

INNOVATION TWINNS

Belfast & Sejong

A roadmap for
international
place-based
collaboration

APRIL
2024

Delivered by:



In partnership with:



Belfast
City Council



INNOVATION
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BELFAST FOREWORD

Cities are recognised as the growth engines of the 21st century global economy.

They are the places where people come together to generate new ideas, to collaborate and innovate. They are places where investments are made and where successful businesses can flourish.

Both Belfast and Sejong are the growth engines for their respective regions. And both have similar ambitions to harness their existing ecosystem strengths in research, infrastructure, talent and industry, to make sustainable contributions to wealth generation, productivity and inclusion at both a regional and national level.

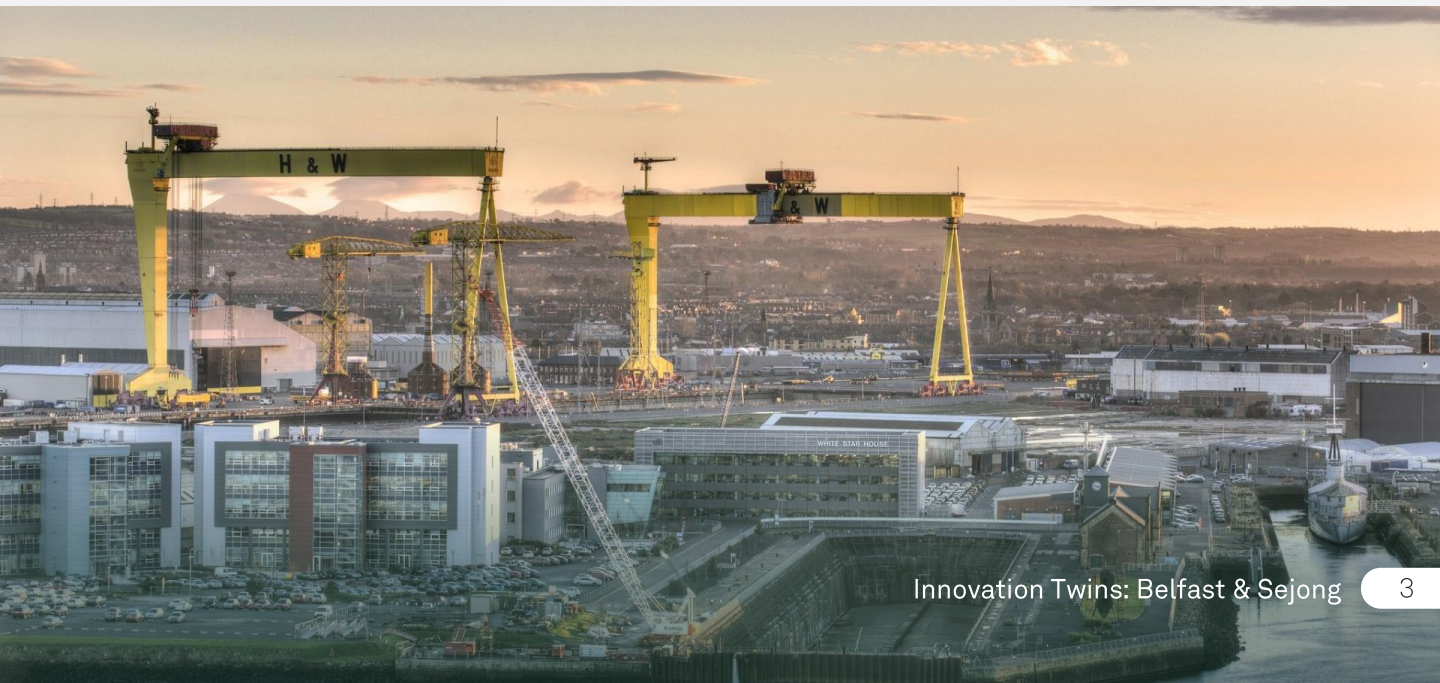
I am delighted that this Innovation Twins programme has allowed the leaders and institutions of both cities to come together around this common journey.

Together we can learn from our experiences and collaborate on mutually beneficial opportunities that support both cities in delivering for their citizens.

This roadmap represents the first step on this journey together and I look forward to celebrating our shared successes over the coming years.



Lord Mayor of Belfast
Councillor Ryan Murphy



SEJONG FOREWORD

Sejong City serves as the de facto administrative capital of the Republic of Korea and is a national pilot city for smart city initiatives.

Both cities have pledged to pursue a Republic of Korea-UK relationship by focusing on the key industries that will lead the future of their respective nations. Priority areas of collaboration will include the economy, cybersecurity, technology, innovation, carbon neutrality, and transportation. Building upon this roadmap, we aim to realise a shared vision of innovative and sustainable economic cooperation.

Sejong City is currently designating economic free-zones, relaxing regulations, and initiating large-scale investment attraction projects, with a

focus on cross-city empirical verification and the cybersecurity industry.

Furthermore, leveraging its strategic geographical advantage as the central hub of the Republic of Korea, Sejong will attract tailored corporate investments through national research institutions and innovation growth support.

We believe that the exchange and cooperation with Belfast will greatly contribute not only to the development of Sejong City but also to the advancement of the Republic of Korea.

Sejong aspires to be a global city as the future strategic capital of the Republic of Korea. To support this goal Sejong City is partnering with Belfast to create a better future through closer and more diverse collaboration.



Mayor of Sejong City
Minho Choi

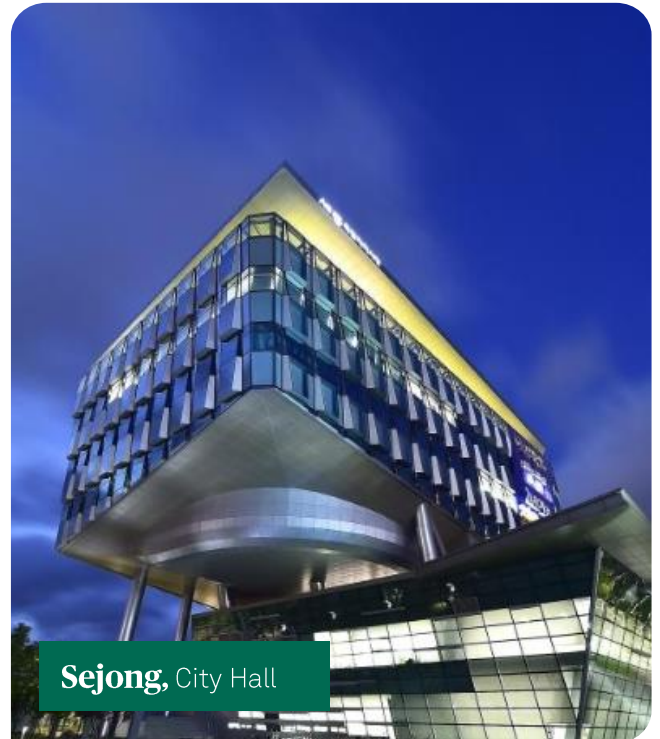


THE PURPOSE OF THIS ROADMAP

An outline of what city-to-city collaboration could look like for Belfast and Sejong

The Belfast-Sejong relationship is part of an ambitious UK programme to foster international collaborations that will harness the power of urban innovation to stimulate trade and investment.

