

# CORK SMART GATEWAY ACTIVITIES REPORT

September 2023-2025

















# **Table of Contents**

Introduction	1
Promoting Cork as a Smart and Innovative Region	2
Cork Smart Gateway Website	2
Cork Smart Gateway LinkedIn Page	2
Cork Smart Gateway X.com (Twitter) Page	2
Events and Presentations	2
Cork Smart Gateway Projects	5
Cork Smart Gateway, VQ & Cork Business Association Smart Street Project	5
Cork Smart Gateway & UCC Green Campus Smart Bike Project	8
Doing Business in Cork: An Entrepreneurs Guide 2023	11
EU Climate Sparks Hackathon	12
Eco-system Building & Strategic Development	13
Industry Day Event: Tech Industry Alliance/Skillnet, CSG and UCC's School of Co	mputer
Science & IT	13
Cork Smart Gateway Webinar Series	14
Supporting Ongoing Projects Across Cork	
Reflections and Future Considerations	18
Promoting Cork as Smart Region	18
Eco-system Building	
Smart Projects	20

# Introduction

The Cork Smart Gateway (CSG) is a collaborative initiative funded by Cork City Council, Cork County Council and University College Cork, and supported by a steering group consisting of the Tyndall National Institute, Nimbus Technology Gateway, Cork Chamber, Tech Industry Alliance and Energy Cork. Established in 2016, the CSG brings together stakeholders from across Cork city and county together to foster a coordinated, innovative ecosystem and position Cork as a smart region. Over the past two years, the CSG has concentrated on three strategic priority areas, each of which has made a positive contribution to advancing Cork's smart region ambitions.

- Promotion: Promoting and showcasing the wide range of smart and innovative projects taking place across Cork to local, national and international audiences.
- **Eco-system Building:** Coordinating the region's innovation ecosystem by facilitating collaboration and strategic alignment among key stakeholders.
- **Smart Projects**: Leading projects and highlighting opportunities to pilot and deploy innovative technologies.

By advancing new initiatives and supporting existing projects across these three key strategic areas, the CSG has acted as a catalyst for innovation, connections and collaborations, working in close collaboration with Cork City Council, Cork County Council, University College Cork (UCC) and other key organisations. While complementing and adding value to the ongoing initiatives of each organisation, the Cork Smart Gateway has also been able to pursue projects that may not currently be core priorities for each council, while still making a positive contribution to their broader work.

Over the past two years, the CSG has firmly established itself as a key stakeholder in Cork's innovative eco-system, The work of the CSG has made a meaningful contribution to the objectives outlined in several key strategic frameworks for both Cork City and Cork County including the Cork City and County Development Plans, Local Economic and Community Plans (LECPs), and Cork City's European Commission Climate-Neutral and Smart Cities Programme. Through its projects and stakeholder engagement, the CSG has supported the advancement of regional goals related to innovation, sustainability and digitalisation.

This report provides a detailed account of the projects and initiatives delivered by the CSG over the past two years, highlighting their objectives, outcomes, and overall contribution towards developing Cork as a smart region. This report also includes reflections on the progress made while also outlining future opportunities and strategic considerations for the year ahead, offering a forward-looking perspective on how the Cork Smart Gateway can continue to play an influential role in Cork's smart and innovative development. The Cork Smart Gateway thanks all the organisations a stakeholders it has worked closely with over the past two years and looks forward to continuing these partnerships in the year ahead.

# Promoting Cork as a Smart and Innovative Region

As mentioned in the introduction, one of the key functions of the CSG is to promote and disseminate knowledge regarding the various innovative projects and initiatives happening across Cork to local, national and international audiences. The main channels used to achieve this include the CSG website, its LinkedIn social media page, and participation in a variety of local, national, and international events throughout the year. These platforms have allowed the CSG to share project updates and showcase Cork while also engaging with a wide range of stakeholders and organisations.

# **Cork Smart Gateway Website**

When the CSG was re-established in September 2023, one of the first task's was to redevelop the Cork Smart Gateways online presence and website. The website is the online home for the CSG where people can learn about the CSG and read about smart and innovative developments in the region.

Officially launched in January, 2024. The process of developing the website took approximately six months, this involved designing the layout of the site, identifying target audiences, developing content and securing a hosting domain. The corksmartgateway.ie domain name was retained from when the CSG was first launched in 2016 and is still in use.

# **Cork Smart Gateway LinkedIn Page**

The official CSG LinkedIn page was launched in November 2023. Setting up the LinkedIn presence was a key step in enhancing the CSG's online presence, as it is the go-to social media platform for professionals and organisations. It provides an easy and effective way to connect with the right audience and share relevant content. The page has been managed entirely through a free account, with no paid promotions or boosted posts, all growth has been completely organic.

## LinkedIn Stats

- The page currently has 341 followers.
- There has been over 100 posts shared, generating more than 10,000 impressions.

