Amazing Spaces, Smart Places
SBRI challenge

Challenge background

Belfast City Council and the Department of Justice for Northern Ireland ('the Challenge Owners') have established a Small Business Research Initiative (SBRI) competition to encourage digital businesses to collaborate with us on innovative technology and data-driven solutions that can help us manage safe, accessible and enjoyable parks and open spaces. Dublin City Council is also participating in the challenge and while the competition will focus mainly on open spaces in Belfast there may also be opportunities in Dublin as well.

We are particularly interested in solutions that will help us make our open spaces safer and more accessible, whilst continuing to respect the privacy of our users.

Belfast has over 2,340 hectares of parks and open spaces that contribute to the quality of life of our citizens. The city makes significant annual investments in management, programming, maintenance and investing in new infrastructure. Belfast's approach is influenced by a commitment to national standards of excellence and the city's strategy, *The Belfast Agenda*.

Dublin City Council manages over 1,500 hectares of parks, green spaces, urban trees and the Bull Island Biosphere. As in Belfast, the parks are popular for many types of recreational activity and provide facilities for activities including sports, play, educational, festivals and events.

What is SBRI?

The Small Business Research Initiative (SBRI) enables the public sector to connect with technology organisations to find innovative solutions to public policy challenges.

SBRI funding stimulates innovation ('the successful generation and exploitation of new ideas') to create better products, processes and new ways of doing things.

It also offers an opportunity to use pre-commercial procurement to **accelerate technology development** by supporting projects through the stages of feasibility and prototyping that are otherwise hard to fund; and they offer businesses, particularly early stage companies, the opportunity to demonstrate the potential of their technology with the support of potential public sector customers.

SBRI competitions often have a two-phase structure. Phase 1 is intended to show the technical feasibility and commercial viability of the proposed concept. Phase 2 builds on this work to then develop and evaluate prototypes or demonstrators from the more promising technologies.

This competition focuses on phase 1 but allows for an extended period of scoping to explore the viability of emerging solutions. Therefore, the challenge owners expect that participating businesses will have a working prototype to demonstrate proof of concept before the end of the phase which can be trialled and tested in the locations identified by both city councils.

The challenge owners will work together to explore funding for a potential Phase 2 which would support projects that successfully demonstrate their potential at the end of Phase 1. Please note, that plans or funding for a second phase have not yet been confirmed.

Participating businesses will retain any Intellectual Property generated from the challenge, with certain rights of use retained by the challenge owners.

The Funding

Belfast City Council (BCC) and the Department of Justice (DOJ) have been granted £50,000 from the Department of Finance and £50,000 from the NI Audit Office (NIAO) SBRI Challenge Fund for this competition.

Belfast City Council is adding a further £10,000 and Dublin City Council is contributing £10,000, bringing the total funding pot to £120,000 for this challenge.

Contracts will be awarded for a four month period. Funding will be offered up to a maximum of **£20,000 per scoping exercise** with staged payments on satisfactory completion of work as detailed in the contract.

The Challenge

The challenge owners are particularly interested in how we can make our open space safer for our citizens while keeping them accessible and ensuring that we respect the privacy of users. We are seeking to work with businesses to explore how innovative data-driven and technological solutions can inform more effective decision-making by our staff to meet these objectives.

We are particularly interested in exploring the potential of both new technologies and data science in generating innovative approaches in this field but we recognise that user-centred design and co-design methodologies also offer valuable avenues to re-think this subject.
The following examples should not be taken as prescriptive but are illustrative of the types of approaches that might generate collaborative innovation:

1. Using data from a variety of sources (including open data) to identify correlated and causal relationships to help us understand usage, measure experience and attitudes, aid prediction and inform decision-making on existing and future programmes.

2. Deploying low-cost remote data-gathering (IoT devices) to measure the impact of investment decisions/programmes/interventions, etc.

3. Demonstrating the potential of co-design or user-centric design to nudge positive behaviours and reduce risk-taking.

4. Creating interactive, 'playable city' experiences that engage and inform the user, but also help our understanding of the user's needs and experience.

5. Exploring how tech-based play interventions or fitness challenges can meet our objectives.

6. Identifying opportunities to embed new technologies and design into existing and planned infrastructure investments in our open spaces (eg lampposts, furniture, buildings, signage) to enhance data gathering and user experience.

Wider context

We strongly recommend that businesses interested in submitting an application consider the following:

Geographical context

1. We will work with successful businesses to agree a small number of geographical locations in Belfast and Dublin. There are different types of parks and open spaces, each with their own characteristics and challenges and we are interested in exploring opportunities for innovation in a variety of settings.

2. Many of our parks/open spaces have close associations with an adjacent neighbourhood or an active community of users. It's important for us to keep such communities informed and we would expect, if required, that businesses would co-operate in positively engaging with these communities.

3. Successful interventions in one location can sometimes just displace negative activity to another. How can your proposal help us identify and militate against such displacement?

4. We will need to see evidence that your idea has market potential beyond Belfast and Dublin. If your phase one is successful, could your product be scaled up to different types of spaces and cities?

Data context

1. Privacy and data security is extremely important to us. If it's relevant to your proposal, we expect your business to understand and be compliant with GDPR and data management standards.

2. Our partners collect different types of data such as geo-spatial data on assets; CRM data on incidents and complaints; footfall, usage and attitudinal surveys. However, we have limited real-time data associated with usage and behaviours and limited data analytics. Can you complement our existing data with new sources and techniques to provide new insights?

