

# Belfast

# 5G

## INNOVATION REGION

### 5G Funding Competition

### Partner Introduction Webinar

**Webinar will start soon.** This briefing is being recorded.  
Please post any questions you have in the Q&A chat.



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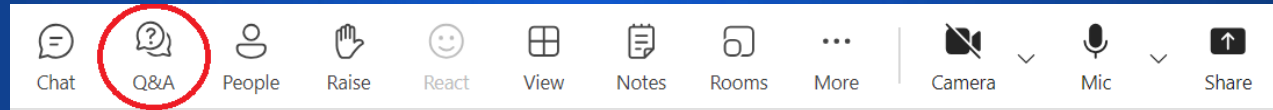
## Agenda

11.30am - 11.35am	<b>Welcome</b> Paula Fee, Belfast City Council
11.35am - 11.40am	<b>Introduction to applicant support and competition context</b> Guy Middleton, Spirit Public Sector
11.40am - 11.45am	<b>Meet the applicant support team leaders</b> Tony Sceales and Ed King, Spirit Public Sector
11.45am - 12pm	<b>Example 5G/advanced wireless use cases</b> Tony Sceales and Ed King
12pm - 12.45pm	<b>Presentations from prospective suppliers and partners</b> Pitchers
12.45pm - 1pm	<b>Q&amp;A and next steps</b> Guy Middleton



# Questions & Answers

Please use the Q&A facility in Teams



# 5G Funding Competition

Full competition and applicant support details are available on the website [www.smartbelfast.city](http://www.smartbelfast.city) (includes video recording and slide deck from Competition Briefing Webinar on 26 June – if you missed it).



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## Today's session

This session is about ***building the partnerships*** to deliver successful wireless projects

- **Applicant Support** – you're not on your own
- **Use Cases** – there are examples to learn from
- **Solutions** – suppliers have ideas for addressing your challenges

Today is about helping people to **connect**.



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## Introduction

- The competition is open to **use case owners/solution users only**.
- They must apply, not the suppliers.
- But **suppliers are crucial** to getting projects off the ground.  
Most applicants will need a delivery partner to implement advanced wireless.
- Suppliers – find applicants
- Applicants – find suppliers and partners, look at what others are doing, use the applicant support

## Applicant support

- **Up to three days of free expert consultancy** support to help applicants to:
  - develop 5G/advanced wireless projects
  - identify potential partners to resolve capability or capacity gaps
  - improve their application, aligned to the competition's guidance.
- This **free, optional** service is **independent** and **confidential**. It will work with applicants as a critical friend, offering practical advice and challenge. It is not a bid writing service.
- Don't worry if your project idea isn't fully formed yet – **get in touch** and the team will help you to explore and develop your use case idea.



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## Meet the team

- **Decades of real-world experience**  
In telecoms, government, and digital delivery. We've seen what works.
- **Well-connected**  
We know the types of suppliers you'll need and how to find them.
- **We understand how grants work**  
We've helped design, judge, and deliver schemes like this. We know what assessors want.



Ed King

- 30+ years in Tech and Telecoms
- 5+ years as Technical Design Authority at DCMS/DSIT on 5G Testbeds and Trials and Future Networks Programmes
- Innovate UK evaluator
- Former Lead Architect BBC
- Former Analysys Mason/ATOS Consulting
- UKTIN Creative Industries EWG



