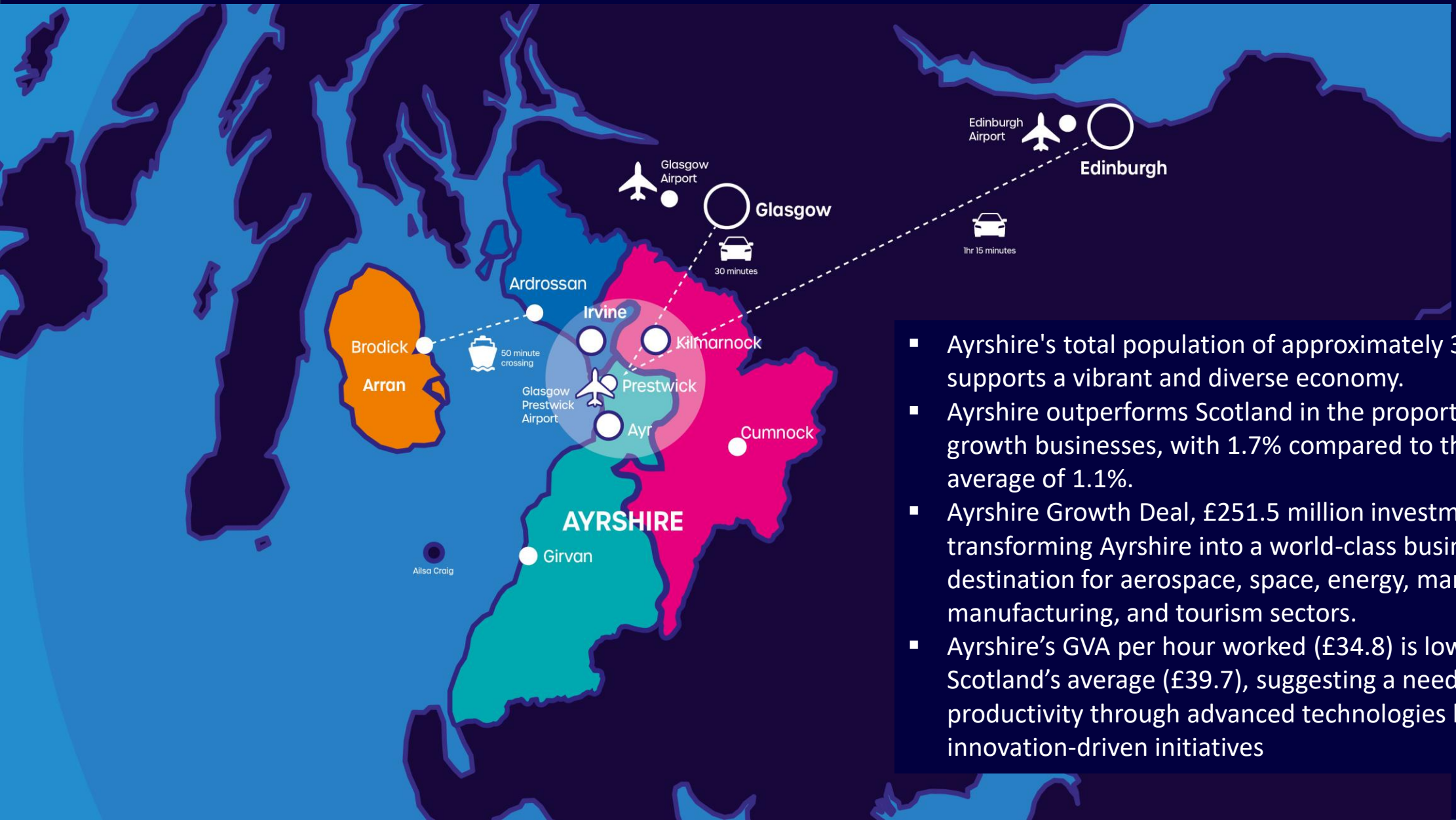
Ayrshire
Digital
Economy
5G
Innovation
Region