# Cork Smart Gateway X.com (Twitter) Page

The CSG also has a presence on X, with over 1,000 followers. The CSG was posting on X until roughly mid 2024 until it was decided to stop posting on X due to the character limits placed on free accounts which limited effective communication. Another factor which led to this decision was the overall devolution of X and the questionable content being shared on the platform.

# **Events and Presentations**

The Cork Smart Gateway has had several opportunities to attend and speak at events and awards ceremonies, these have served as opportunities to promote the work of the CSG and innovation in the region. They also serve as an opportunity to meet with different stakeholders and learn about ongoing initiatives and discuss potential projects and collaborations. Some of the events that the CSG has participated in and contributed towards are discussed below.

# Tech Industry Alliance Leaders Awards 2023 & 2024.

For the past two years, the CSG has sponsored the Smart Technology Innovation Award which is a category in the Tech Industry Alliances annual Leaders Awards. The award recognises the innovative use of technology or bio-technology by companies based in Cork or Kerry. In 2024, the Cork Smart Gateway participated solely as a member of the judging panel, while in the 2025 the Cork Smart Gateway led and coordinated the judging process.

The 2023 winner of the Smart Technology Innovation award was Skillsbase, a Cork based software company. In 2024, the winner of the award was BioAtlantis, a Tralee based bio-tech company. The presentation of the Smart Technology Innovation Award by the CSG serves as a fantastic opportunity to promote the CSG at one of the premier regional events to key stakeholders and support innovation in the region.



Sean Lotty of the Cork Smart Gateway presenting the Tech Industry Alliance Smart Technology Innovation Award to BioAtlantis at the 2025 Leaders Awards

#### CONNECT Industry Day Event, Cork County Council 2023

The CONNECT industry day event took place in September 2023 in Cork County Hall. The goal of the event was to introduce CONNECT's research themes to locally-based companies with a view to establishing new research partnerships. The event was hosted in partnership with Cork County Council. The Cork Smart Gateway delivered a presentation which gave overview of the Cork Smart Gateway Programme and innovation in the region. The event was attended by local industry and CONNECT researchers based in universities across Ireland.

# Irish Planning Institute Annual Conference 2024

The Irish Planning Institute (IPI) held its annual conference in Waterford on April 18-19, 2024, at the Theatre Royal in Waterford City. The theme of the conference was "Planning for Smart, Sustainable, and Competitive Regions and Cities". The CSG delivered a fifteen-minute

presentation and participated in an interactive panel discussion that followed. The presentation focused on showcasing Cork's innovative ecosystem and its role in advancing Cork's strategic goals, particularly in relation to innovation, climate action and sustainable development. The event was attended by over 200 senior level stakeholders from a diverse range of sectors across Ireland.

# Smart City World Expo 2024

The 2024 Smart City World Expo took place in November in Barcelona, Spain. The CSG attended the event to gain insights into global best practices in smart city development. During the expo, the CSG engaged with other city and regional representatives from around the world and established valuable new connections that could support future collaborations and initiatives in Cork. While engaging with these representatives, the CSG also raised awareness of Cork and it's smart region ambitions.

At the conference the CSG met with representatives from EIT Urban Mobility. EIT Urban Mobility is a body of the European Union focussed on accelerating the transition to sustainable mobility. From this the conversations held at the expo, meetings were then held with Cork City Council to explore the potential of collaborative projects.

# Cork City Council Open Street Workshop Event 2024.

On December 2024 in the old Cork Savings Bank, Cork City Council hosted a workshop in relation to their Open Street programme. The Open Streets Programme seeks to implement a series of car free days on selected streets throughout 2025 with specific events being ran during each car free day.

The objective of the workshop was to discuss the topic of data collection to assess the impact of each car free day and support future initatives. The CSG presented on potential methods of data collection and assessment based it experience from previous CSG projects and best practice from across Europe.

The workshop was attended by various stakeholders from Cork City Council, Cork Chamber, Cork Business Association, An Garda Siochana, Bus Eireann and more. Following the workshop, the CSG facilitated an introduction between Cork City Council and the ENTIRE European Digital Innovation Hub to explore how ENTIRE's services might support the project. The workshop was attended by a broad range of stakeholders, including representatives from Cork City Council, Cork Chamber, Cork Business Association, An Garda Síochána, Bus Éireann, and others.

# TIPS4PED Positive Energy District EU Project Consortium Meeting 2025

On June 10th, 2025, the TIPS4PED project consortium held a project meeting at the Tyndall National Institute. The TIPS4PED initiative aims to develop a Positive Energy District in Cork's North Docklands using digital twin technology. Cork is participating as a follower city, with Turin serving as the lighthouse city and the CSG is acting as a supporting partner in the project

The meeting featured presentations from several key stakeholders, including the Tyndall National Institute, Cork Docklands, Cork City Council, and representatives from Turin. The CSG contributed by delivering a presentation providing an overview of the CSG, innovation in the Cork region and potential data sources to support the development of a digital twin for the North Docklands area.