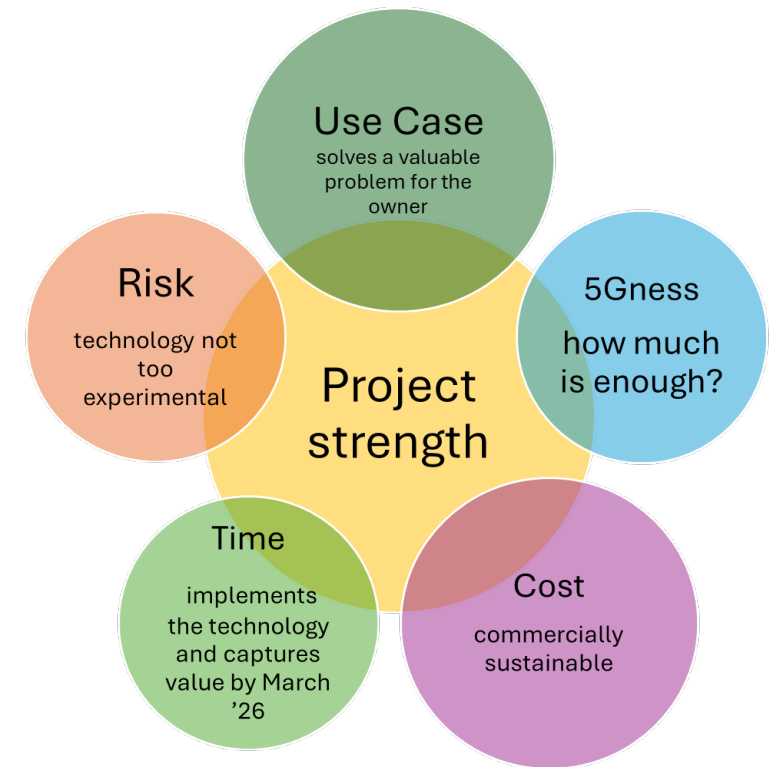
Tony Sceales

- 30+ years in Tech and Telecoms
- 4 years at DCMS/DSIT leading Development of the 5G Testbeds and Trials Programme
- Technology Director of Borderlands 5GIR
- Founder/Chair/CEO/CTO
- Global Technology leadership roles at BT, IBM, Telstra, Swisscom, KPN
- Co-chair UKTIN Health & Care EWG



## 5G and Advanced Wireless – Context

- Remember: **5G is evolutionary, not revolutionary.** It's a direction of travel, not a fixed point.
- Projects could include private 5G, LTE, Wi-Fi 6 & 7, LPWAN, satellite, etc. - depends on what fits the use case.
- **Competition scoring favours 5G**, but that's not the only factor - deliverability, value for money, clarity of need all count.
- Don't over-engineer. The best projects will be **credible, quick to implement**, and clearly beneficial.



## 5G and Advanced Wireless Techniques

- Advanced Wireless:
  - 5G & LTE, Private and Public Networks
  - LPWAN
  - WiFi 6 & 7
  - mmWave
  - ...
- Wireless is important when you have:
  - Things or people that move
  - Things that are dispersed over wide areas
- Don't do 5G for the sake of it – horses for courses!

### Flexibility

The flexibility of 5G means that networks can often be set up more quickly compared to traditional wired networks that require extensive planning and cabling. This can support more rapid deployment and reconfiguration of business operations.

Examples:

**Construction:** Rapid deployment of site connectivity for project duration.

**Event location manufacturing:** Quick setup of temporary production facilities.

**Emergency response:** Rapid deployment of connected command centres.

### Remote access

5G's ultra-low latency delivers real-time communications with zero lag, offering better real-time decision-making off site. This can support industries that involve remote workers such as maintenance staff, engineers and technicians.

Examples:

**Manufacturing:** Remote expert troubleshooting of complex machinery.

**Utilities:** Remote inspection of infrastructure using connected drones.

### Security

5G offers more advanced encryption capabilities, data privacy, authentication, and controlled access which are particularly beneficial in regulated industries like healthcare, manufacturing, and logistics.

Examples:

**Defence manufacturing:** Secure production data transmission.

### Mobility

Faster, more stable 5G mobile connections enable users to work flexibly. Access full industrial systems and controls whether on the factory floor, at a client site, or in a supplier meeting.

Examples:

**Field service:** Engineers accessing full diagnostic tools and documentation on-site.

**Quality control:** Inspectors conducting remote

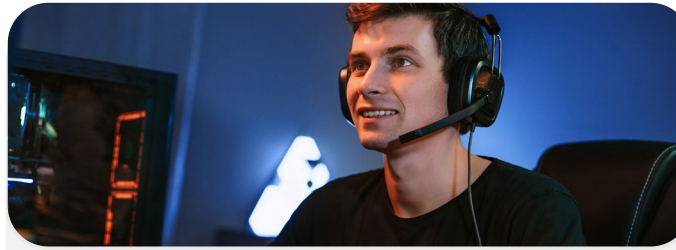


## Use Case Examples



### Health & Social Care

- Remote patient diagnostics
- Gateway uses 5G/LTE or Satellite and translates to wireless health devices.
- Mobility for patient and carer
- Benefits: Patients stay at home longer, lower risk and costs versus hospital, built-in data capture/accuracy



### Creative industries

- Pop-up Outside Broadcast
- North West 200 (NI motorcycle race)
- A 5G network in a box that supports a broadcast production crew where there's unreliable mobile coverage.



