

INNOVATION CITY BELFAST

A Future Thinking City

G-SIRT: The proposition

This document sets out the Global Centre for Secure and Intelligent Regulatory Technologies (G-SIRT) proposition, outlines the background to why this is needed in the UK and sets out why it should be located in Northern Ireland (NI).

Executive Summary

We are currently living through an unprecedented period of global challenges and change that increasingly threaten our planet. At the same time, organisations are subject to ever more complex regulatory pressures that often stand in the way of innovation. Regulatory technology (RegTech) can support organisations to become more agile and resilient in fulfilling their regulatory obligations and provide a competitive advantage.

Located in NI, 'G-SIRT' will be the UK's national institute in RegTech, bringing together companies, academics and public bodies to drive world-class research and innovation; to understand and address at pace the real-world, cross-sectoral challenges within RegTech; and ensure the UK is acknowledged as the global hub for innovative and influential leadership in this area. If fully funded, we anticipate G-SIRT would create up to 16,500 (10,200 direct with 6,300 indirect and induced) new jobs and £931m in gross value added (GVA) by 2031.

G-SIRT will work alongside other initiatives and industry groups, such as the Centre for Finance Innovation Technology (as proposed by HM Treasury's Kalifa Review) and the FinTech National Network, to strengthen industry collaboration between all nations of the UK, accelerate digital and data driven innovation, and unlock the associated economic benefits.

The development of G-SIRT will require £300m of funding. Over the next six years, we envisage £139m being invested by the private sector, with the UK government contributing £161m.

Innovation City Belfast

- Innovation City Belfast is a partnership between Belfast City Council, Belfast Harbour, Queen's University Belfast, Ulster University, Catalyst and Invest Northern Ireland. Our proposal to establish G-SIRT will repeat the job creation success of Queen's University's Institute of Electronics, Communications and Information Technology (ECIT): 1 job in ECIT creates 10 jobs in the Catalyst community and 100 further jobs in NI.

RegTech: What problems will it solve and what opportunities does it create?

- The world is changing rapidly, and businesses face an increasing number of challenges, including climate change, financial crime and the assimilation of new technologies into their established systems and practices. Such rapid change heaps increasing regulatory pressures onto organisations of all sizes. In this increasingly complex and uncertain world, RegTech can support organisations to become more agile and resilient in fulfilling their regulatory obligations and providing a competitive advantage.
- Emerging technologies will drive emerging regulations. Regulation typically lags behind the technological capabilities. For example, regulation of social media and cryptocurrencies is just emerging and the conversation around ethics in artificial intelligence (AI) is only beginning. There is a real need to balance the development and enforcement of effective regulation with enabling innovation and adoption of new technologies, both at pace and at scale.
- In this COP26 year, there is an expectation that the work agreed in the 2015 Paris Agreement will be built upon, implying further regulation in the environmental, social and governance (ESG) space. This will have wide-ranging implications, from the need for all organisations to understand and report on their own climate impact, to large financial institutions being required to evidence how their lending and investment decisions are compliant with climate related criteria.
- Financial crime is an on-going challenge to the effective operation of the global financial system, including anti-money laundering and issues of market conduct. The resultant regulatory change is ongoing and disparate globally. There is significant opportunity to reduce costs and improve effectiveness of measures taken in this space, for example by creating better transparency around ultimate beneficial ownership, better understanding and implementation of risk-based and AI-enabled approaches to regulatory monitoring and reporting, and the creation of utility-like solutions to common data problems.
- Against this backdrop, there are huge opportunities for RegTech. G-SIRT would enable NI to exploit these and create real world solutions that could be monetised and exported on behalf of UK plc.

What is G-SIRT?

- RegTech does not just involve using technology to manage regulatory and compliance processes; it uses technology to strengthen the link between regulation and public policy outcomes.
- While in the first instance RegTech has predominantly supported financial services, there are significant opportunities to grow this sector. G-SIRT will bring two globally significant ecosystems (financial technology – FinTech - and cyber security) together to deliver a leading global hub, going beyond financial services and into other sectors that have a strong need for RegTech, such as health, environment, agri-tech, transport and telecoms.
- Co-located in Belfast and Derry/Londonderry, G-SIRT will be the UK's national institute in RegTech, bringing together companies, academics and public bodies to drive world-class research; to understand and address the real-world challenges within RegTech; and ensure the UK is acknowledged as the foremost location for innovative and influential leadership in this area.
- There is a significant potential global market for RegTech: PWC estimate that financial services firms alone already spend \$270bn a year on compliance and regulatory. This is likely to increase as regulation becomes more complex and far-reaching. To seize this opportunity, G-SIRT will accelerate the development of the UK's RegTech sector.
- G-SIRT will achieve this through an industry-led challenge model: large corporates and SMEs will co-create and innovate alongside the academic excellence of the region's two universities

(Queen's University Belfast and Ulster University), to provide novel solutions and create the next generation of highly skilled industry experts.

- G-SIRT will accelerate the real-world application of the world-leading research emerging from NI's academic institutions. For example, Ulster University's Cognitive Analytics Research Lab (CARL) is a cutting-edge research centre. G-SIRT would support CARL and industry in deploying novel analytics capabilities for commercial benefit. Similarly, G-SIRT would support the Legal Innovation Centre at Ulster University, which brings together the School of Law and the School of Computing & Intelligent Systems to promote and support innovation in legal services, to accelerate the application of innovative legal tech solutions in a commercial environment.

Why Northern Ireland?