# **Cork Smart Gateway Projects**

Another key focus areas of the CSG is the development of pilot projects and testing the use cases of innovative technologies. These low-budget, low-risk initiatives act as catalysts for innovation, enabling the Cork Smart Gateway to collaborate with partners on more experimental projects without significant financial commitment. These projects have enabled the Cork Smart Gateway to deliver tangible outputs and benefits on the ground benefitting the stakeholders involved.

# Cork Smart Gateway, VQ & Cork Business Association Smart Street Project

The Smart Street project idea originated from discussions with Shane Clarke, the then Manager of the VQ (Victorian Quarter) and the Cork Business Association. Funded by local businesses, the VQ aims to promote and support the urban development of the MacCurtain Street in Cork City Centre. Both the VQ and the Cork Business Association have a strong interest in data-driven urban management, particularly around monitoring footfall and traffic volumes—critical insights for local businesses and planning efforts. After initial discussions, the project was then led by the Cork Smart Gateway.

The initial concept was to pilot a small-scale project to test cost-effective solutions and develop a basic dashboard to support the VQ's and Cork Business Association's decision-making. In January 2024, high-level ideas and potential technologies were explored. Through a series of collaborative meetings, four streets—MacCurtain Street, Bridge Street, Oliver Plunkett Street, and North Main Street—were identified as test deployment locations. It was agreed to procure ten Telraam S2 sensors, developed by Telraam, a Dutch SME focused on creating affordable pedestrian and traffic monitoring solutions. Ten Telraam S2 devices were purchased at a total cost of €2,000

The Telraam device is installed on a window overlooking the street and contains a small camera that captures low-resolution images every two seconds. These images are processed by an onboard AI algorithm to detect and classify traffic and pedestrian activity. Once analysed, the images are immediately discarded—no visual data is stored—ensuring privacy. The processed data is then transmitted to an online dashboard, where it is visualized through a range of detailed graphs and charts.



The Telraam S2 Device

The first stage of the project ran for one year initially resulting in many positive developments including:

- Official launch a press release with the VQ, Cork Business Association and Cork City Council.
- The Evening Echo published an article on the project which significantly promoted the Cork Smart Gateway.
- Produced monthly reports tracking the trends in footfall and traffic in the VQ for the VQ board members and laid the initial ground work for developing a prototype VQ dashboard.
- Resulting data shared with the Cork Business Association offering insight into activity in the city.

As the project progressed, Irish Rail joined the project. Irish Rail provided monthly passenger data for arrivals and departures at Kent Station. These figures were incorporated into the reports to offer more detailed insights into activity around MacCurtain Street and the South Docks area.

As the project gathered momentum, discussions on smart technologies for urban management expanded beyond Cork City to include Telraam. The CSG's deployment of devices in an urban environment prompted Telraam to develop a new outdoor device designed for installation on existing street infrastructure, such as street lights. This innovation eliminates the need for businesses or residents to host devices, simplifying installation and management. The device was presented to Cork City Council via the CSG leading to the council procuring four units for testing in Cork City Centre. Cork City Council views these devices as a cost-effective solution for monitoring footfall and traffic trends.

The project has also supported Cork City Council's Open Data objectives. Data from the devices is now integrated into the Council's Open Data Portal via the Telraam API, enabling

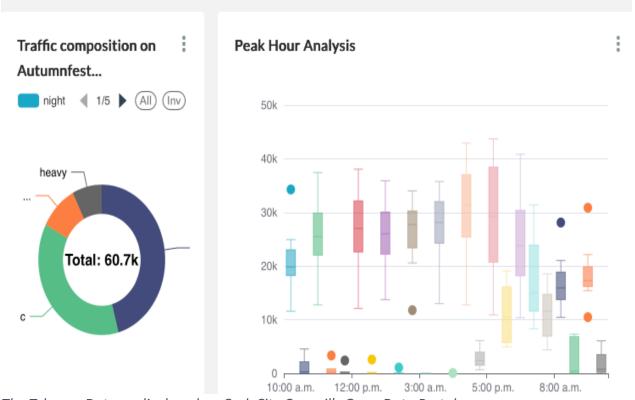
public access for research and other purposes. To view Cork City Council's Open Data Portal and the available datasets visit data.corkcity.ie

# Traffic Composition

- Pedestrian movement dominates (approx. 60.7k total).
- Car traffic is the next significant contributor, followed by bikes and heavy vehicles.
- · Night traffic represents the lowest share.

#### Peak Hour Distribution

- Peak traffic volume occurs between 11:00 AM and 3:00 PM\*.
- · Car and pedestrian traffic show the widest variation during peak hours.
- Some categories (e.g., bike, heavy) show tighter distributions, with minimal outliers.



The Telraam Data as displayed on Cork City Council's Open Data Portal

Currently, the data is being utilized by Saanvi Bhagat, a master's student at UCC's School of Mathematical Sciences who is undertaking her masters in collaboration with UCC's Centre for Research into Atmospheric Chemistry. Her research is examining the impact of traffic volumes on air quality in Cork City and Saanvi is using Telraam data to develop models that simulate various traffic scenarios.