### Logistics

- Real time supply chain tracking both in-building and in wider areas.
- Track and monitor deliveries, product and assets in real time.
- End user apps provide improved customer experience.



## Use Case Examples



### Manufacturing

- Moving parts connected wirelessly.
- Essential equipment relies on reliable connectivity.
- Reliability, mobility and cost can be tailored to meet user's requirements.



### Environmental monitoring

- Where no mobile coverage available.
- IoT devices with direct to satellite connections.
- Used in Wales to monitor river levels and pollutants.
- DEFRA - support nutrient monitoring for growers



### Event management

- Provide a pop-up network for special events.
- Supports organiser and public safety communications
- Allows calls from the public to emergency services.
- Supports cashless payments.

## Use Case Examples

• • •

"If the endpoint moves around or many endpoints are over a wide area – wireless..."

## Resources

- Belfast 5GIR 5G Adoption Toolkit (transport, logistics, creative industries, construction)
- Glasgow 5GIR Projects (social housing, health and social care)
- Ayrshire 5GIR Use cases (manufacturing, creative industries, tourism, aerospace)
- Borderlands 5GIR Use cases (tourism)
- Oxfordshire 5GIR Use cases (rail transport, advanced engineering)
- Greater Manchester 5GIR Programme (manufacturing, decarbonisation)
- River Severn Partnership 5GIR Projects (rural industries, water management)
- North East 5GIR Report (transport and logistics, creative industries, agritech)
- Growing Sussex 5GIR Use Cases (food production, agriculture)
- West Midlands 5GIR Use cases (manufacturing, smart communities)
- UKTIN Deployment Toolkits (health, transport, logistics, manufacturing, agriculture)



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# Presentations from prospective suppliers and partners

- 3-4 minutes each.
- Focus on: What you offer, what types of projects you can support, any past work that's relevant, example 5G/advanced wireless use cases.
- Be clear if you're a network provider, integrator, device supplier, platform/software provider, facility, business support consultancy etc.
- Invite follow-up conversations - this is about starting relationships.



# Innovation Partner For Your Business

Ashleigh Jordan  
5G Business Development &  
Innovation Manager  
VodafoneThree  
[ashleigh.jordan1@vodafone.com](mailto:ashleigh.jordan1@vodafone.com)





# Co-Creation, Collaboration and Innovation – Underpinned by Advanced Wireless Technology



## Connected Worker

Working with the DPMC to deploy a private 5G network that is currently demonstrating use cases such as AR and VR technology to improve efficiency and training for advanced manufacturing across Scotland.

## Digital Twin for Aviation

Working with UWS, Dell and the aerospace ecosystem to utilise a “5G MPN in a box” to demonstrate the value of 5G to create virtual environments for aviation manufacturing

## Water Quality Monitoring

Working with the local fisheries and environmental agency's to protect Atlantic Salmon, Vodafone installed IoT sensors that allow the real time monitoring of the water quality within the River Nith.

## Next Gen Networks for Health & Social Care

Working with GCC to trial network slicing technology to enable “dedicated” service to care homes for critical digital devices



## Assisted Living Programme

As the technology partner for Spinal Injuries Scotland, We are deploying smart devices within the home to support rehabilitation and independent living



## 5G Connected Campus

Partnering with Oxfordshire County Council as part of their 5GIR programme – Vodafone is delivering a smart connected campus solution using private 5G technology to deliver a “best in class” digital infrastructure



## Network as a Sensor

Endorsed by Scottish Government, SEPA, Transport Scotland and the London Boroughs – Vodafone have deployed a smart environmental monitoring network across Glasgow and the City of London

Proud to be a part of Vodafone's everyone.connected programme to help 4 MILLION people and businesses cross the digital divide



## Everyone Connected

Committed to bridging the digital divide and skills gap across the UK. Upskilling businesses and communities to support a digital future.