As 'Innovation Twins', Sejong and Belfast are committed to working together to use their complementary innovation strengths and ambitions to explore how they can contribute to the long-term sustainable growth of both places in ways that will deliver economic and societal benefits for their citizens, businesses, and institutions.



This roadmap outlines the first set of joint proposals for impactful collaborations between businesses, institutions and city governments. As the relationship between both places matures, these initial proposals will evolve into substantial programmes of work and be joined by further initiatives.

The roadmap is testimony to the visionary leadership of both cities and their commitment to harness and exploit urban innovation to build sustainable, resilient and inclusive cities of the future.

INNOVATION TWINS: PROGRAMME OVERVIEW

Unlocking local innovation ecosystems for international impact

WHAT IS THE PROGRAMME?

The programme is designed to support twinned cities in the development of place-based research and innovation opportunities that are important to both nations.

The creation of mutually beneficial city partnerships have the potential to unlock international market opportunities, shared research initiatives and deliver on policy agendas of growth, inclusivity and sustainability.

The identification of potential pairings between UK and Korean cities and city-regions has been based on research and data analysis on local ecosystems to understand governance, policy and strategy, sector priorities, business and societal culture, funding models and more.

Belfast and Sejong is one of four strategic city pairings on the **Innovation Twins: UK-Korea** programme in development. The other partnerships being explored are Glasgow & Daegu, Birmingham & Ulsan, and the Liverpool City Region & Busan.

THE AIMS

- To position the participating cities and city regions as a partner of choice for research & innovation in key global challenges, including net zero, clean growth, healthcare, and future mobility.
- To identify and develop structured and outcome-based collaborative proposals across the levels of civic/policy, business and academia.
- To support cities and city-regions to create international partnerships in a new needs-based way, engaging with their innovation ecosystems to identify where collaborative innovation can solve challenges.
- To identify new funding streams for cross-city/city-regions proposals.

1 Evidence gathering 2020-21

Identifying high-potential city pairings and assessing their compatibility and appetite to collaborate.

Enhancing knowledge and understanding of the potential twin cities and their unique strengths.

2 Engaging & disseminating 2021-22

Convening local innovation ecosystems and exploring areas of potential joint interest for collaboration.

Getting buy in from city ecosystems and stakeholders and initiating relationships.

3 Scale & collaboration 2022 onwards

Supporting cities and city-regions to share learning, access opportunities, build research and business collaborations through international relationships, and to develop proposals to initiate cooperation.

Enabling cities and city-regions to create international partnerships in a new needs-based way, engaging with their innovation ecosystems to identify where collaborative innovation can solve challenges.

NATIONAL CONTEXT

Key policies and innovation drivers

The United Kingdom and the Republic of Korea are both powerhouses of science and technology, with a longstanding history of excellence in the development and testing of cutting-edge innovation. Both are known for a highly skilled workforce, outstanding academic institutions, and globally renowned companies.

In 2022, trade represented 70% of GDP for both countries. However, bilateral trade represents less than 2% of GDP in each case. The Republic of Korea was the UK's 21st largest trade partner in 2022, and the UK was Republic of Korea's 19th largest.

The UK and the Republic of Korea are ranked as the 4th and 10th most innovative countries in the world. Both countries are ranked in the top five OECD nations for gross expenditure on research and development, recognising innovation as a key driver of decarbonisation, economic growth and prosperity.

Having celebrated over 140 years of diplomatic relations, the UK and the Republic of Korea enjoy a close and important partnership. This was reflected during the November 2023 State Visit of President Yoon Suk Yeol and the signature of the [Downing Street Accord](#).

The Accord sets out ambitions for a stronger, future-focused, and holistic relationship that seeks to work together to tackle global challenges and take advantage of mutual opportunities.

The State Visit launched negotiations for a new bilateral Free Trade Agreement, expanding on the existing agreement to include emerging issues and trends, including supply chain resilience and the digital economy. A shared commitment to net zero future will be enabled through a planned UK-Republic of Korea Clean Energy Partnership.

Building on the 1985 Science and Technology Cooperation Agreement, the two countries have committed to reinvigorating research and development cooperation.

A new [Digital Partnership](#) aims to enhance exchange and collaboration for telecommunications, artificial intelligence, semiconductors, and cyber security.

Sectors of science and innovation cooperation have been identified to address the promise of emerging technologies, including quantum technologies, and new collaboration via an MOU for Space Cooperation. Closer ties have been targeted for the creative economy and the education sector

Inclusivity is a priority, ensuring that economic prosperity is shared by all and across the breadth of their countries. It is recognised that modern, large-scale challenges cannot be solved alone, and that bilateral and international collaboration is key to driving positive change.

The UK and Republic of Korea both recognise the vitality of their city and regional economies beyond the capital. Significant investment is enabling locally-led, citizen-centric approaches to urban development and innovation that directly address the needs of the city or region.

These initiatives provide an exciting platform for strategic international collaborations that leverage and globalise unique local skills, capabilities, knowledge and technologies.

THE UK-ROK TRADE AND INVESTMENT LINKS

The UK and the Republic of Korea have a strong and growing economic relationship

To the Republic of Korea (ROK)

Total exports	£8.6bn
2021 Outward stock of FDI	£4.8bn

ROK is the UK's

trading partner	25th
export market	25th
import market	23rd

Investment in R&D

2020 expenditure	£69.2bn
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Globally the UK ranked as

Ease of doing business ranking	8th
2023 Innovation ecosystem performance	4th
2023 Startup ecosystem strength	2nd

To the UK

Total exports	£7.5bn
2021 Outward stock of FDI	£1.9bn

UK is the ROK's

2022 trading partner	20th
2022 export market	20th
2022 import market	27th

Investment in R&D

2020 expenditure	£63.3bn
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Globally the ROK ranked as

Ease of doing business ranking	4th
2023 Innovation ecosystem performance	10th
2023 Startup ecosystem strength	8th



£16.1 BN

Total trade of goods and services between the two countries

Given the level of shared economic ambition and existing links between the two nations, there are many opportunities for cities to collaborate effectively. By working together, these cities can build on their existing economic links and provide new market opportunities in both nations.

In March 2023, UK Export Finance (UKEF) appointed its first international executive for Republic of Korea, who will help to facilitate trade links between the two countries. There is £4 billion of financing on offer, and there are multiple businesses from the Republic of Korea looking to invest and trade with the UK, particularly within the renewable energy and clean growth sectors.

WHY BELFAST AND SEJONG?

What are the shared and complementary innovation ambitions of the cities?

CIVIC BASE

City leadership committed to harnessing innovation for wider economic and societal impact, to deliver sustainable urban policies and services.

A strong appetite for experimentation, risk taking, knowledge exchange and adoption of novel solutions.

RESEARCH

World-class university research centres in areas such as advanced manufacturing, cyber-security, health and creative industries.

Eager to build global relationships, while at home are committed to impact on the local economy and urban place-making.



Harnessing collaborative innovation for economic and societal impact

INNOVATION DRIVEN ECONOMIES

Vibrant innovation ecosystems that attract entrepreneurs, innovators, startups, investors, as well as large enterprises in high growth sectors.

Both have collaborative environments that foster cross-fertilisation of ideas between industry, academia and public institutions.

SUSTAINABLE PROSPERITY

Commitment to inclusive growth that aims to generate opportunities for all, community wealth building and good jobs.