# Cork Smart Gateway & UCC Green Campus Smart Bike Project

The Smart Bike Project was a collaborative initiative between CSG and UCC Green Campus. It aimed to recruit ten UCC students and staff to use bicycle-mounted air quality sensors over a three-month period to collect air quality readings along their commute to and from the UCC's campus. The project sought to demonstrate the potential of citizen science, raise awareness of air quality among the university community, and evaluate the performance of SODAQ air quality sensors in Cork.



Office of Sustainability and Climate Action An Oifig um Inbhuanaitheacht agus





# UCC Green Campus & Cork Smart Gateway Smart Bike Project Citizen Science Research



Smart Bike Project Poster

Initial discussions in November 2024 identified collaboration opportunities between the CSG and UCC Green Campus, inspired by similar European projects. It was felt by both organisations that there was a strong synergy between the work of the CSG and UCC Green Campus's climate objectives. This project offered the opportunity to apply innovative technologies to contribute towards climate action, delivering on objectives for both the Cork Smart Gateway and UCC Green Campus. The learnings of the project would also help inform the work of Cork Healthy Cities and showcase how citizen science can be used to achieve strategic climate related objectives.

After evaluating options, the SODAQ bicycle-mounted air quality sensors were chosen. Procured in February 2025 for €2,000, the cost was shared equally between both organisations. The sensor is a battery-powered device equipped with an air quality sensor, GPS, SIM card, and accelerometer. When mounted on a bike and movement is detected, the sensor collects air samples every ten seconds. The device then Stops recording data automatically when the AIR speed reaches above 50km/h.

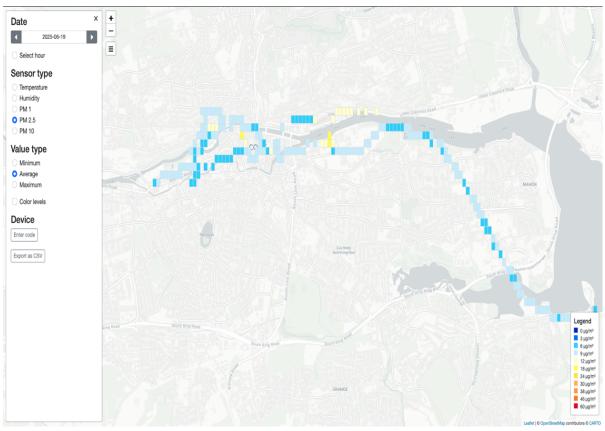


The SODAQ Air Quality Sensor as used in the project.

These samples are linked to GPS coordinates and anonymously displayed as a coloured tile on the knowyourair.net map, allowing participants to monitor air quality readings along each part of their route daily The device will automatically remove the first and last 10 minutes of every journey to protect users privacy.

The device measures particle parameters including PM1, PM10, with a primary focus on PM2.5. The device also measures humidity levels, concentration of particulate matter is directly linked to the temperature and water content of the air. With the AIR's advanced sensors users can get a complete understanding of those parameters and the resulting changes in air quality.

The device also offers real time insights LED light strip changes colour on the users route to signal changes in air quality. Green, orange, and red lights alert the users to low, medium, and high concentrations of PM along their journey.



#### Knowyourair.net Data Map

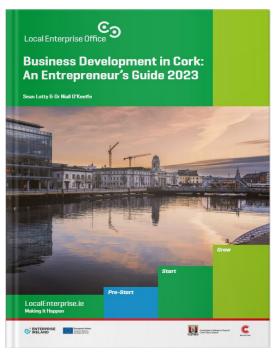
Following the procurement of the devices , participants were recruited via an open call promoted on relevant social media channels and networks. Of the ten participants, six were UCC staff and four were students. The participants used the devices for approximately three months during their daily commutes to and from UCC. The collected data was uploaded to the Knowyourair.net platform, providing a detailed breakdown of measurements. The data has also been made available on Cork City Councils Open Data Portal.

At the project's conclusion, a survey was conducted to assess participants' experiences with the devices and any changes in their perception of air quality.

The project was a success and with good learnings taken in regards to running citizen science based projects and the management of innovative technologies in this context, some of the key project outputs include:

- Collected valuable air quality data over three months which will be used in various research projects by the Centre for Research in Atmospheric Chemistry, UCC.
- Deployed and tested the SODAQ Air Quality Sensor in an Irish and Cork context, opening the door for future projects of this nature.
- Conducted a participant survey which gave insight to climate behavioural changes after using the device.
- Showcased the opportunity's to use citizen science in engaging the public in projects and shared the learnings with Cork Healthy Cities.

# Doing Business in Cork: An Entrepreneurs Guide 2023



Business Development in Cork: An Entrepreneurs Guide 2023 was a digital booklet developed in partnership with the Local Enterprise Office, Cork City. The purpose of the booklet was to serve as an easy and accessible repository of information and provide an overview of all the known supports available to SME's in Cork.