# JET Connectivity



We develop and deploy pop-up, fibreless private 5G networks for rapid, secure deployment, enabling fast, robust communication for industry, energy, construction, defence & security, port and offshore safety, disaster relief, and search & rescue operations.

- 7 seconds from **power up** to **live network** in any environment – urban, industrial, rural, land, sea or air
- 100% UK designed and built
- Temp to Perm, fully scalable 5G solutions

Alex Lawrence-Berkeley

[alexlb@jet-eng.com](mailto:alexlb@jet-eng.com)

Head of Sales and Marketing

<https://jet-eng.com>





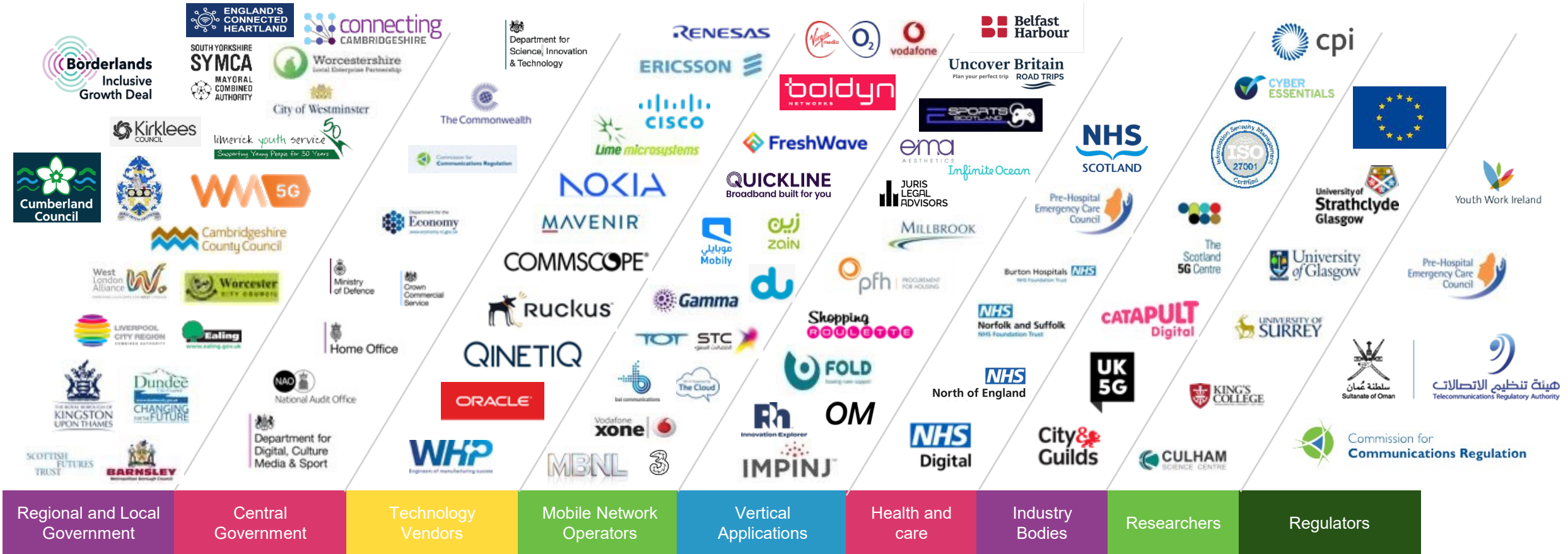
## 5G Webinar



Contact information:  
Peter Najm([peter.najm@awtg.co.uk](mailto:peter.najm@awtg.co.uk))  
Ian Vernon([ian.vernon@awtg.co.uk](mailto:ian.vernon@awtg.co.uk))



# Delivering value to customers through quality and expertise



## Innovative Platforms

- Generative AI
- Agentic AI
- Privacy compliance
- Asset exchange and management
- Service correlation and assurance
- Coverage and performance maps

## Advance Applications

- AI / ML recommender systems
- AI / ML customer support systems
- Immersive applications
- Bespoke applications using own innovations
- rApps and xApps for Networks

## Design, Deploy and Operate

- More than 100 5G MPN delivered
- More than 6000 5G sites deployed and optimised
- Managed enterprise Wi-Fi for hundreds of buildings