Pledged to Net Zero transition across industry and government. With plans to invest in adaptation and resilience of their urban infrastructure.



BELFAST'S AMBITION

Belfast's initial expansion extends back to the industrial revolution when the city's global success was built on shipbuilding, rope-making and linen production. Today Belfast has equally ambitious plans to harness digital innovation to rapidly grow our innovation economy on the global stage.

The city has unique access to both the UK and EU markets and has a major commitment by the United States Government to encourage investment and trade. We also are at the heart of a proposed Innovation Zone supported by UK Government, and the capital city of a region with an extraordinary ambition for economic growth.

Our leaders want to maximise this unique global position, by harnessing the

research excellence of our universities, and the growth potential of our knowledge economy in sectors such as FinTech, Life and Health Science, Manufacturing and Creative Media, to generate an additional £3 billion for our economy.

We are investing £1 billion in the city's infrastructure, including the Belfast Region City Deal investments in digital connectivity and in six new research centres of excellence, to fashion an ecosystem that is welcoming to international investment, talent, and research. We are also harnessing this ecosystem to address major urban challenges including net zero and inclusive growth.

**President & Vice-chancellor, Queen's University,
Chairman of Innovation City Belfast
Professor Sir Ian Greer**



SEJONG'S AMBITION

Sejong City was launched on 1st July 2012 with the aim to promote balanced development across the country and to enhance national competitiveness. To date, 47 central administrative agencies and 16 government-funded research institutes have been relocated to the city. Plans are in place for the future to establish the Sejong National Assembly Hall, the second Presidential Office, and the installation of local and administrative courts, solidifying Sejong's position as the administrative capital of the Republic of Korea.

Situated at the heart of the nation, Sejong City is a crucial hub for transportation and logistics. With a concentration of major national administrative facilities, it functions as the epicentre of administration. Sejong City was selected as a national smart city pilot in 2018 and through this has grown into a city leading the future, developing the cutting-edge technologies of the Fourth Industrial Revolution. Sejong City

was the world's first city to receive international certification as a smart city.

Our goal is to continue to grow Sejong City by bolstering its capabilities and to evolve to become a future strategic capital of creativity and challenge. We are prioritising the development of future strategic industries, including the establishment of a foundation for the quantum technology industry. Sejong City is also promoting garden projects as host to the International Garden City Expo in 2026, a valuable opportunity to highlight the city's commitment to culture.

Through the current Republic of Korea-UK Innovation Twins project we aim to expand exchanges with Belfast City. We intend to pursue close cooperation across a variety of fields, including business exchange, low-carbon policies, cybersecurity, the Internet of Things, and autonomous driving policies to lead the Republic of Korea's smart future.

BELFAST AND SEJONG SNAPSHOT

Comparing the Cities

Belfast



Belfast City Council

348,005

Population of the Belfast Metropolitan Area

\$56,811

Belfast GDP per head (2021)

Belfast

London

Sejong



세종특별자치시

Seoul

Sejong

393,005

Population across the greater Sejong City Area

\$28,471

GDP per capita (2023)

Key Growth Sectors

Software and IT

FinTech and Financial Services

Health and Life Sciences

Advanced manufacturing

Creative Industries

Key Facts & Figures

Number of jobs **236,476**

Number of companies **11,405**

Total Ext Sales Across all Sectors **£6 billion**

Sales to ASEAN pacific **£148 million**

Key Growth Sectors

Administrative capital of the Republic of Korea

National Pilot Smart City

Testbed city for cutting edge technology

Hub for the future of high value add industries

Inter-regional platform connecting the entire nation

Key Facts & Figures

Number of Government Agencies **47**

Number of National Research Institutes **16**

Number of Industrial Complexes **20**



MAPPING THE URBAN INNOVATION ECOSYSTEM

A snapshot of Belfast's innovation ecosystem and opportunities for research, development and innovation and business development and growth



STRENGTHS

- Top three UK city for FDI
- Top UK city for full-fibre connectivity
- £1 billion City Region Deal investments in innovation
- Unique tariff-free product access to both UK and EU markets
- Top 10 global FDI for cyber-security
- Young, highly educated, skilled workforce



RESEARCH

- Advanced Manufacturing Innovation Centre
- Artificial Intelligence Research Centre
- Belfast Met e3 Centre for Economic Development & Social Inclusion
- BT Ireland Innovation Centre
- Centre for Digital Healthcare Technologies
- Centre for Secure Information Technologies
- I-REACH clinical research centre
- Momentum One Zero
- National Digital Twin Centre
- Studio Ulster virtual production centre



CIVIC / POLICY

- Innovation City Belfast partnership
- 10x Economic Ambition for Regional Innovation
- Smart Belfast Urban Innovation Programme
- Belfast Region City Deal Digital Programme



BUSINESS ECOSYSTEM

- Catalyst science and technology hub
- Digital Catapult (Northern Ireland Centre)
- Innovation Factory
- Invest NI economic development agency
- Ormeau Labs entrepreneurial hub
- Ulster Bank Accelerator Hub



MAPPING THE URBAN INNOVATION ECOSYSTEM

A snapshot of Sejong's innovation ecosystem opportunities for research, development and innovation and business development and growth



STRENGTHS

- Administrative capital where the National Assembly Sejong, the President's Second Office will be located
- Internationally certified smart city and a national pilot city for smart city initiative
- Attracted 890 billion won in investment from 20 excellent companies, including KT&G
- A startup incubator capable of accommodating 100 venture companies is being established
- Advanced technology test beds for AI, urban air mobility, and autonomous driving are being developed
- Serves as the transportation hub connecting major cities nationwide within two hours
- Developed as a future education city with education innovation zones and joint campuses



ACADEMIA

- Korea University Sejong Campus
- Korea Development Institute School of Public Policy and Management
- Sejong City Joint Campus
- Korea University of Media Arts



CIVIC / POLICY

- Sejong City Executive Department
- National Government Complex
- Sejong City National Research Complex
- International Science Business Belt



BUSINESS ECOSYSTEM

- Sejong TechnoPark
- Sejong Centre for Creative Economy & Innovation
- National Smart City Pilot Area
- Sejong Smart City Data Centre



THE ROADMAP

ROADMAP OVERVIEW

Roadmap Development

The roadmap is the outworking of a series of workshops, meetings, and Memoranda of Understanding signed by both cities and their partners over the past eighteen months. Initial opportunities for collaboration now focus on key areas such as:

- Joint academic research exchange in key areas such as cybersecurity.
- Supporting SMEs and Integrated Development Environments to engage in international opportunities.
- Building mechanisms for successful collaborative innovation.
- Delivering innovative urban services and technologies.
- Fostering inclusive innovation and citizen participation.

Partners from both innovation ecosystems have prioritised opportunities that are mutually beneficial, can deliver early value, and that can act as foundations for future proposals and investments.

Each proposal is being driven by a lead institution that has committed to working with their city counterpart over the next year to build a proposal that will attract resources, expertise and funding with measurable outputs.

Roadmap Future

This is the first roadmap between the two cities, and it is expected to evolve over time and grow in ambition as benefits are realised. As the relationship matures, it's likely that Belfast and Sejong will identify new opportunities for exchange and cooperation.

The portfolio of longer-term opportunities that have been captured during discussions between both cities is noted later in the roadmap. These will move into development phase as resources become available.

NOW

Getting the roadmap proposals off the ground and city-to-city collaboration in full flow.