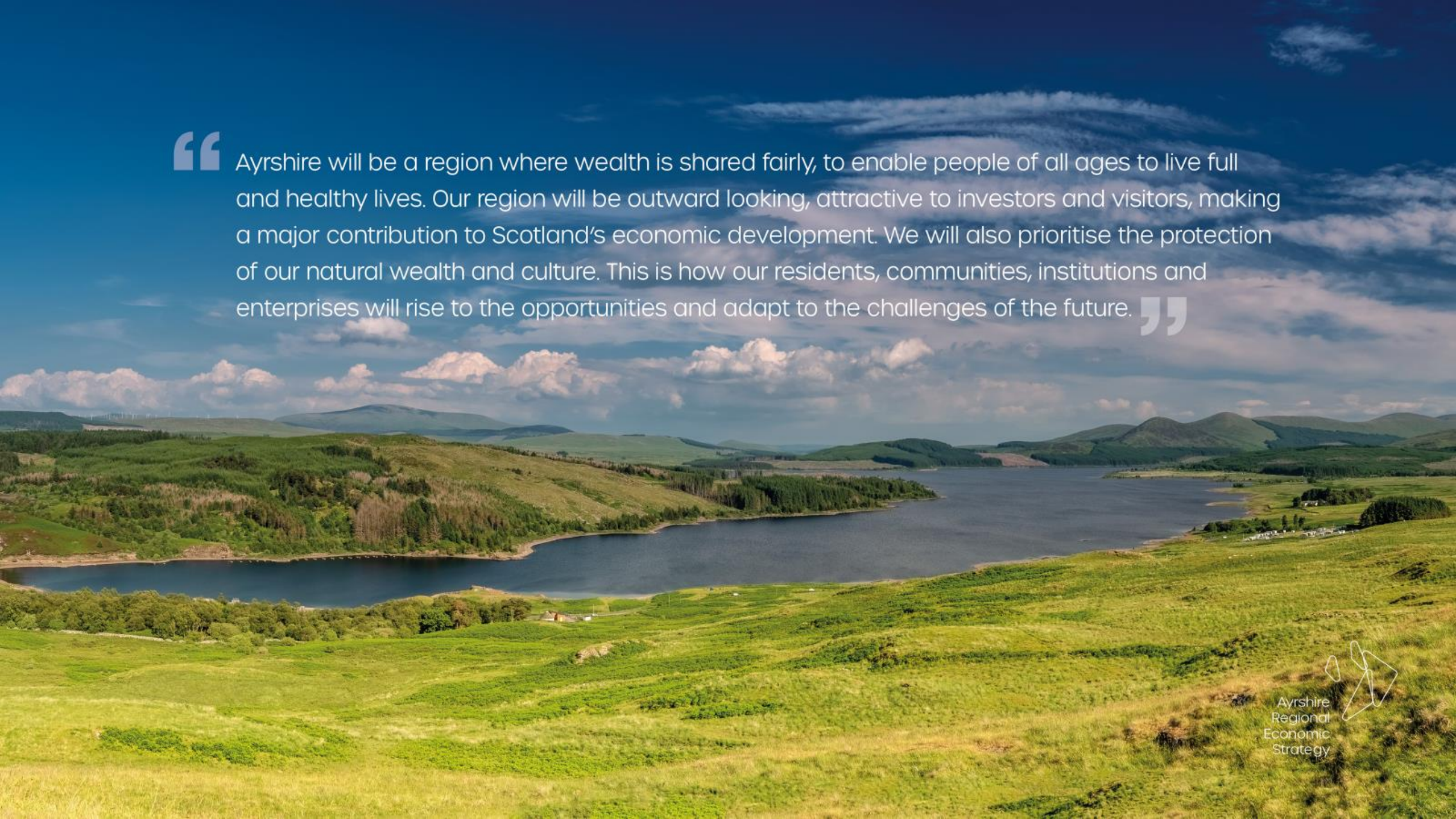
Ayrshire 5GIR Update Agenda

- Regional Economic Strategy
- Digital Economy Framework
- 5G Innovations Region Overview
- Ecosystem Development
- Strategic Partnership
- Sustainability Plan

Ayrshire Region



- Ayrshire's total population of approximately 368,650 supports a vibrant and diverse economy.
- Ayrshire outperforms Scotland in the proportion of high-growth businesses, with 1.7% compared to the national average of 1.1%.
- Ayrshire Growth Deal, £251.5 million investment aimed at transforming Ayrshire into a world-class business destination for aerospace, space, energy, marine, manufacturing, and tourism sectors.
- Ayrshire’s GVA per hour worked (£34.8) is lower than Scotland’s average (£39.7), suggesting a need to boost productivity through advanced technologies like 5G and innovation-driven initiatives


“Ayrshire will be a region where wealth is shared fairly, to enable people of all ages to live full and healthy lives. Our region will be outward looking, attractive to investors and visitors, making a major contribution to Scotland’s economic development. We will also prioritise the protection of our natural wealth and culture. This is how our residents, communities, institutions and enterprises will rise to the opportunities and adapt to the challenges of the future.”
Ayrshire Regional Economic Strategy

Ayrshire Regional Economic Strategy

Six Themes

- Support for enterprise
- Fair work
- Innovation
- Good health and wellbeing
- Stronger places and communities
- Enhancing natural capital

Six Workstreams

- Skills
- Clean growth
- **Digital Economy**
- Aerospace/ Space
- Visitor Economy
- Food and drink

Ayrshire **Digital** **Economy**

A Path Towards Smart Connected Places and Digital Manufacturing

Ayrshire Digital Economy Framework

Vision: Transforming Ayrshire into a digitally inclusive region that embraces innovation, fosters economic growth, and enhances the quality of life for all residents while positioning itself as a leading destination for digital investment and collaboration.