## Trusted Partners

- Trusted by regulators, local and national governments
- Cyber Essentials Plus, ISO 27001, ISO 9001, ISO 14001, ISO 2000, ISO 45001 Certified, HAWASA compliant
- Multiple frameworks (Network Services 3, GCloud 14, PFH, etc.)
- FRANC, FONR, ONE, UK-ROK R&D

## R&D, Microservices and IP

- 5G MPN, DAS and RIS
- Artificial Intelligence
- SW IP and microservices for right fit implementation
- Open APIs integration to industry products
- Hybrid Open Core Software licensing



# Who are we and what do we do?



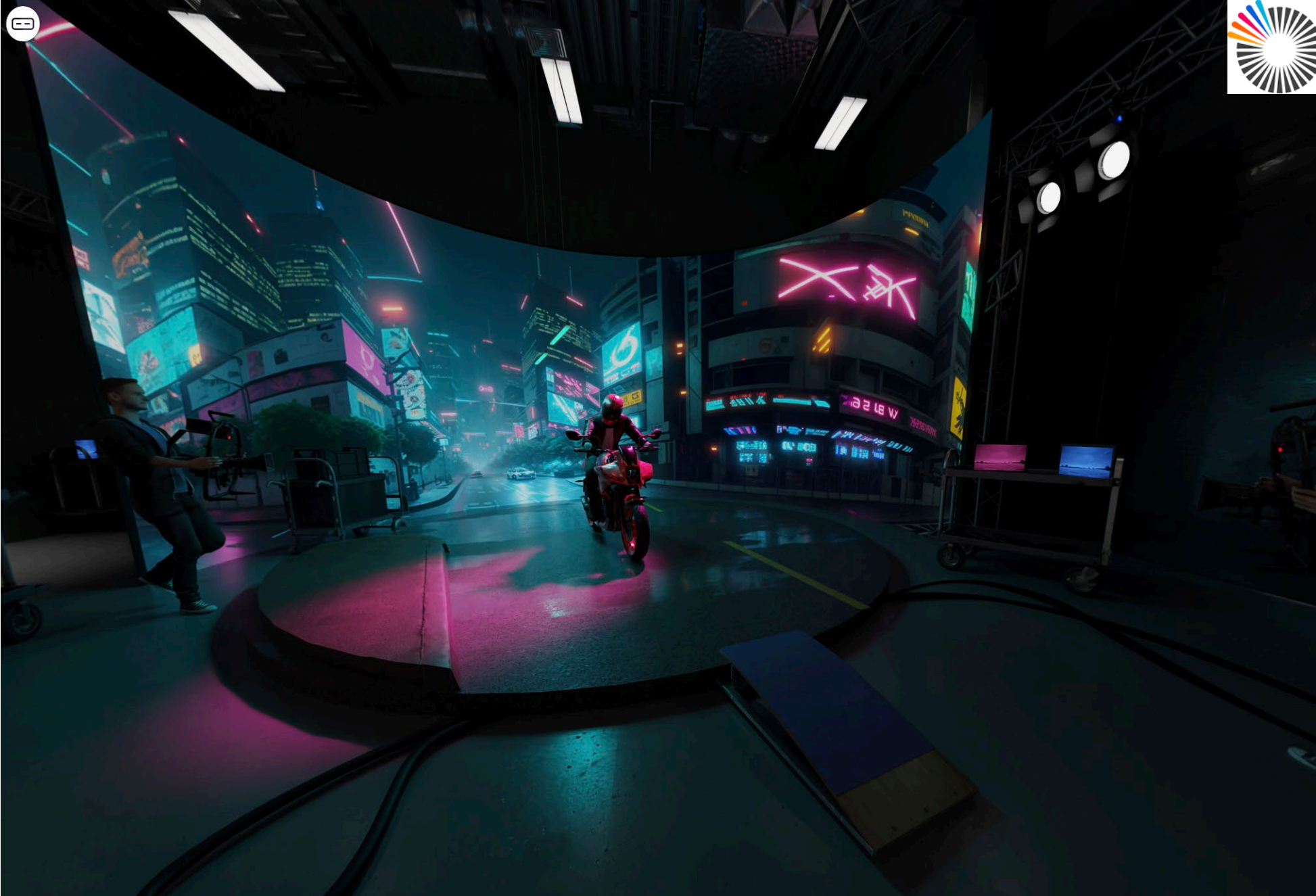
- ❖ UK's smallest and most agile MNO
- ❖ We have:
  - **Developed and deployed a full set of Mobile Network capabilities**
  - **Extensive experience working with DCMS/DSIT (both Lead & Project Member)**
  - **A reputation for innovation and making systems that work**

