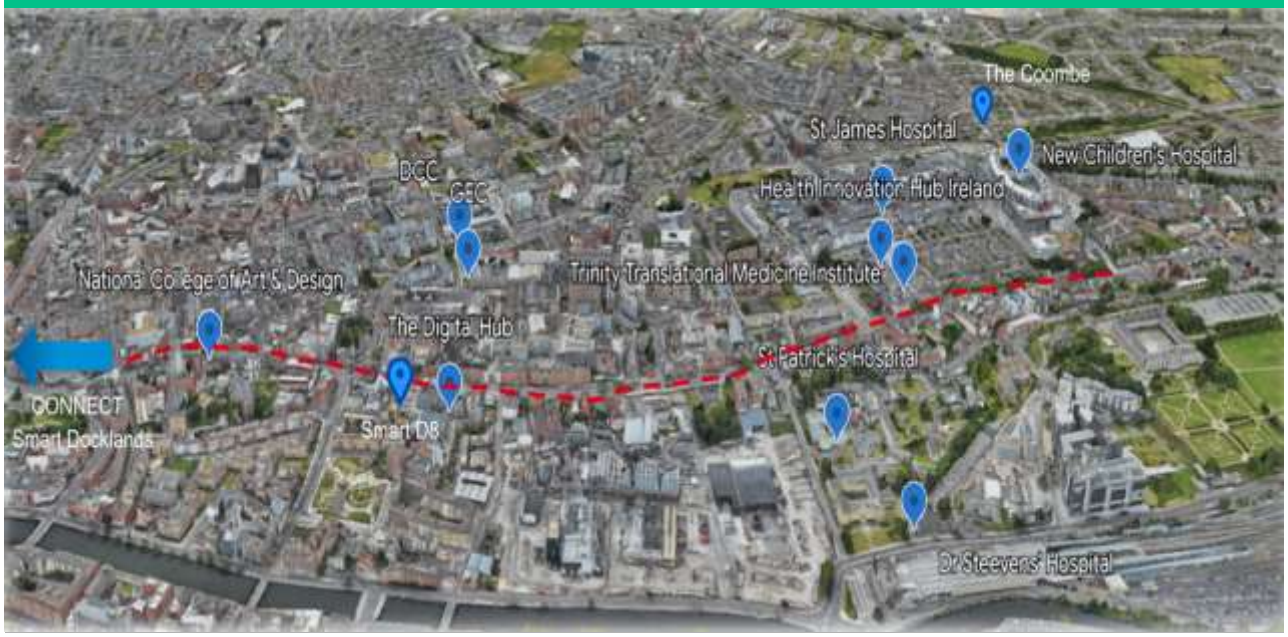
Connected Healthcare ecosystem



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SMART DOCKLANDS

FUTURE CONNECTIVITY

5G/6G IN HEALTH CARE

20th June 2023, 9:40-14:30

The Bank at The Digital Hub
85 James Street, The Digital Hub, Dublin 8
D08 C2PR

CONNECT

THE DIGITAL HUB

- Brought academics, industry, city and healthcare professionals together
- Key takeaways: coordinated approach to connected healthcare; need for funding/investment; cost of deployment; alignment on potential use-cases
- Opportunity to build upon DCC telecoms agenda, CONNECT research, eHealth strategies and deliver significant societal impact

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Connected ambulances

Drone delivery

Immersive training & triage

Remote consultations

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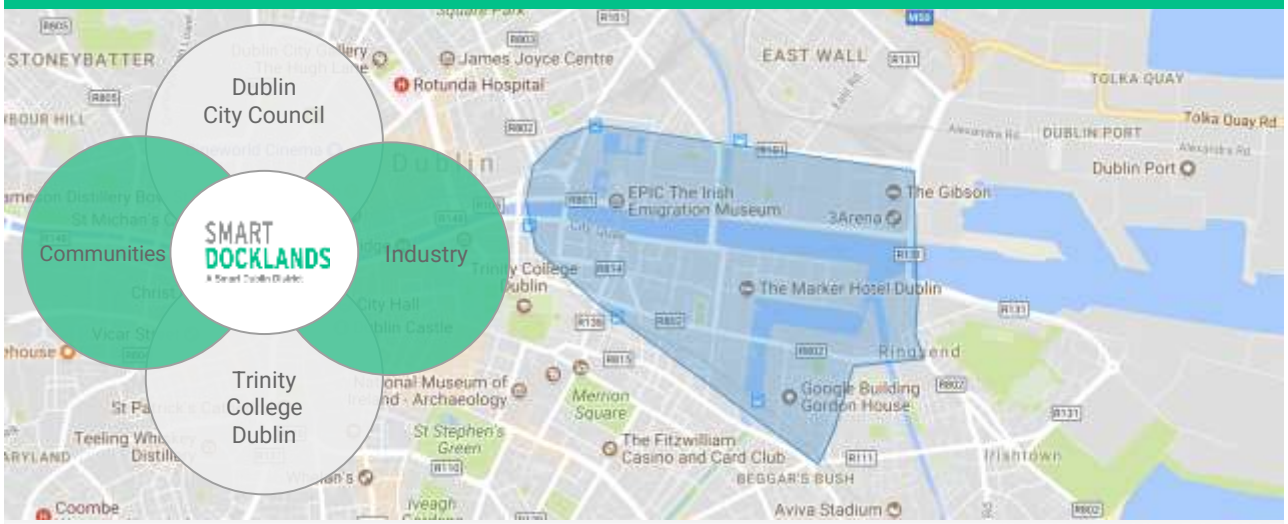
Smart Docklands District



Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin

CONNECT
SFI Research Centre for Future Networks

sfi
Fondúireacht Eolaíochta Éireann
Ga bhfuil romhainn
Science Foundation Ireland
For what's next

Comhairle Cathrach Bhaile Átha Cliath
Dublin City Council

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Shaping the Future of Cities

"**Smart Docklands is *a unique partnership between Dublin City Council and the SFI Connect Centre for Future Networks and Connectivity based in Trinity College Dublin to future proof Dublin*.** Supporting the acceleration and adoption of new and emerging technologies for Cities"

Smart Docklands was the first of Dublin's 'smart districts'" which has now expanded to 5 districts.