MISSIONS

Digital Infrastructure

Advancing Ayrshire's Digital Infrastructure

- Develop a robust digital infrastructure to enhance connectivity, attract investment, and position the region as a leading digital hub.

Digital Connectivity

Seamless Digital Connectivity in Ayrshire

- Ensure reliable and high-speed internet access, including 5G technology for businesses, residents, and public services, driving economic growth and fostering digital innovation.

Digital Innovation

Fuelling Digital Innovation and productivity in Ayrshire

- Cultivate a culture of innovation, research, and digital adoption to drive economic growth, productivity, and sustainability.

Digital Skills

Building a Skilled Digital Workforce in Ayrshire

- Equip individuals and businesses with the necessary digital skills and capabilities to thrive in the digital economy.

Digital Inclusion

Fostering Digital Inclusion for All in Ayrshire

- Promote digital inclusion and equity by ensuring equal access to digital technologies, reducing digital poverty, and improving well-being.

Three cross-cutting themes: Empowering digital champions, leveraging data-driven decision-making, and embracing sustainability for a thriving and inclusive digital economy in Ayrshire.

Ayrshire Digital Economy

5G Innovation Region

For more information contact:
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Department for Science, Innovation, & Technology

University of the West of Scotland

Ayrshire College

NMIS Digital Process Manufacturing Centre

The Scotland 5G Centre

vodafone

FarrPoint

East Ayrshire Council
Comhairle Siorrachd Àir an Ear

North Ayrshire Council
Comhairle Siorrachd Àir a Tuath

South Ayrshire Council
Comhairle Siorrachd Àir a Deas

Ayrshire **Digital Economy** 5G *Innovation Region*

Ayrshire's flagship 5G project driving connectivity innovation and adoption across the region.

5G ECOSYSTEM

1. **Advanced Manufacturing**
2. **Aerospace Innovation with 5G**
3. **SME IoT/5G Adoption**
4. **5G for Tourism Events**
5. **Immersive learning**

£3.8m
funding from DSIT

10+
Project partners & counting

5
Project streams across Ayrshire's key sectors

£1.25k
Worth of additional investment secured already

Ayrshire 5G Innovation Region Projects

Innovation Hubs Approach Projects

Leveraging Ayrshire's sectoral strengths by creating three Regional Strategic Wireless Innovation Hubs

5G Use Case Projects

Project 1 - Advanced Manufacturing

This project, led by NMIS and hosted at Scotland's Digital Process Manufacturing Centre, aims to showcase the transformative effect of wireless connectivity and digital technologies in advanced manufacturing.

Enabling Technologies: 5G MPN, real-time data sharing, automation, immersive AR/VR.

Project 2 – Aerospace Innovation with 5G & ORAN

This project, Led By UWS aims to create a wireless factory of the future to demonstrate the uses and benefits of 5G MPN within Aerospace & Engineering in the Prestwick Aerospace Cluster. This will provide an anchor to drive innovation and investment

Enabling Technologies: 5G MPN in a Box and Open Radio Access Networks (ORAN)

Project 3 – Business 5G & IoT Adoption

This project, led by S5GC, delivers grant funding to businesses to showcase advanced wireless technologies. Focus areas include Manufacturing, Food & Drink, and Life Sciences, driving awareness, adoption, and industry transformation.

Enabling Technologies: IoT, AWS adoption, challenge-based innovation.

Project 4 – 5G for Tourism and Events

This project explores how 5G connectivity can enhance operational efficiency at events, improving safety, real-time data sharing, and processes. It also focuses on developing insights to understand how public access to 5G can be improved in the future.

Enabling Technologies: Enhanced operational Wi-Fi connectivity, real-time data sharing, and event optimisation.

Project 5 – Immersive Learning

Led by Ayrshire College, this project uses 5G technology to deliver immersive AR/VR experiences, enhancing education, upskilling students, and supporting advanced manufacturing through a 5G-enabled extended campus.