## Our Focus:

- ❖ Fixed Wireless Access (FWA)
- ❖ Multi Operator Neutral Host (MONEH)
- ❖ Private Networks and Applications (5G SA)

## Our Solutions Provide Mobile Coverage

- ❖ Areas where it is not commercially viable for large MNOs to deploy RAN
- ❖ Scenarios where current coverage does exist, but does not meet commercial or functional requirements
- ❖ Scenarios where Private RAN offer Public access



## CoSTAR Screen Lab

- Closed and mobile 5G Network Infrastructure
- Multi-site real time pre-visualisation, production and post-production
- Low latency data transfer in studio environments (LED wall focus)
- Camera tracking
- Automation of LED wall configuration
- High volume, real-time motion capture
- 3D and 4D scanning applications for real time
- Real time spatial audio automation
- Artificial Intelligence and Machine Learning applications in real time studio environments

Contact: [fr.lyons@ulster.ac.uk](mailto:fr.lyons@ulster.ac.uk)

Website: [www.studioulster.com](http://www.studioulster.com)





Clear Insights, Smarter Spaces.



Temperature



Light/lux  
levels



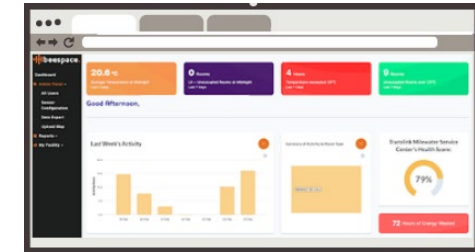
Occupancy  
tracking



Proof of  
presence



Task  
assignment



beespace.facility costs



LoRaWAN

4G 5G



Clear Insights, Smarter Spaces.

[aidan@bee.space](mailto:aidan@bee.space)

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- + Nurse-guided procedures via video
- + Efficiency and accuracy boosted by AI
  - + Rapid GI triage outside hospitals
  - + Reduces wait times
  - + Supports rural access



Patient Box



Colon Capsules



Hub Box



An aerial night view of a city skyline, featuring several prominent skyscrapers. A green, glowing network of lines and nodes is overlaid on the image, representing a connectivity grid. The lines connect various points across the city, including buildings and a highway. The sky is dark blue with some clouds, and the city lights are visible in the background.

# BrightSites by Signify

## The Connectivity Grid Of The Future

Negin Sabet – Senior Key Account Manager  
[Negin.sabet@signify.com](mailto:Negin.sabet@signify.com)  
07845 8383 391