The development of the booklet was led by Dr. Niall O'Keeffe, Head of Enterprise at the Local Enterprise Office Cork City. Dr. O'Keeffe had identified a gap in the availability of information, noting the absence of a single, accessible resource for SMEs to explore the full range of available supports. The original concept was to develop an online digital resource which is when discussions with the CSG began.

While the booklet was developed in partnership with the Local Enterprise Office Cork City, a wide array of stakeholders provided material for inclusion. Each key stakeholder in Cork's enterprise and innovation eco-system was contacted and asked to provide a summary of their supports relevant to SMEs. In total roughly one hundred stakeholders contributed material for the booklet.

The booklet was the first of its kind developed by any Local Enterprise Office in Ireland and officially launched during Local Enterprise Week 2024 by the then Minister for Enterprise Simon Coveney. A large number of stakeholders who contributed to the booklets development were present on the day. Since its publication on the Cork City Council website, the booklet has been viewed over 2000 times with numerous downloads.

# **EU Climate Sparks Hackathon**

In July 2024, the Cork Smart Gateway took part in the EU Sparks for Climate Hackathon, a Europe-wide series of hackathons aimed at fostering collaboration between citizens and researchers to develop innovative solutions for climate challenges. Supported by the European Commission, these events aligned with the EU Missions on Climate-Neutral and Smart Cities and Adaptation to Climate Change.



Poster for the EU Climate Sparks Hackathon

The programme saw twenty two local hackathons hosted online by over Over 20 EU member states, the CSG and Louth County Council were selected to represent Ireland and host the Irish hackathon. An Irish team was assembled which included community representatives from the Glasheen area in Cork City and Co. Louth and PhD researchers from the Research Ireland supported CONNECT research centre, Ireland's leading research centre for sustainable communities.

The climate challenge the Irish team set out to solve was how to create an early warning flood system to help local residents prepare and mitigate against flooding in the Glasheen area of Cork City. A small stream runs behind a number of houses in the area and It has been a problem in recent years where unexpected flooding has been occurring in the area.

The Irish team developed initial ideas around an IoT based early warning system that could be created with off the shelf equipment at low cost. The idea was to mark key levels in the river and when breached an alert would be sent to the residents. The team presented the idea to a panel of judges but unfortunately our project was not selected to progress to the finals. Overall it was still a valuable experience as the Cork Smart Gateway was afforded the opportunity to represent Cork and Ireland on the European stage.

# **Eco-system Building & Strategic Development**

A key focus for the Cork Smart Gateway has been helping to strengthen Cork's innovation ecosystem. This has involved working closely with stakeholders to develop new initiatives, build connections, and share knowledge. The CSG has continually collaborated with the CSG Steering Group members to exchange updates, explore opportunities for joint projects, and help add an extra layer of cohesion and strategic direction to the innovation efforts across the region.

To facilitate this the CSG delivered a programme of webinars and events and supporting ongoing stakeholder led projects. In addition to this, the CSG is continually meeting with stakeholders formally and informally to sign post them to relevant projects and initiatives and stay up to date with each stakeholders work programme. As a result, the CSG has been able to strategically align and raise awareness of the initiatives happening cross the region.

# Industry Day Event: Tech Industry Alliance/Skillnet, CSG and UCC's School of Computer Science & IT.

The joint industry day event delivered in partnership with the Tech Industry Alliance, Skillnet Ireland, UCC's School of Computer Science & IT, the CSG. This was the first major event delivered by the CSG and was an excellent example of the CSG in action, bringing stakeholders from academia and industry together to provide a forum for networking, collaboration and innovation. This event was the first time these organisations had collaborated in this fashion.



The Industry Day Event Poster

The idea for the industry day was originally presented to the CSG steering group by the CSG in August 2024. Given that the CSG is based in UCC's School of Computer Science & IT and had been supporting the school with its industry engagement, the CSG identified an opportunity deliver an industry day with Tech Industry Alliance/Skillnet. Given that the Tech Industry Alliance/Skillnet is a CSG steering group member and a major industry cluster in the southwest region it made strong sense to deliver an event in partnership with them. In addition to playing a key role in organising the event, Tech Industry Alliance/Skillnet kindly sponsored the catering for the event.

The objective of the event was to highlight the innovation supports on offer through UCC's School of Computer Science & IT to local industry. UCC's School of Computer Science & Information Technology is a leading centre for innovation, hosting three Science Foundation Ireland research centres that conduct cutting-edge work in computer science. The School is also a key partner in the newly established ENTIRE European Digital Innovation Hub. ENTIRE brings together UCC's School of Computer Science, the Nimbus Technology Gateway, the Walton Institute, and Skillnet Ireland. Funded by the European Commission, ENTIRE serves as a one-stop shop for SMEs seeking to begin or advance their digitalisation journey. The event provided a platform to strengthen connections between Cork's local industry base and the School, acting as a catalyst for future collaboration and potentially innovative joint projects.