INCREASING IMPACT AND SCALE

NEXT

Developing and delivering agreed projects and bringing new proposals into the pipeline for delivery.

ROADMAP PROPOSALS AND LEAD ORGANISATIONS

Priority proposals agreed by Belfast and Sejong

P1	Smart Cities Cluster Mission to Sejong	Invest Northern Ireland and Sejong Techno Park
P2	Smart Cities Cluster Mission to Belfast	Invest Northern Ireland and Sejong Techno Park
P3	Global Open Innovation Network	Catalyst, Sejong TechnoPark and Sejong Centre for Creative Economy & Innovation
P4	Green City Accelerator	Belfast City Council's Climate Commission and Sejong Carbon Neutrality Support Centre
P5	Cyber-Cities	Queen's University Belfast, Sejong City and Korea University Sejong Campus
P6	Security in Space	Queen's University Belfast and Korea University Sejong Campus
P7	5G Urban Testbeds for the Internet of Things	Ulster University, Digital Catapult and Sejong Techno Park
P8	Urban Transport and Pathways to Net Zero	Translink, Sejong City and Sejong City Transportation Corporation

P1 SMART CITIES CLUSTER MISSION TO SEJONG

Accelerating international business

VISION

Connecting the Belfast Smart Cities Cluster to the Sejong Smart Cities ecosystem and highlight both Belfast and Sejong's Smart Cities capabilities.

DESCRIPTION

Invest Northern Ireland, in collaboration with Sejong TechnoPark, will bring a delegation of six to eight commercial entities to Sejong for a series of engagements, including site visits, demonstrations of Sejong Smart Cities capabilities and pitching sessions.

EXPECTED OUTCOMES

- Increased understanding of Belfast's Smart Cities capabilities amongst Sejong stakeholders.
- Increased understanding of Sejong's Smart Cities capabilities amongst Belfast stakeholders.
- R&D/innovation/commercial partnerships between Belfast commercial entities and Sejong stakeholders.
- Deepen the relationship between Invest Northern Ireland & Sejong TechnoPark.

TIMELINE



- Starts March 2024
- Finishes March 2024

PROPOSAL OWNERS AND POINTS OF CONTACT



- Mark Graham, Regional Director for North East Asia, Invest Northern Ireland
mark.graham@investni.com
 - David Bae, Country Head Korea, Invest Northern Ireland
david.bae@investni.com
-
- Haang-suk Cho, Team Leader, Sejong TechnoPark, hangscho@sjtp.or.kr
 - Do-Yeong Lim, Researcher, Sejong TechnoPark, limuju01@sjtp.or.kr

PROPOSAL TYPE



- ✓ Knowledge, experiences & information exchange
- ✓ RD&I & commercialisation
- ✓ Start-up and SME support & internationalisation

THEMATIC AREA

- ✓ Net Zero / Low Carbon
- ✓ Smart cities, digital twin and urban mobility
- ✓ Cybersecurity
- Inclusive innovation, citizen participation approaches
- ✓ SME support & joint business activities

P2 SMART CITIES CLUSTER MISSION TO BELFAST

Accelerating international business

VISION

Connecting the Sejong Smart Cities Cluster to the Belfast Smart Cities ecosystem and highlight both Belfast and Sejong Smart Cities capabilities to the wider Sejong visiting delegation.


DESCRIPTION

Led by Sejong Technopark, in collaboration with Invest Northern Ireland and other Belfast stakeholders, a delegation of 6-8 commercial entities, accompanied by wider Sejong stakeholders, will visit Belfast for a series of engagements, including site visits, demonstrations of Belfast Smart Cities' capabilities and pitching sessions.

EXPECTED OUTCOMES

- Increased understanding of Belfast's Smart Cities Capabilities amongst Sejong stakeholders.
- Increased understanding of Sejong's Smart Cities Capabilities amongst Belfast stakeholders.
- R&D/innovation/commercial partnerships between Sejong commercial entities and Belfast stakeholders.
- Deepen the relationship between Invest Northern Ireland, Sejong TechnoPark and Catalyst.

TIMELINE



- Starts March 2025
- Finishes March 2025

PROPOSAL OWNERS AND POINTS OF CONTACT



- Mark Graham, Regional Director for North East Asia, Invest Northern Ireland
mark.graham@investni.com
- David Bae, Country Head Korea, Invest Northern Ireland
david.bae@investni.com

- Haang-suk Cho, Team Leader, Sejong TechnoPark
hangscho@sjtp.or.kr
- Do-Yeong Lim, Researcher, Sejong TechnoPark
limuju01@sjtp.or.kr

PROPOSAL TYPE



- ✓ Knowledge, experiences & information exchange
- ✓ RD&I & commercialisation
- ✓ Start-up and SME support & internationalisation

THEMATIC AREA

- ✓ Net Zero / Low Carbon
- ✓ Smart cities, digital twin and urban mobility
- ✓ Cybersecurity
- Inclusive innovation, citizen participation approaches
- ✓ SME support & joint business activities

P3 GLOBAL OPEN INNOVATION NETWORK

Supporting innovation-driven businesses

VISION

The Global Open Innovation Network is a platform to connect key components of the Northern Irish and Korean innovation ecosystems together, and further to develop international linkages to help link a complex landscape and to promote collaboration locally, nationally, and internationally in the key growth areas of Greentech, Health and Life Sciences, and Fintech.

DESCRIPTION

The aim is to encourage effective knowledge sharing, resources, information and problems with external partners for solutions and suggestions. This will increase R&D activity, increase innovation rates across the wider business base by being openly accessible to all sectors and will offer the opportunities needed to support the number and scale of high growth Innovation Driven Enterprises.

EXPECTED OUTCOMES

- De-risk innovation, such as investment in R&D, and increase the agility of a firm.
- Increase Northern Ireland research and innovation activity rates at a regional, national and international level with Sejong as a key partner.
- Raise awareness and connect innovators abroad within Sejong.
- Raise ambition and opportunity by linking with international innovation excellence and partnerships.

TIMELINE



- Starts March 2024
- Finishes March 2025

PROPOSAL OWNERS AND POINTS OF CONTACT



- Andrew McCrea, Innovation Delivery Manager, Catalyst, andrew.mccrea@wearecatalyst.org
- Do-Yeong Lim, Researcher, Sejong TechnoPark, limuju01@sjtp.or.kr

PROPOSAL TYPE



- ✓ Knowledge, experiences & information exchange
- ✓ RD&I & commercialisation
- ✓ Start-up and SME support & internationalisation

THEMATIC AREA

- Net Zero / Low Carbon
- Smart cities, digital twin and urban mobility
- Cybersecurity
- Inclusive innovation, citizen participation approaches
- ✓ SME support & joint business activities

P4 GREEN CITY ACCELERATOR

Scaling low carbon tech

VISION

Belfast and Sejong have ambitious growth plans in this area. Belfast is seeking to tap into a £8 trillion investment in the global green economy. Supporting our industries to thrive in this market, we will develop a suite of carbon services starting with carbon accounting software to enable these industries to differentiate themselves from carbon intensive competitors.

DESCRIPTION

The Green City Accelerator will target interconnected manufacturing, power, and transport sectors as part of an overall coordinated, whole systems approach to attract investment, deploy a range of low carbon technologies, and change citizen and industry's behaviour and ultimately establish Belfast and Sejong as global leaders for carbon accounting standards.