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Dublin City Council

Fondúireacht Eolaíochta Éireann
Science Foundation Ireland

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Smart City Technology

Experimenting with new connectivity for city services

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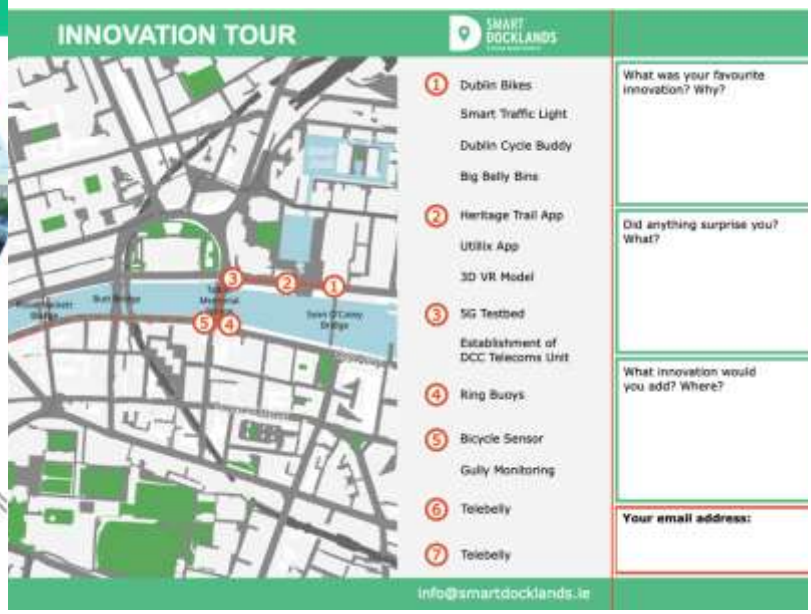

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SMART DOCKLANDS

Docklands Innovation Tours

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SMART DOCKLANDS

Engagement Programme

ACADEMY OF THE NEAR FUTURE

Building awareness & empowering young people & local authority staff to tackle 21st-century city challenges

CONNECT Centre for Future Networks

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SMART DOCKLANDS

SFI Fondúireacht Eolaíochta Éireann Science Foundation Ireland

53

72% female participants

5

70% DEIS schools

15 air pollution and traffic sensors set up in DCC schools

DESIGN YOUR FUTURE CITY

2 week-long programmes
14+ collaborators
8 student projects

1 youth internship

Over 1500 students

8 action projects on Active Travel

21 staff in Digital Rights module

3 staff modules in development

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DESIGN YOUR FUTURE CITY

Prototyping ideas & presenting to city leaders

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ACADEMY OF THE NEAR FUTURE

Module 2: Privacy and Ethics & Digital Rights

What are the privacy and ethical implications of deploying technology solutions in Dublin?

- Impacted stakeholder groups
- Intended & unintended consequences

Connection between digital rights and the Irish Public Sector Duty

Delivery robots in Dublin

March 2023: Delivered pilot module on Digital Rights and the Public Sector Duty in collaboration with UN-Habitat and the Cities Coalition for Digital Rights

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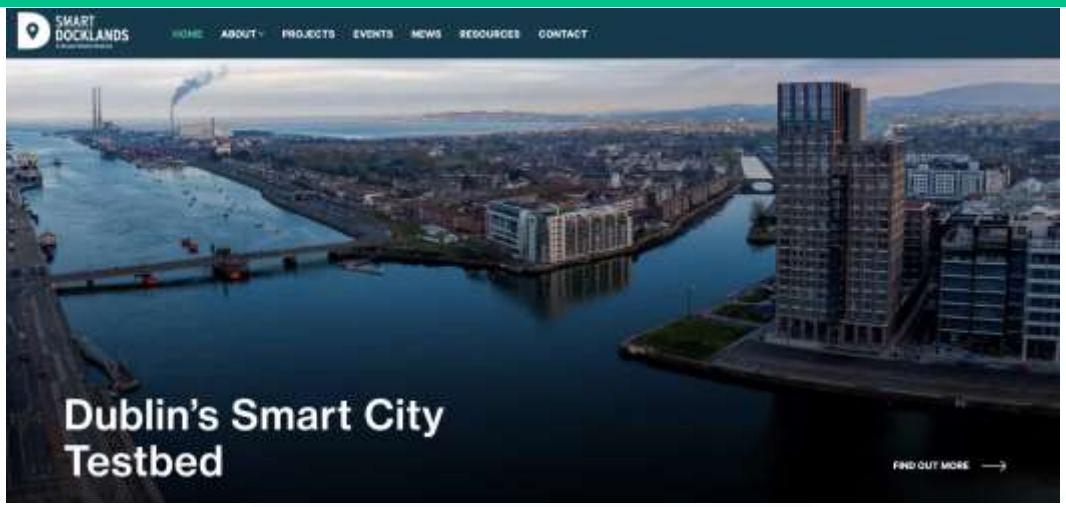
Jan 2024 Call For Pilots



"We are big enough yet small enough to be an ideal location to pilot new city services & solutions."

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www.smartdublin.ie

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