The event took place on 28 January 2025 in UCC's Western Gateway Building. A morning event, it featured a series of presentations followed by a Q&A session. Prof. Dirk Pesch, Head of School MC'd the event and following Q&A while four speakers presented on the schools key research areas. Speakers included:

- Prof. Cormac Sreenan (UCC): Networks, Computer Architectures, and Software Systems
- Prof. Ken Brown (UCC): Artificial Intelligence and Data Analytics
- Dr. Laura Maye (UCC): Human-Computer Interaction and Interactive Media
- Dr. Ena Tobin (ETOS): Shared insights from ETOS's collaboration with UCC's School of Computer Science on a previous research project. Dr. Ena also provided an industry perspective on university research projects.

The event was highly successful with over seventy five people in attendance. Attendees included Tech Industry Alliance/Skillnet industry members, researchers from across the region, PhD students and representatives from Cork City and County Council. The event gained great social media traction with many of the attendees highlighting how insightful and engaging they found the event leading to significant promotion for all organisations involved. The success of the event laid the foundations for future events and collaborations of this nature between the partners.

# **Cork Smart Gateway Webinar Series**

The CSG webinar series served as an effective platform to foster collaboration among stakeholders within Cork's innovation ecosystem. Webinars offer a cost-effective and accessible way to share knowledge and promote initiatives and services on offer from different stakeholders. The CSG webinar series was delivered in partnership with the ENTIRE Digital Innovation Hub, represented by both Nimbus and School of Computer Science & IT,

University College Cork. The primary objectives of the webinars were to highlight the services provided by ENTIRE to SMEs and public sector organisations. In total, three webinars were delivered in collaboration with the Local Enterprise Office Cork City, Local Enterprise Office Cork North and West and Cork City Council.

# **Local Enterprise Office Webinars**

The first webinar began in partnership with the Local Enterprise Office (LEO) Cork City, followed by LEO Cork North and West. Aimed at SMEs in the early stages of digitalisation, the webinars sought to highlight the free and match-funded supports available through the ENTIRE European Digital Innovation Hub. The idea originated in September 2024, when the CSG identified an opportunity to collaborate with LEOs and ENTIRE to support local SMEs in advancing their digital and innovation goals. The Local Enterprise Offices were happy to collaborate as the webinars served as an opportunity to connect with other stakeholders in Cork's innovation eco-system and highlight other services on offer to their clients.



Poster for the Webinar Delivered with the Local Enterprise Office Cork City

Both webinars featured presentation from Local Enterprise representatives and Brian Cahill of the Nimbus Technology Gateway and Chrys Ngwa of ENTIRE and UCC's School of Computer Science & IT. The booking and hosting and promotion of the webinars were managed by the LEO's while the content delivery was managed by the CSG and ENTIRE.

The webinars were quite successful with a total of thirty five SMEs attending both webinars. There were many follow up discussions from attendees with both Brian and Chrys afterwards to learn more about the services on offer. Several of the attendees went on to

attend the AI Literacy training courses delivered by ENTIRE & UCC's School of Computer Science & IT.

# Cork City Council Webinar: Public Service Transformation Week.

The Cork City Council webinar was delivered in collaboration with Cork City Council's innovation forum as part of Public Service Transformation Week. Public Service Transformation week is a national week dedicated to focusing on leveraging technology to improve public services and operations within local authorities. This webinar also was delivered in partnership with ENTIRE represented by both the Nimbus Technology Gateway and UCC's School of Computer Science & IT. One of the key objectives of ENTIRE is to help drive digitalisation in public bodies and this webinar served as a great opportunity to forge connections between ENTIRE and the various departments in Cork City Council.



Poster for the Webinar Delivered with Cork City Council

The webinar was hosted by Cork City Council and promoted internally to it's staff members. Outputs. The webinar was highly successful with there being over 80 attendees from a variety of departments within Cork City Council. There were also some attendees from other council's across Ireland. The webinar was the most attended event ever run by Cork City Council's innovation forum. Many of the attendees went on to sign up to the AI training courses offered by ENTIRE and some initial discussions were held with the Nimbus Technology Gateway around potential projects.

# **Supporting Ongoing Projects Across Cork**

In addition to leading its own initiatives, the Cork Smart Gateway has played an active role as a steering group member in several partner-led projects. In this capacity, The CSG has provided guidance on smart technologies and innovative solutions. This involvement has not only allowed the Gateway to influence project direction and outcomes but also to foster collaboration and connect stakeholders involved in similar initiatives across the region.

# Climate Neutral & Smart Cities Programme Cork City Council

The EU Climate-Neutral and Smart Cities Mission aims to support 100 cities in becoming climate-neutral and smart by 2030, serving as innovation hubs to inspire all European cities to follow suit by 2050. As part of the Horizon Europe programme, the mission is supported by initiatives such as NetZeroCities, which provides tools and expertise to help cities reach their climate goals. Cork City is among the 100 selected cities participating in this ambitious mission. The CSG has actively contributed to several initiatives under the Climate-Neutral and Smart Cities programme. Its role has included advising on smart technologies and strategies, as well as connecting Cork City Council with key stakeholders and organisations that can support the mission's objectives.