The proposal will test and demonstrate existing ground-breaking software in selected industries building capacity in supply chains with strategic significance for both countries.

EXPECTED OUTCOMES

- Enable industries to commercialise and scale low carbon technologies.
- Create opportunities for green shoring enabling the UK and Republic of Korea to establish a decarbonised, globally competitive manufacturing base.
- Accurate reporting will motivate supply chains to reduce emissions.
- Place Belfast and Sejong at the forefront of carbon accounting and will underpin the ambitions of our industrial partners and others.

TIMELINE



- Starts April 2024
- Finishes March 2025

PROPOSAL OWNERS AND POINTS OF CONTACT



- Debbie Caldwell, Climate Commissioner, Belfast City Council, caldwelld@belfastcity.gov.uk
- Dong Hoon Kim, Team Leader, Sejong Carbon Neutrality Support Centre, dhkim@dsi.re.kr

PROPOSAL TYPE



- ✓ Knowledge, experiences & information exchange
- ✓ RD&I & commercialisation
- ✓ Start-up and SME support & internationalisation

THEMATIC AREA

- ✓ Net Zero / Low Carbon
- ✓ Smart cities, digital twin and urban mobility
- Cybersecurity
- Inclusive innovation, citizen participation approaches
- ✓ SME support & joint business activities

P5 CYBER-CITIES

Cybersecurity HackTheon

VISION

To be a place where students from partnering universities can enhance their abilities in cybersecurity, contribute to the future stability and security of the United Kingdom and the Republic of Korea, and culturally engage with students from around the world in Sejong City. The awareness of Sejong HackTheon competition will be increased globally.

DESCRIPTION

Facilitating a Queen's University Belfast team of cybersecurity students to participate in the Sejong HackTheon cybersecurity competitions to be held over two days in June 19-20, 2024. The four-person team will travel to Sejong with an academic supervisor and will participate in cultural exchange with their Sejong hosts, further developing their cybersecurity skills across all participants, promoting the study of cybersecurity, and highlighting the career opportunities in the sector.

The Queen's Cybersecurity Society (QSec) will promote the HackTheon across the student body and will facilitate multiple teams to complete in the initial stages of the competition locally in Belfast (expected in March 2024). The best performing team from QUB will be offered financial support to cover travel and subsistence costs associated with participation in the final round of the competition in Sejong.

The team will act as ambassadors for the Northern Ireland region, Belfast City, and Queen's University Belfast.

EXPECTED OUTCOMES

- Improved awareness of cybersecurity in Sejong City.
- Grow the number of students taking cybersecurity courses in Belfast and Sejong.
- Societal confidence that cyber threats can be managed and mitigated.
- Increased resilience to cyberattack, via speedy response and remediation.

TIMELINE



- Starts February 2024
- Finishes June 2025

PROPOSAL OWNERS AND POINTS OF CONTACT



- Dr Sandra Scott-Hayward, ACE-CSE Co-Ordinator, Queen's University Belfast, s.scott-hayward@qub.ac.uk
- Dr Olufemi Olukoya, QSec Liaison, Queen's University Belfast, o.olukoya@qub.ac.uk
- Megan D'Arcy, QSec President, Queen's University Belfast, mdarcy05@qub.ac.uk
- Prof Dooho Choi, Dept of AI Cyber Security, Korea University Sejong Campus, doohochoi@korea.ac.kr
- Kihwan Lim, Assistant to Director, Information & Statistics Division, Sejong City, barogagi0929@korea.kr

PROPOSAL TYPE



- Knowledge, experiences & information exchange
- RD&I & commercialisation
- Start-up and SME support & internationalisation

THEMATIC AREA

- Net Zero / Low Carbon
- Smart cities, digital twin and urban mobility
- Cybersecurity
- Inclusive innovation, citizen participation approaches
- SME support & joint business activities

P6 SECURITY IN SPACE

Addressing cyber security concerns for satellite and space systems

VISION

An opportunity for researchers from two leading research institutions in the field of cybersecurity to apply their expertise to support national cybersecurity via the application of best practices and technologies for satellite and space systems.

DESCRIPTION

While satellite and space systems rely on similar infrastructure to terrestrial digital infrastructure, they face unique cyber security challenges in relation to scale, distance and criticality.

Korea University and the Centre for Secure Information Technologies (CSIT) at Queen's University Belfast both have strong research expertise in quantum and post-quantum cryptography. They are ideally placed to collaboratively address space security challenges. In particular, both universities have specific expertise to investigate hybrid quantum/post-quantum systems for securing next-generation space communication systems.

EXPECTED OUTCOMES

- Increased awareness of cybersecurity issues related to space-based systems.
- Novel cybersecurity solutions for satellite systems (longer term: deliver a proof-of-concept).
- Knowledge sharing between Korea University and Queen's University Belfast.
- Building a concrete partnership between Korea University and Queen's University Belfast.

TIMELINE



- Starts March 2024
- Finishes June 2025

PROPOSAL OWNERS AND POINTS OF CONTACT



- Prof Máire O'Neill, Director, Centre for Secure Information Technology (CSIT), Queen's University Belfast, m.oneill@ecit.qub.ac.uk
- Prof Dooho Choi, Dept of AI Cyber Security, Korea University Sejong Campus, doohochoi@korea.ac.kr

PROPOSAL TYPE



- Knowledge, experiences & information exchange
- RD&I & commercialisation
- Start-up and SME support & internationalisation

THEMATIC AREA

- Net Zero / Low Carbon
- Smart cities, digital twin and urban mobility
- Cybersecurity
- Inclusive innovation, citizen participation approaches
- SME support & joint business activities

P7 5G URBAN TESTBEDS FOR IOT

Developing testbeds in Belfast & Sejong

VISION

With the rapid developments within the telecommunication sector and the increased prevalence of sensorised devices, smart environments operating at scale, across a range of application sectors is no longer an aspiration, it is a reality. Our vision is to couple these recent technological advances with the emerging digital twin paradigm to examine the workflow and adoption complexities from regional and cultural perspectives, across a diverse range of application scenarios.

DESCRIPTION

The aim of this proposal is to develop a suite of testbeds in both Belfast and Sejong which offer the functionality of a true Internet of Things deployment enabled by 5G communications to support time sensitive applications such as those found within the fintech and health-tech sectors.

Specifically, the proposal will investigate the recognised barriers to innovation adoption from cultural, regional and application perspectives and endeavour to define changes in workflow to overcome these barriers.

EXPECTED OUTCOMES

- Improved deployment of technology to facilitate smart city deployments.
- Societal benefits for users.
- Growth of use cases leveraging technology-based solutions.
- Increased usage of digital twins to solve real problems.