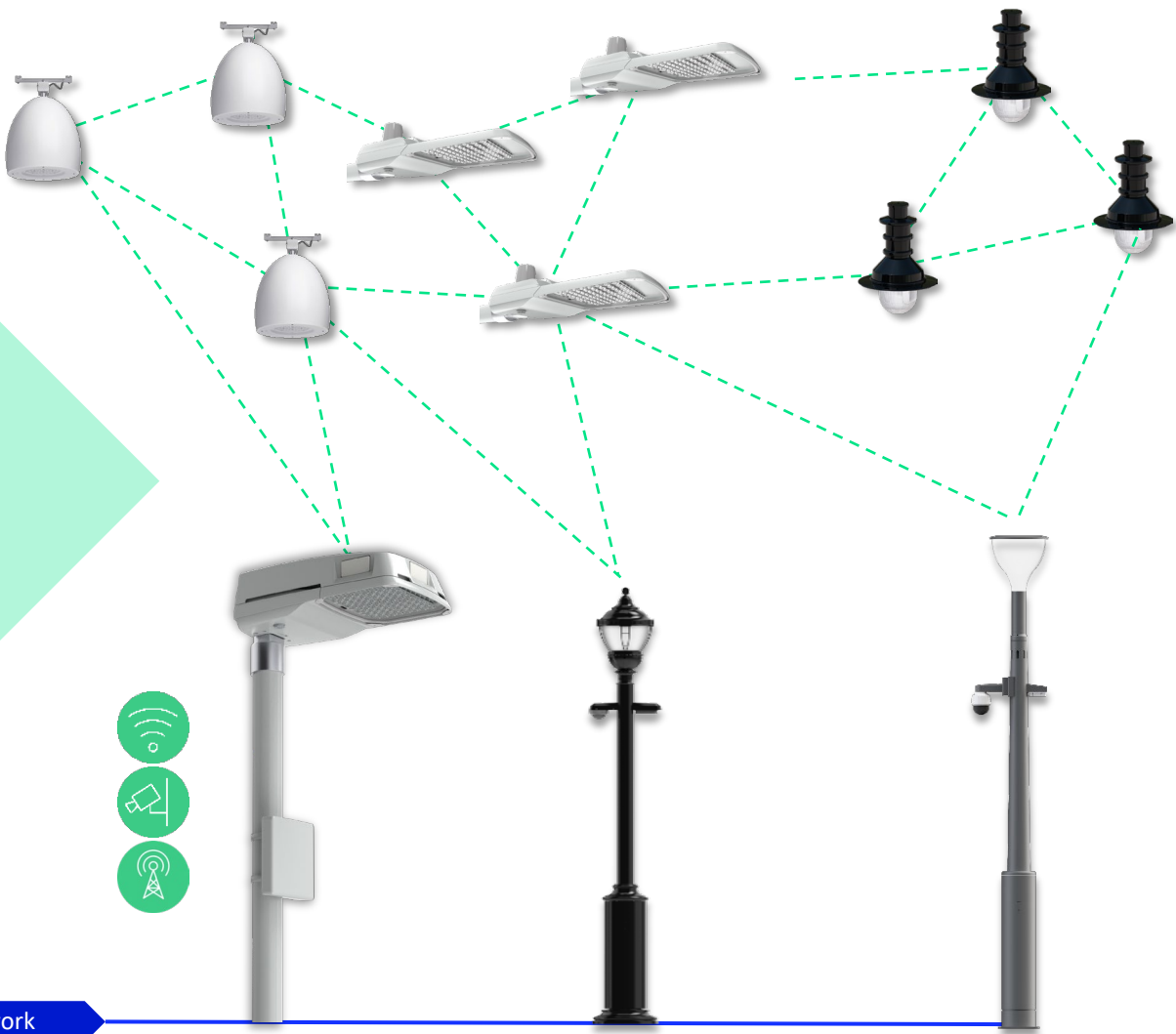


Lighting

BrightSites

Data Connectivity

60GHz mmWave mesh



Fiber network

Use Cases

**City IoT**

Traffic Management

Security and Safety

Public Wifi

Smart Parking

**4G/5G**

Public 5G

Enterprise 5G

Mobility

Connectivity

Drones

**Internet**

Digital Equality

- Expertise and a proven track record
- Delivering remote wireless data projects across Northern Ireland
- LPWAN and 5G Technologies
- Partners : Deloitte, Civica, NIE
- Agri-tech, Energy, Environmental, Hospitality, Logistics, Utilities, Manufacturing, Satellite





## Q&A

- Questions for presenters?
- Anyone want to make themselves known? Put your hand up.
- Questions about applicant support?
- Questions about the competition?



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- **Don't worry** if your project idea isn't fully formed yet – **get in touch** and the team will help you to explore and develop your use case idea.
- Email [innovationfunding@belfastcity.gov.uk](mailto:innovationfunding@belfastcity.gov.uk) by **11 July 2025** to register for applicant support. If you register after this date, you will be added to a reserve list.



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## Next steps

- Thank you to all presenters.
- We'll offer partnership advice throughout the Applicant Support
- Keep talking. This session was about **starting conversations**. Now it's over to you to build something great.

## Get in touch

All competition and applicant support information is available at [www.smartbelfast.city](http://www.smartbelfast.city)

Email your questions and register for applicant support at [innovationfunding@belfastcity.gov.uk](mailto:innovationfunding@belfastcity.gov.uk)



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## INNOVATION REGION

This session has now ended.



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