# Cork City Open Streets Programme.

The Cork City Open Streets programme is led by Cork City Council's Climate Action Team and aims to implement a series of car-free days on selected streets across the city. The initiative promotes the use of streets as shared spaces for community engagement, health, and recreation—shifting the focus from vehicles to people.

A key component of the programme is data collection to measure and evaluate its impact. Given its experience with the Smart Streets project in the VQ, the CSG was invited to discuss suitable data collection technologies. The project is ongoing, with the main events scheduled to launch in September. CSG has also facilitated connections between Cork City Council, the Nimbus Technology Gateway, and Telraam, to explore potential technology solutions for monitoring and analysis.

# Cork City Council TIPS4PED project

The TIPS4PED Project is a European initiative aimed at designing, developing, and testing the effectiveness and techno-economic feasibility of a Digital Twin-based platform to support municipalities in implementing Positive Energy Districts (PEDs). Cork, Kozani (Greece), and Budapest (Hungary) are participating as follower cities, with Turin, Italy serving as the lighthouse city.

Local project partners include Cork City Council, the Tyndall National Institute, and the International Energy Research Centre (IERC). The Cork Smart Gateway has supported the project by advising on relevant data sources for the digital twin and its potential applications in strategic decision-making for PED development. The CSG has contributed to multiple steering group meetings, provided guidance on data collection strategies, and facilitated introductions to researchers working in the field of digital twins.

# **ENTIRE European Digital Innovation Hub Steering Group**

The CSG has assisted the newly established European Digital Innovation to promote the consortium and their services. CSG has regularly contributed to various ENTIRE steering group meetings. The CSG also worked collaboratively with ENTIRE to promote its services and make introductions across the region particularly to key public sector bodies such as Cork City Council and the Local Enterprise Offices.

# Southern Regional Assembly Smart Regions Programme

The CSG is in continuous contact with the Southern Regional Assembly, supporting its various projects and sharing updates regarding Cork's smart and innovative developments. The CSG also acts as a key liaison, connecting the Southern Regional Assembly with relevant stakeholders in the region, including local authorities, academic partners, industry representatives, and community organisations. By facilitating this coordination, the CSG helps to align local innovation projects with broader regional objectives

# Reflections and Future Considerations

The CSG has delivered considerable contributions towards Cork's smart and innovation ambitions and has established itself as a key and trusted stakeholder. There are many opportunities for the CSG to continue to develop and build on this progress. The CSG should continue to operate under the three key strategic areas listed below. By delivering initiatives under these three key strategic areas, the CSG will be able to continue making significant contributions towards Cork's development as a smart region.

- **Promotion:** Promoting and showcasing the wide range of smart and innovative projects taking place across Cork to local, national and international audiences.
- **Eco-system Building:** Coordinating the region's innovation ecosystem by facilitating collaboration and strategic alignment among key stakeholders.
- **Smart Projects**: Leading projects and highlighting opportunities to pilot and deploy innovative technologies.

As discussed in the report, the CSG has engaged considerably with both Cork City and Cork County Council. These collaborations have delivered tangible and considerable benefits to Cork. There is the opportunity to build on these successes and further develop these engagements in a more formal and structured manner to fully realise the potential of the CSG. Given that the CSG is interconnected with many of the key stakeholders across Cork, the CSG can be utilised as a vehicle to strengthen collaboration across the region. Both Cork County Council and Cork City Council have ambitious strategic digital sustainability objectives to which the Cork Smart Gateway (CSG) is well positioned to make a substantial and measurable contribution towards.

# **Promoting Cork as Smart Region**

#### Website & Social Media

The Cork Smart Gateway has effectively engaged a broad network of stakeholders to promote Cork as a smart region. Building on this momentum, key objectives for the coming period include maintaining regular publication of news articles on the CSG website, growing the follower base on the CSG LinkedIn page, and sustaining active engagement with

stakeholders to remain informed about developments across the region. With significant amount of smart and innovative work happening across various directorates in both Cork City and County Council, it is important information on these initiatives is shared with the CSG at the CSG steering group meetings to ensure that they can be effectively promoted.

The Cork Smart Gateway will continue to prioritise consistent communication with stakeholders to source content. Relevant content can then be shared with the like of the Southern Regional Assembly and the All-Ireland Smart Cities Forum to leverage their extensive networks and achieve greater reach.

An opportunity for further visibility involves partnering with stakeholders to contribute feature articles for their websites and publications. This approach leverages existing networks to reach wider audiences. A successful example of this was CSG's contribution to Chamberlink, the Cork Chamber's quarterly magazine, which highlights key developments in Cork's enterprise and innovation ecosystem.