TIMELINE



- Starts April 2024
- Finishes March 2025

PROPOSAL OWNERS AND POINTS OF CONTACT



- Prof Chris Nugent, Head of School of Computing, Ulster University, cd.nugent@ulster.ac.uk
- William Revels, Managing Director, Digital Catapult Northern Ireland, william.revels@digicatapult.org.uk

- Do-Yeong Lim, Researcher, Sejong TechnoPark, limuju01@sjtp.or.kr

PROPOSAL TYPE



- Knowledge, experiences & information exchange
- RD&I & commercialisation
- Start-up and SME support & internationalisation

THEMATIC AREA

- Net Zero / Low Carbon
- Smart cities, digital twin and urban mobility
- Cybersecurity
- Inclusive innovation, citizen participation approaches
- SME support & joint business activities

P8 URBAN TRANSPORT & PATHWAYS TO NET ZERO

Accelerating R&D for transport and urban mobility

VISION

The provision of carbon neutral transport is at the core of cities Net Zero targets and strategies. Belfast and Sejong are working to develop public bus and rail services that will support national 2050 net zero targets and earlier Net Zero and carbon positive ambitions. This proposal will seek to increase the movement from carbon-based private transport to Net Zero public transport uptake by commuters and travellers across the two city regions, ensuring the move to carbon neutral and then to carbon positive forms of transport and micro mobility.

DESCRIPTION

The aim is to encourage effective knowledge sharing, resources, information and problems with external partners for solutions and suggestions. This will increase R&D activity and innovation rates across the wider business base by being openly accessible to all sectors and will offer the opportunities needed to support the number and scale of high growth innovation in public transport systems for the future. This will include technology installation and micro power grids in areas working with hydrogen production from other industries such as wastewater treatment.

EXPECTED OUTCOMES

- De-risk innovation, such as investment in R&D, and increase the agility solutions to be delivered.
- Increase Northern Ireland research and innovation activity rates at a regional, level with Sejong as a key partner.
- Raise awareness and connect innovators abroad within Sejong to NI based partners with Translink.
- Raise ambition and opportunity by linking with international innovation excellence and partnerships.

TIMELINE



- Starts March 2024
- Finishes on March 2025

PROPOSAL OWNERS AND POINTS OF CONTACT



- Duncan McAllister, Head of Belfast Grand Central Station & Weavers Cross, Translink, duncan.mcallister@weaverscross.co.uk
- Adam Holland, Business Modernisation Consultant, Translink, adam.holland@translink.co.uk
- Mihwa Cha, Assistant Director, Transport Division, Sejong City, countcar@korea.kr
- Dong-Gyu Kim, Team Leader, Sejong City Transportation Corporation, kimdong887@sctc.kr

PROPOSAL TYPE



- Knowledge, experiences & information exchange
- RD&I & commercialisation
- Start-up and SME support & internationalisation

THEMATIC AREA

- Net Zero / Low Carbon
- Smart cities, digital twin and urban mobility
- Cybersecurity
- Inclusive innovation, citizen participation approaches
- SME support & joint business activities

FUTURE PROPOSALS FOR CONSIDERATION

P9

Sharing Urban Practice

Belfast City Council and Sejong City

P10

5G Enabled Cities

Digital Catapult and Sejong City

P11

Autonomous Urban Travel

Belfast Harbour Commissioners and Sejong TechnoPark

P12

Accelerating Digital Twin Adoption

The UK Digital Twin Centre and Sejong City

P13

Public Transport & Hydrogen

Translink, Sejong City and Sejong City Transportation Corporation

P14

Urban Data for Active Travel

Translink, Sejong City and Sejong City Transportation Corporation

P9 SHARING URBAN PRACTICE

Sustainable Urban Development

VISION

Belfast and Sejong have ambitious growth plans and are seeking to embed models of sustainable urban development. Both are working to encourage greater investment in their urban infrastructure, fostering their innovation-driven urban economies, diversifying land use, and growing their population.

DESCRIPTION

Belfast and Sejong are at contrasting stages of their development. Sejong is a new, carefully planned city that functions as the administrative centre for the country. Belfast which recently celebrated the 400th anniversary of its city status, has emerged organically and heavily shaped by the industrial revolution. It's working to re-tool and re-direct itself to meet the opportunities and challenges of the twenty-first century.

Planners and urban regeneration specialists from both municipalities are eager to share learning and insights on contrasting, but complementary, urban policy initiatives and projects to better inform future planning and investment decisions.

EXPECTED OUTCOMES

- Create a channel for sharing learning on urban regeneration and development initiatives.
- Develop joint proposals to trial and test urban policy initiatives particularly in areas that support both city's commitments to net zero, and the challenges of climate adaptation.
- Explore opportunities to joint encourage greater private sector investment.

PROPOSAL OWNERS AND POINTS OF CONTACT



- Cathy Reynolds, Director, City Regeneration and Development, Belfast City Council, reynoldsc@belfastcity.gov.uk
- Jae Wook Ham, Urban Affairs Division, Sejong City, hamjak@korea.kr

PROPOSAL TYPE



- Knowledge, experiences & information exchange
- RD&I & commercialisation
- Start-up and SME support & internationalisation

THEMATIC AREA

- Net Zero / Low Carbon
- Smart cities, digital twin and urban mobility
- Cybersecurity
- Inclusive innovation, citizen participation approaches
- SME support & joint business activities

P10 5G ENABLED CITIES

Harnessing advanced wireless networks for the innovation economy

VISION

Harnessing the potential of advanced wireless, particularly 5G networks, to enhance innovation in convergent digital technologies by key SME sectors including advanced manufacturing, transport, life and health tech, logistics, and creative industries.

DESCRIPTION

Bringing together industry, researchers, and public bodies to support greater investment in advanced wireless networks and to encourage the adoption and exploitation of these networks to support the development of innovative commercial use cases by SMEs and by public bodies for new city services.

EXPECTED OUTCOMES

- Create a channel for sharing learning from the delivery of successful use cases in terms of technological and commercialisation.
- Delivery of a joint R&D project including universities and industry that exploit advanced wireless connectivity.
- Develop a proposal for greater investment in advanced wireless connectivity by both cities.

PROPOSAL OWNERS AND POINTS OF CONTACT



- William Revels, Managing Director, Digital Catapult Northern Ireland, william.revels@digicatapult.org.uk
- Mark McCann, City Innovation Manager
Belfast City Council, mccannmark@belfastcity.gov.uk
- Youngchae Lim, Assistant to Director, External Cooperation, Sejong City, chae0972@korea.kr

PROPOSAL TYPE



- ✓ Knowledge, experiences & information exchange
- ✓ RD&I & commercialisation
- ✓ Start-up and SME support & internationalisation

THEMATIC AREA

- Net Zero / Low Carbon
- ✓ Smart cities, digital twin and urban mobility
- Cybersecurity
- Inclusive innovation, citizen participation approaches
- ✓ SME support & joint business activities

P11 AUTONOMOUS URBAN TRAVEL

Transportation and port cargo movements

VISION

Belfast has ambitious plans to grow the use of autonomy in the Belfast Harbour Estate for sustainable public transportation and port cargo movements. Both Belfast and Sejong have ambitious growth plans to embed models of sustainable urban transportation, and this represents a unique opportunity to jointly progress this agenda.

DESCRIPTION

Belfast is running Project Harlander with Innovate UK funding and the Centre for Connected Autonomous Vehicles in a consortium with Oxa, eVersum, Horiba Mira, BT and Angoka on public transport within the Belfast Harbour Estate and are looking for opportunities to progress the port autonomy journey based on the knowledge gained with this trial on public transportation.

EXPECTED OUTCOMES

- Create a channel for sharing learning on autonomous transport opportunities and learning.
- Develop joint proposals to trial and test autonomous transport solutions for both port use and public transportation in real world environments.