3. The Challenge Owners have an ongoing investment programme across our open spaces; that are creating new uses, new buildings, furniture, public assets, etc. We also manage a wide range of programmes and interventions and events in these spaces. These are likely to provide a rich variety of opportunities for developing complementary proof of concepts. For example, can we use new assets to generate better data for decision-making; and/or to create a richer experience for users.

What we will **NOT** support

1. The SBRI competition is an opportunity for your business to collaborate with city partners on a real-world problem. This is **NOT** a pre-sales demonstration of your existing products or services. We want to see that your business is interested in innovating with us around this challenge. (If you do have an existing product that you think is relevant, we would encourage you to consider how you can use this opportunity to develop it or deploy it in innovative ways.)

2. We are unlikely to support applications that focus on active surveillance. The privacy of our park-users is paramount. Our parks are used by a wide cross-section of society including young people and groups that may be at risk. Emerging solutions must be respectful of this.

3. Dublin City Council is not likely to support lighting solutions for the Dublin City test site.

Support for participating businesses

Alongside the funding, participating businesses will get unique access to a wide range of expertise, locations, and data:

1. Access to the experience and knowledge base of the management and delivery teams within Belfast and Dublin City Councils, involved in parks and open space (e.g. community safety, parks team, community development service, facilities management, project design team). Companies will also have access to our partners in the Department of Justice and Police Service ofr NI.

2. Access, where appropriate (and under the terms of data sharing agreements) to complementary geo-spatial data, CRM data on incidents and complaints, historical survey data on usage and attitude. Businesses will also be given insight into existing electronic systems used to manage our open spaces. If your idea requires access to existing partner data, we will help to broker a data sharing agreement with your business.

3. Opportunities to deploy proto-types on-site.

4. Opportunities to engage with user groups and communities from the locations selected.

5. If required, free access to Belfast City's Things Connected LoraWan network, cloud-hosting, and IoT training.

6. If required, business development support for start-ups that are seeking to innovate with signposting advice on business plan development, marketing, showcasing, innovation vouchers and tax rebate opportunities (for qualifying companies).

Measuring success

Phase 1 should include tangible results of experiments or trials, and should not be just a desk study. The deliverables for Phase 1 will comprise a commercial 'in confidence' report using the template provided (Phase 1 End Report).

We recognise that Phase 1 is unlikely to deliver significant measurable change in shared outcomes during the life of the project. However, businesses will be expected to consider how their proposal would ultimately contribute to one or more of these measures, demonstrating in particular how they impact on measure 7.

1. A route map towards the development of a commercially viable product or service.

2. An increase in real-time actionable relevant data that can inform management of public space.

3. An increase in footfall, walking, and positive activity in our open spaces.

4. Increased positive perception by users of our parks and open space.

5. An increase in information and coordination between agencies.

6. A decrease in response time and costs to open space.

7. A decrease in antisocial behaviour and risk-taking in open spaces.

Additional background information

This challenge is one of many competitions managed by Belfast City Council's Smart Belfast programme which seeks to promote collaboration with academia and industry to address urban challenges by nurturing and harnessing innovation. See http://smartbelfast.city.

Information on Belfast's Open spaces:
http://www.belfastcity.gov.uk/leisure/parks-openspaces/parksAtoZ.aspx

The Smart Dublin initiative is a collaboration of the four Dublin Local Authorities who work together to encourage the deployment of innovative technology and data driven solutions to provide better services and outcomes for citizens. www.smartdublin.ie

Dublin City Park Strategy 2017-2022
Dublin City Public Realm Strategy

The application process

The deadline for applications is 12:00 noon on 14 November 2018.

SBRI competitions are open to all organisations that can demonstrate a route to market for their solution. The challenge owners are strongly encouraging applications from organisations that scope practical and economically viable solutions.

Collaboration between businesses is encouraged to avoid duplication or part solutions; the emphasis should be on innovation and demonstration of capability.

Key information relating to the competition is available at http://www.smartbelfast.city. From this page there will be a link to the eSourcingNI site where you will need to register in order to download the documents relating to the SBRI competition.

Directions on how to complete the application form can be found in the '**Invitation to Apply'** document. The application forms are suitable for ONE application only. If you intend to submit more than one application, or have any other questions about the application process please request further information from the Smart Belfast team using the contact details below.

Questions related to the particular requirements of this competition should be addressed directly to the e-Portal messaging system provided by eSourcing NI.

FURTHER INFORMATION

- Smart Belfast: smartbelfast@belfastcity.gov.uk
- For more information about other competitions please see the competitions section of our website at https://interact.innovateuk.org
- For more information about SBRI see www.innovateuk.org/sbri

INFORMATION SESSIONS

Information sessions for potential applicants will be held on23 **October** 1pm to 2pm at Catalyst Inc's Fintech Hub, Danske Bank, Donegall Square West**, October 29th** 1pm to 2pm at Ormeau Baths, 18 Ormeau Ave,   7 November 1pm to 2pm at the Innovation Factory, 385 Springfield Rd.

KEY DATES

We aim to work to the following time schedule

Competition opens	Launch Event, 18 October 2018
Deadline for applications	12 noon, 14 November 2018
Applicants notified of decision	30 November 2018
Contracts awarded	7 December 2018
Feedback provided by	15 December 2018
End of project report	22 March 2019
Project Complete	31 March 2019

Successful applicants will be expected to mobilise rapidly to start Phase 1 of the project. It is important that your project is ready to start soon after the contract has been issued.