#### **Events & Presentations**

As outlined in the report, the CSG has presented at numerous stakeholder events over the past two years. These opportunities have allowed CSG to highlight the regions smart credentials, raise the profile of the CSG, and engage with diverse audiences. Continuing this momentum, the CSG will to present at a minimum of two relevant events per year. While local events remain important, expanding participation to national and regional conferences would help reach broader audiences less familiar with Cork's smart initiatives.

Additionally, ongoing sponsorship and support of initiatives such as the Tech Industry Alliance Leaders Awards should be maintained. These events offer valuable opportunities to support local stakeholders and SMEs while strengthening the CSG brand and its presence within the innovation ecosystem.

# **Eco-system Building**

# **Partnerships**

The Cork Smart Gateway (CSG) has been successful in strategically aligning and coordinating various initiatives across the region. This has been achieved through its programme of webinars, events, and ongoing stakeholder engagement. With the groundwork laid and credibility established in this space, there is now an opportunity to build on this success with a potential stronger focus on digitalisation and digital skills. Given the CSG's integration with the ENTIRE European Digital Innovation Hub, there is potential for both councils to partner with the CSG to jointly deliver a targeted programme focussing on digital skills. This programme would support citizens and SMEs in learning about rapidly developing digital technologies.

Proposed target groups and focus areas include:

- **SMEs and Start-ups** Training on AI adoption, data analytics, cybersecurity and EU-funded innovation supports.
- Citizens Awareness campaigns and training on topics such as AI, digital public services, and data privacy.

The CSG has already delivered a successful programme of events and webinars which have proven highly effective in engaging stakeholders, fostering innovative connections, facilitating knowledge exchange, and enhancing CSG visibility. Continuing to develop and deliver this programme should remain a key objective in the coming year. Webinars could be used to address the strategic focus areas listed above, with delivery in partnership with a wide range of organisations depending on the target audience. Potential partners could include Cork County Council, Cork City Council, Local Enterprise Offices, Cork Chamber, Cork Business Association, Cork Learning Cities, and Public Participation Networks.

In addition to webinars, in-person events could also be delivered to maximise engagement and networking opportunities. The joint event hosted in collaboration with the Tech Industry Alliance, UCC, and ENTIRE demonstrated the strong impact of multi-stakeholder engagement. It successfully educated a broad audience, strengthened relationships, and promoted the work of all partners. Building on this success, similar collaborative events should be organised over the coming year, focusing on high-impact, relevant themes that advance Cork's smart region goals in which Cork City and Cork County Council could be partners.

## **CSG Steering Group Meetings**

Over the past two years, more than twenty online Steering Group meetings have been held, with the aim of meeting once per month. Overall attendance has been strong, with consistently high levels of engagement from all members. The monthly meeting frequency has proven effective and will be maintained going forward. In addition, the Steering Group should consider holding at least one in-person meeting annually to further strengthen collaboration and relationships.

# **Smart Projects**

#### **Locally led Projects**

Developing innovative projects remains a key function of the Cork Smart Gateway and should continue to be prioritised. There are significant opportunities to initiate small-scale, collaborative projects with various partners that deliver tangible outcomes and act as stepping stones to larger initiatives. Many projects originally initiated by the Cork Smart Gateway have continued to evolve, with learnings applied and new partners joining as the project progresses.

The Smart Street project with the VQ is a prime example of this evolution. Discussions are currently underway with Heineken Ireland, which has expressed interest in supporting the deployment of advanced footfall monitoring technologies in the VQ area, aligning with their vision of developing a Smart Business District. In addition to this, plans are being developed to conduct air quality studies during peak school traffic hours to assess emissions impact. This aspect of the project is being pursued in collaboration with the VQ and the Centre for Research into Atmospheric Chemistry. The CSG is also in discussions with the Cork Transport Mobility forum to deploy new outdoor Telraam S2 sensors on active travel routes in Cork City.

Through projects like the VQ Smart Street initiative and the air quality project with UCC Green Campus, the Cork Smart Gateway has established itself as a trusted partner for organisations seeking to deliver innovative, small-scale pilot projects.

With both council's working in alignment with the LGMA's local Government and Digital ICT Strategy, there may be opportunities for both councils to collaborate with the Cork Smart Gateway on low-cost, locally led projects. These initiatives can deliver real and tangible benefits to stakeholders on the ground, while requiring fewer resources than larger European-led projects and being much easier to implement. For projects of this nature to succeed, consistent engagement from both councils will be important.

# **Joint EU Funding Applications**

Another potential avenue for engagement could be that Cork County Council and Cork City Council could partner with the CSG to strategically target European programmes and secure funding for high-impact, regional smart projects. Both councils bring access to public infrastructure, operational resources, and statutory authority to implement large-scale initiatives. The CSG complements this with its extensive innovation network and stakeholder coordination.

By combining these strengths, strong funding bids could be prepared to leverage the funding on offer through major EU funding streams such as Horizon Europe calls related to climate-neutrality and smart cities and Digital Europe Programme projects focussed on AI adoption, open data platforms, and cybersecurity.