PROPOSAL OWNERS AND POINTS OF CONTACT



- Laura O'Neill, Digital Transformation Manager, Belfast Harbour Commissioners, l.oneill@Belfast-harbour.co.uk

- Gyeong Woo Heo, Sejong Techno Park, hkw@sjtp.or.kr

PROPOSAL TYPE



- Knowledge, experiences & information exchange
- RD&I & commercialisation
- Start-up and SME support & internationalisation

THEMATIC AREA

- Net Zero / Low Carbon
- Smart cities, digital twin and urban mobility
- Cybersecurity
- Inclusive innovation, citizen participation approaches
- SME support & joint business activities

P12 ACCELERATING DIGITAL TWIN ADOPTION

The future of manufacturing and design

VISION

Digital Twin technologies have been identified by both the Sejong and UK Government as strategically important to accelerate competitive advantage and inclusive growth. Digital Twins are essential for the future of design and manufacturing and are being widely adopted in the Republic of Korea. With an initial focus on Aerospace, Defence and Maritime Sectors in the UK the aim of this programme will be to help organisations shorten the time to market of new products; reduce material and labour costs while creating new (circular) business models and reducing carbon emissions.

DESCRIPTION

The UK Digital Twin Centre is being established in Belfast with almost £40M investment from both public and private industry investors and will be the UKs research and innovation centre of excellence based in Northern Ireland. It will help businesses compete in the global market by reducing the cost of designing and deploying a Digital Twin by 50% which will lead to a broad range of direct commercial benefits.

EXPECTED OUTCOMES

- Reduce cost of producing a Digital Twin by 50% to shorten time to market, reduce costs.
- Reduce emissions and accelerate inclusive UK growth.
- Increase productivity and job growth.
- A thriving ecosystem within and across sectors.
- Develop Cutting edge tools, methodologies and assets.
- Stimulate cross-sector use of world-leading digital design smarter practices.

PROPOSAL OWNERS AND POINTS OF CONTACT



- Deborah Colville, Director, UK Digital Twin Centre,
Deborah.colville@digicatapult.org.uk
- Kyeong Jin Jeong, Smart Cities Division, Sejong City,
julia0915@korea.kr

PROPOSAL TYPE



- Knowledge, experiences & information exchange
- RD&I & commercialisation
- Start-up and SME support & internationalisation

THEMATIC AREA

- Net Zero / Low Carbon
- Smart cities, digital twin and urban mobility
- Cybersecurity
- Inclusive innovation, citizen participation approaches
- SME support & joint business activities

P13 PUBLIC TRANSPORT & HYDROGEN

Options for fleet and buildings in hydrogen fuel production and energy management

VISION

Translink are the public transport provider for bus and rail services for delivery of public transport services and have the target to reach net zero by 2030 and become carbon positive by 2040. Translink want to increase use hydrogen production, use of hydrogen vehicles in fleet for bus then in future potentially to rail vehicles and power for property and buildings.

DESCRIPTION

The aim is to encourage effective knowledge sharing, resources, information and problems with external partners for solutions and suggestions; this will increase R&D activity, increase innovation rates across the wider business base by being openly accessible to all sectors and will offer the opportunities needed to support the number and scale of high growth innovation in public transport systems for the future. Technology installation and micro power grids in areas working with Hydrogen production from other industries such as wastewater treatment.

EXPECTED OUTCOMES

- De-risk Innovation, such as investment in R&D, and increase the agility solutions to be delivered.
- Increase NI research and innovation activity rates at a regional, level with Sejong as a key partner.
- Raise awareness and connect innovators abroad within Sejong to NI based partners with Translink.
- Raise ambition and opportunity by linking with international innovation excellence and partnerships.

PROPOSAL OWNERS AND POINTS OF CONTACT



- Duncan McAllister, Head of Belfast Grand Central Station & Weavers Cross, Translink, duncan.mcallister@weaverscross.co.uk
- Adam Holland, Business Modernisation Consultant, Translink, adam.holland@translink.co.uk
- Mihwa Cha, Assistant Director, Transport Division, Sejong City, countcar@korea.kr
- Dong-Gyu Kim, Team Leader, Sejong City Transportation Corporation, kimdong887@sctc.kr

PROPOSAL TYPE



- ✓ Knowledge, experiences & information exchange
- ✓ RD&I & commercialisation
- ✓ Start-up and SME support & internationalisation

THEMATIC AREA

- ✓ Net Zero / Low Carbon
- ✓ Smart cities, digital twin and urban mobility
- Cybersecurity
- Inclusive innovation, citizen participation approaches
- SME support & joint business activities

P14 URBAN DATA FOR ACTIVE TRAVEL

Accelerating Transport Management and modal shift for City to achieve Net Zero for Transport Solutions

VISION

Translink are the public transport provider for bus and rail services for delivery of public transport services and have the target to reach net zero by 2030 and become carbon positive by 2040. Translink want to continue to grow the offering and movement from carbon based private transport to public transport uptake by commuters and travellers across Northern Ireland, ensuring the move to carbon neutral and then to carbon positive forms of Transport and micro mobility.

DESCRIPTION

The aim is to use data information from travel behaviours, mass people movement, best practice in modern city and urban design to modernise and create efficiencies for the safe management and movement of people, buildings and transport system integration. Supporting a pathway to a net zero city and urban integrated transport system.

EXPECTED OUTCOMES

- De-risk Innovation, such as investment in R&D, and increase the agility of a firm.
- Increase NI research and innovation activity rates at a regional, national and international level with Sejong as a key partner to meet net zero targets.
- Raise awareness and connect innovators abroad within Sejong.
- Improve experience for transport users.
- Raise ambition and opportunity by linking with international innovation excellence and partnerships.

PROPOSAL OWNERS AND POINTS OF CONTACT



- Duncan McAllister, Head of Belfast Grand Central Station & Weavers Cross, Translink, duncan.mcallister@weaverscross.co.uk
- Adam Holland, Business Modernisation Consultant, Translink, adam.holland@translink.co.uk
- Mihwa Cha, Assistant Director, Transport Division, Sejong City, countcar@korea.kr
- Dong-Gyu Kim, Team Leader, Sejong City Transportation Corporation, kimdong887@sctc.kr

PROPOSAL TYPE



- Knowledge, experiences & information exchange
- RD&I & commercialisation
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THEMATIC AREA

- Net Zero / Low Carbon
- Smart cities, digital twin and urban mobility
- Cybersecurity
- Inclusive innovation, citizen participation approaches
- SME support & joint business activities

WHAT HAPPENS NEXT

Deploying the roadmap to support bi-lateral collaborative innovation

1

Roadmap adopted by both cities

April 2024

2

Roadmap launched and proposals initiated

April 2024

3

Lord Mayor of Belfast visit to Sejong

April 2024

4

Sejong Cyber Security HackTheon

June 2024

5

Sejong SME mission to Belfast

Early 2025

6

Mayor of Sejong visit to Belfast

May 2025

The image features a solid teal background. A white rounded rectangle is positioned in the lower half, with its top-left corner rounded. A thin white vertical line runs down the right side of the page, ending in a small white circle.

APPENDIX

ROADMAP STAKEHOLDERS



Belfast
City Council

Belfast City Council

Belfast City Council, with 60 elected Councillors and almost 2,500 employees, drives sustainable and inclusive economic, physical, cultural and social regeneration to provide key services for the city's growing population.