Enabling Technologies: 5G-enabled AR/VR, extended campus, real-time collaboration.

Cross Cutting Workstream 6 – 5G Ecosystem Development

This overarching workstream is aimed at fostering the development of a 5G ecosystem within Ayrshire. Through increased collaboration and stakeholder engagement, this will drive innovation, upskill businesses and influence future investment into the region.

5G Innovation Region Ecosystem

Inputs

Ayrshire Regional Economic Strategy
- Support for enterprise
- Fair work
- Innovation
- Good health and wellbeing
- Stronger places and communities
- Enhancing natural capital

Ayrshire Digital Economy Workstream
- Infrastructure
- Connectivity
- Innovation
- Skills
- Inclusion

Actions

Ecosystem Scope
- Ecosystem Framework Strategy and Vision
- Collaboration and Alignment
- Partner Management
- Innovation Advocacy
- Long-Term Strategic Planning
- Performance Monitoring
- Framework Integration
- Digital Ambassador Pilot Programme

Approach and Methodology
- Framework **Co-Creation** with partners
- Stakeholder **Engagement**
- **Research** and Analysis
- **Sustainable** beyond 5G project

Outcomes

Ayrshire 5G Innovation Region Project Objectives
- Technological Excellence
- Innovation Ecosystem
- Economic Growth
- Skills & Talent Development
- Investment Influence

5GIR Ecosystem Outputs
- Publicly accessible framework for **sustainable** future technology adoption
- Fulfilment of regional objectives and promotion of **innovation**, **collaboration** and **education** within 5GIR partners

Ayrshire 5G Innovation Region Benefit Realisation Framework

INPUTS

STAKEHOLDERS

Department for Science, Innovation & Technology

North Ayrshire Council
Comhairle Siorrachd Àir a Tuath

East Ayrshire Council
Comhairle Siorrachd Àir an Ear

South Ayrshire Council
Comhairle Siorrachd Àir a Deas
Making a Difference Every Day

The Scotland 5G Centre

NMIS Digital Process Manufacturing Centre

FarrPoint

University of the West of Scotland UWS

University of Strathclyde Glasgow

Ayrshire College

vodafone

cpi

PROJECTS

Project 1: Advanced Manufacturing

Project 2: Aerospace Innovation with 5G

Project 3: SME 5G/IoT Adoption

Project 4: 5G for Tourism and Events

Project 5: Immersive Learning

Crosscutting workstream 6: 5G Ecosystem Development

OUTPUTS

USE CASES

Individual Project Uses Cases

OUTCOMES

MEDIUM TERM OUTCOMES

5G Ecosystem Development

Improving partnership working across key stakeholders

Increasing collaboration between the public sector, businesses and mobile industry suppliers

Improving knowledge and nurturing innovation in businesses

Enhance business understanding of advanced wireless technologies.

Developing economic development leads knowledge of digital connectivity solutions to drive innovation with business

Upskilling workers and students in advanced wireless and digital connectivity technologies

Training workers in advanced digital tools and solutions

Ensuring the future competitiveness of the Ayrshire economy

OBJECTIVES

LONG TERM AIMS

- Technological Excellence
- Innovation Ecosystem
- Economic Growth
- Skills & Talent Development
- Investment Influence

Ayrshire Digital Economy 5G Innovation Region

Industry Impact

26
technology partners / suppliers involved

£850,000
GVA

£290,000
private sector investment

60
individuals within the organisation upskilled (Capacity Building)

12
businesses directly supported

£1,063,233
investment

18
advisors upskilled

Tourism, Manufacturing, and Education sectors all involved

Vodafone In Ayrshire

5GIR – Strategic Technology Partner

Vodafone's Role Within The 5GIR Programme

Trusted partner delivering 5G mobile private networks

- Deployment of 5G MPN within DPMC
- " Pop Up 5G MPN" for UWS with pre-loaded use cases

Supporting use case creation through collaboration

- Participating and delivering workshops with partners to develop 5G use cases
- Bringing together a global partner ecosystem

Supporting digital skills and technology adoption

- Boosting digital skills through education workshops and support programmes for schools, business and communities

Strategic innovation partnership beyond the 5GIR

- Ensuring scalability and repeatability of use cases across industry
- Support benefits realisation through technology adoption
- Continue to innovate and develop new technologies and applications based on user requirements and industry challenges.

Building A Regional Innovation Ecosystem

Fostering partnerships and collaboration to drive technology adoption across industry, academia, and public sector organisations.