<https://www.belfastcity.gov.uk>



Queen's University Belfast

Ranked within the top 85 universities globally for impact (THE Impact Rankings 2023), and a proud member of the Russell Group, Queen's University Belfast exemplifies excellence in research and education with a significant focus on societal needs.

<https://www.qub.ac.uk>



**The Centre for Secure
Information Technologies
(CSIT)**

CSIT at Queen's University Belfast represents a cornerstone in the UK's strategy for technological commercialisation and innovation.

<https://www.qub.ac.uk/ecit/CSIT/>



Ulster University

Ulster University is a university with a national and international reputation for excellence, innovation and regional engagement, making a major contribution to the economic, social and cultural development of Northern Ireland.

<https://www.ulster.ac.uk>



Invest Northern Ireland

Invest Northern Ireland (Invest NI) is the region's economic development agency. They help companies from Asia Pacific (APAC) scale internationally into Northern Ireland, providing tailored overseas expansion guidance and soft-landing support

<https://www.investni.com>

ROADMAP STAKEHOLDERS



Digital Catapult

Digital Catapult is the UK authority on advanced digital technology. Bringing together industry leaders, researchers and startups, we accelerate digital technology adoption to benefit the UK.

<https://www.digicatapult.org.uk/about/regions/northern-ireland/>

Catalyst Catalyst

Catalyst, a non-profit hub in Northern Ireland, is dedicated to fostering innovation and entrepreneurship, involving 1,000 entrepreneurs, 2,700 daily site workers, and 570 business experts and mentors.

<https://wearecatalyst.org>

Translink

Translink is the accessible, inclusive and green public transport provider helping Northern Ireland to reconnect people and places.

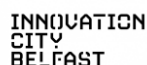
<https://www.translink.co.uk>



Belfast Harbour Commissioners

Founded in 1847, Belfast Harbour serves as Belfast's port authority and a key maritime gateway, covering 20% of the city's area. Functioning as Northern Ireland's logistics hub, it houses major businesses across diverse sectors.

<https://Belfast-harbour.co.uk>



Innovation City Belfast

Formed in 2020 Innovation City Belfast is a partnership the leaders of key institutions working together to support and grow the city's urban innovation ecosystem.

<https://smartbelfast.city/innovation-city-Belfast/>

ROADMAP STAKEHOLDERS



Sejong City

Sejong City stands as the administrative capital of the Republic of Korea, symbolising innovation and progress. It intertwines cutting-edge technology with modern design, emerging as a city where industry and culture coexist harmoniously, garnering significant attention as a city of the future.

<https://www.sejong.go.kr/eng.do>



Sejong TechnoPark

Established by Sejong City to design and plan industrial development strategies for the city, Sejong TechnoPark has evolved to include local industrial policy development and serves as a hub to connect local companies with domestic and international partners.

<https://www.sjtp.or.kr>



**Korea University
Sejong Campus**

Founded in 1905, Korea University is one of the oldest, largest and highest ranked universities in the country, and is ranked 76th in the world. Korea University Sejong Campus was opened in 1980. An agreement signed in June 2023 with Queen's University Belfast and Sejong City aims to foster closer cooperation for the development of cyber security.

<https://sejong.korea.ac.kr>

**SCNC Sejong Carbon Neutrality
Support Center**

The Sejong City Carbon Neutrality Support Center has the aim to research and formulate climate crisis response and carbon neutrality plans for the Sejong City region. It enables the development of collaborative projects between domestic and international governments.

<https://www.dsi.re.kr/menu.es?mid=a10222000000>

ROADMAP STAKEHOLDERS



Sejong Center for Creative Economy and Innovation

The Sejong Center for Creative Economy and Innovation (CCEI) serves as a leading global public accelerator. Focused on establishing a sustainable innovation entrepreneurship ecosystem, the CCEI provides dedicated support to emerging sector high growth enterprises and identifies high value regional initiatives. CCEI discovers and fosters promising startups, expands open innovation clusters and cultivates venture funds in Sejong.

<https://ccei.creativekorea.or.kr/sejong/>



National Research Council for Economics, Humanities and Social Sciences (NRC)

The National Research Council for Economics, Humanities and Social Sciences (NRC) is the Republic of Korea's national think tank group dedicated to supporting and nurturing 26 national research institutions. NRC's objective is to contribute to the advancement of the knowledge industry and is dedicated to supporting the Republic of Korea's national policies in an era of societal of transformation and paradigm shift.

<https://www.nrc.re.kr>



Sejong City Transportation Corporation

Sejong City Transportation Corporation (SCTC) is committed to promoting the development of urban transportation and enhancing the convenience of and welfare of its citizens. SCTC specialises in managing public transportation services and undertaking public development projects, including industrial complexes and mixed-use public facilities, to foster regional economic growth.

<https://www.sctc.kr>

MEMORANDUM OF UNDERSTANDING

Memorandum of cooperation and friendship between



City of Sejong

Represented by the Deputy Mayor
for Economic Affairs
Mr Lee Seung-Won



City of Belfast

Represented by the Lord Mayor
Councillor Ryan Murphy

Sejong City and Belfast City (hereinafter referred to as the "parties") intend to build friendly relationships and promote concrete cooperation across diverse fields to encourage creative innovation and sustainable urban development.

Willingness between our cities to cooperate is reflected in this Memorandum of Understanding (MOU). As part of the MOU, both parties will:

1. Establish a long-term collaborative relationship based on mutual exchange of information for the benefit of both parties.
2. Promote active and practical cooperation and exchanges in areas such as research, training activities and exchanges of academia, in fields of common interest including, but not limited to:
 - a. Smart City technologies including digital twins and future mobility
 - b. cybersecurity
 - c. joint research and academic exchange
 - d. support for SMEs' overseas expansion
 - e. international and domestic event participation and collaboration
 - f. inclusive innovation and citizen participation approaches
 - g. areas identified as needed and of interest by both cities
3. Link with relevant departments in charge of cooperation and exchanges to facilitate execution and delivery of this MOU.
4. Conduct visits and exchanges to strengthen their relationship, exchange information, and, as appropriate, meet with each other to discuss and develop concrete cooperation and projects.

It is agreed that this MOU does not create any financial obligation towards any party. The parties acknowledge that this MOU is not a legally binding or enforceable contract and shall not give rise to any obligation on the part of each party.

This MOU will be effective on the date of execution by all parties and shall remain valid until 6 August 2025. The terms of this MOU may be extended or terminated at any time upon a mutual agreement in writing by the parties.

This MOU has been made in original texts in 1 Korean, 2 English, and signed in Belfast on 7 August 2023, each of which is equally effective as the original from the date of signing.

Mr Lee Seung Won
Deputy Mayor for Economic Affairs

Councillor Ryan Murphy
Lord Mayor of Belfast

REFERENCES

- The Downing Street Accord: A United Kingdom-Republic of Korea Global Strategic Partnership, [November 2023 - The Downing Street Accord - A United Kingdom-Republic of Korea Global Strategic Partnership.pdf](#) ([publishing.service.gov.uk](#)), (2023)
- UK-Republic of Korea Digital Partnership, [UK-Republic of Korea Digital Partnership - GOV.UK](#) ([www.gov.uk](#)), (2023)



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Visit Connected Places
Catapult's website at
<https://cp.catapult.org.uk/>

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Follow us on LinkedIn

Connected Places Catapult

Email us

info@cp.catapult.org.uk