Future-proofing Ayrshire's businesses & communities with cutting-edge connectivity, skill development and innovation

National Manufacturing Institute Scotland

Driving the future of manufacturing through innovation. Vodafone & NMIS have deployed a best-in-class 5G MPN to help drive the next wave of manufacturing use cases

Vodafone Connectivity Partner

Scotland 5G Centre

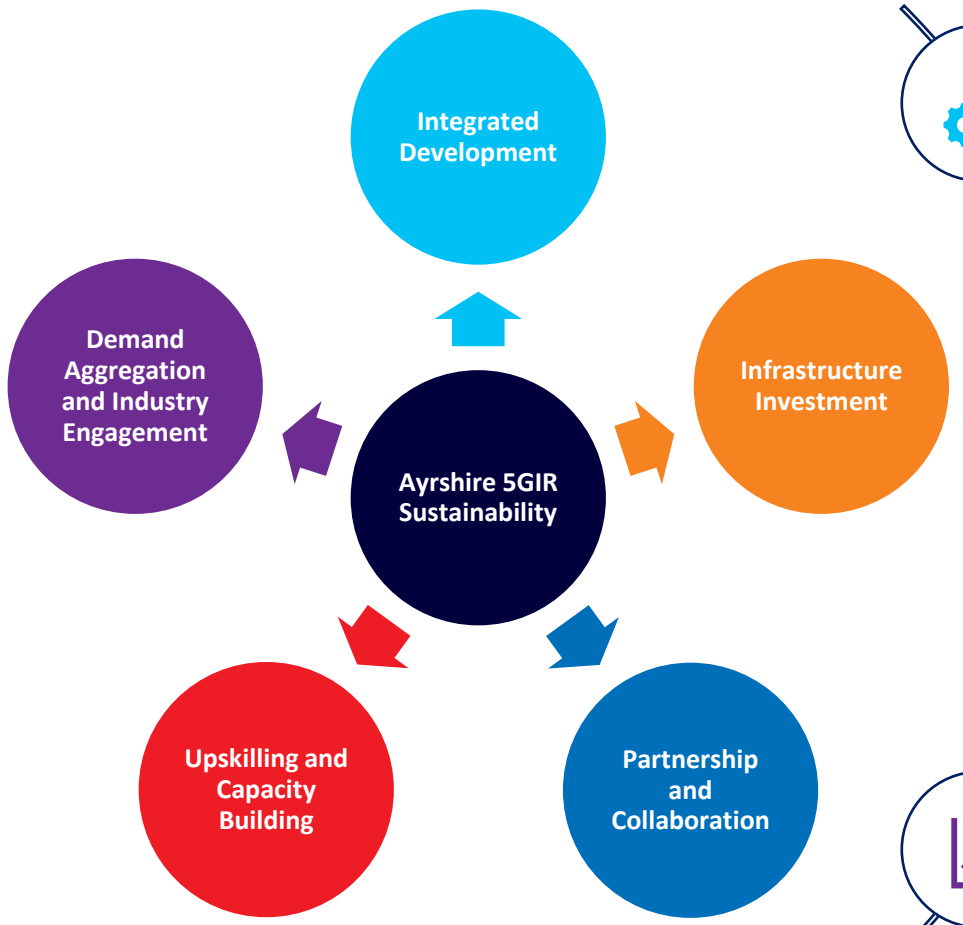
S5GC & Vodafone deployed a 5G Mobile Private Network (MPN) to enable businesses and academic researchers to test new 5G enabled products and solutions

Ayrshire - 5G Innovation Region.

In collaboration with partners, this programme is set to enhance the adoption of 5G technologies and applications, fostering a transformative impact across various sectors.

Ayrshire 5G Innovation Region Sustainability Plan

Looking to the next stage in the project development, work is being undertaken, focussed on the long-term sustainability of the project beyond March 2025, based around our 5-Point Sustainability Plan:



Integrated Development: integrate with Ayrshire Regional Economic Strategy. All partners are committed to actively promoting and embedding these projects into their operational frameworks.

Infrastructure Investment: capitalise on public sector investments (e.g. growth deals, regeneration projects, and housing initiatives), by collaborating with major mobile network operators and alternative network providers

Partnership and Collaboration: foster robust partnerships with universities, local businesses, and government bodies to align efforts and pool resources, maximising impact.

Upskilling and Capacity Building: educate and enhance the capabilities of business advisors and digital ambassadors. Empowering them with a deeper understanding of the potential of advanced wireless technologies.

Demand Aggregation and Industry Engagement: utilise the advanced capabilities of our advisors and economic development officers to aggregate demand and foster collaborative projects with industry, enhancing investment impacts and driving economic growth and regional development.

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