- The Belfast region is well-placed to take forward this ambition. In the last decade we saw a 300% increase in investment in R&D by our local businesses. 26% of all job openings here in 2019 were in digital technology – the highest in the UK. Prior to Covid, Belfast had been identified by Financial Times' fDi intelligence as one of the world's top 10 Digital Economies of the Future (the only UK city other than London). Coming out of Covid, tech recruitment is already back at 90% of pre-pandemic levels, and we have recently seen a swathe of job announcements in the sector. We've got world-class strengths in FinTech, in cyber-security, in digital twins, in life & health sciences and software engineering.
- NI has a long and rich history of technology development, and more recently has led the UK in the growth of the FinTech sector, with the highest concentration of FinTech employment in the UK.
- NI is recognised as a world-leading cyber security innovation ecosystem, with 2,300 cyber jobs, over 100 companies and a novel model of economic development based around the Centre for Secure Information Technologies (CSIT). CSIT is the UK's largest cyber security-focused university technology research centre, based around a unique open innovation model with industry partners. This model enables CSIT to scale its collaborative research and innovation engagements with industry from start-ups and SMEs through to multi-nationals.
- The 2021 Kalifa Review, sponsored by HM Treasury, recognised that NI has great potential to grow an already emerging RegTech industry: the region has an existing multidisciplinary and multilayer ecosystem, as well as global reach when it comes to attracting investment. NI is an ideal location for G-SIRT which would leverage existing skills and investment to grow a nascent sector and maximise economic benefit.
- NI is already a hub for foreign direct investment (FDI). It is the world's number one location for US FDI in cybersecurity, and Europe's leading FDI destination for new software development.
- G-SIRT has received enthusiastic backing from industry, academia and the NI Executive. Alongside Innovation City Belfast, Fintech NI (the industry representative body), Invest NI, Digital Catapult NI and Matrix (the science and industry panel) have all backed G-SIRT. The Department for Economy is also fully supportive, particularly in relation to the '10x Vision' for the NI economy and its focus on FinTech as a strategic cluster. A range of Fintech companies, including FinTrU, Datactics, First Derivatives, TP-ICAP, Rapid7, Allstate, MasterCard and Citi have also endorsed the case for G-SIRT, seeing it as a welcome opportunity for further investment and to establish innovation hubs in NI.
- This is a highly competitive global sector, and key jurisdictions around the world are investing in their RegTech capacity. For example, earlier this year the Monetary Authority of Singapore announced funding for its RegTech start-ups to take proof of concepts to market. Meanwhile, the

Australian government has created bespoke funding for its own RegTech businesses to take advantage of the global RegTech market opportunity. NI has world-leading expertise, ecosystems and capability, but investment is required to ensure that these assets are able to be brought together into a best-in-class global hub. A failure to invest risks squandering NI's unique potential.

- Emerging technologies will impact employment and businesses: 7% of jobs are at high risk from automation, with a further 58% at risk of substantial change. Investment in G-SIRT, as part of a wider policy framework, could transform a potential risk to the NI economy into an opportunity with the potential to create up to 16,500 (10,200 direct with 6,300 indirect and induced) jobs by 2031.
- While uncertainty remains around the future of the Northern Ireland Protocol, many in the service sector, such as Michael Hall, managing partner of EY's NI business, recognise that it could ultimately create "the best of both worlds" by making NI a unique jurisdiction with a toe in both the UK and the EU. G-SIRT would exploit this position to crowd in private investment and drive job creation.
- While the UK government has invested significantly in NI, it is still the lowest of the 12 UK regions in terms of innovation investment. G-SIRT would build upon and maximise the value of existing investments and projects, such as the Belfast City Deal and a potential NI Freeport, while at the same time helping to close the gap in innovation investment.

Why should the government support G-SIRT?

- Within the available land in Belfast's Titanic Quarter planning approval exists for 400,000 sq ft of space zoned for a financial services district. This availability of land with planning permissions already granted should enable the project to proceed at pace.
- Catalyst have experience in delivering real estate development solutions to a high quality, on time and on budget. The design stage of the project is approximately 12 months, some of which could progress at risk. The procurement period would be circa 6 months, with on-site construction and fit-out circa 18-24 months.
- This model has worked previously, as demonstrated by the CSIT which has formed the centre of a local cybersecurity ecosystem that includes over forty companies. A [report](#) by the Royal Society, which used the CSIT as a case study, found that "these companies [employ] approximately 1,600 cybersecurity professionals delivering £60 million per annum in salaries to the local economy. The cybersecurity industry supports approximately 750 additional jobs in the wider economy."
- HM Government investment in G-SIRT will leverage £80 million in private co-investment in real estate to create the space for 5,000 employees, as well as an additional £300 million in private co-investment in research and innovation programmes.
- As set out in BEIS' recently published UK Innovation Strategy, in recovering from the pandemic, we must build on the UK's innovative foundations to create a robust and agile economy that is fit for future generations. Investment in innovation will be critical to achieving this. G-SIRT presents a key opportunity for the UK government to champion innovation led growth in NI, which in turn, will boost private sector investment and deliver growth and better-paid jobs.
- The establishment of G-SIRT as we propose would not just benefit NI and as a result it draws support from across the UK. For example, Stephen Ingledew, Executive Chair of FinTech Scotland welcomes the G-SIRT proposal, recognising that it "*will further strengthen the fintech collaboration across the UK and will be complementary in fuelling the acceleration of digital and data driven innovation*

as demonstrated by our Global Open Finance Centre of Excellence in Edinburgh. We look forward in working with the G-SIRT team to drive forward our mutually shared positive economic objectives".

- G-SIRT will complement and support other HMG sponsored initiatives, such as the Centre for Finance Innovation Technology (CFIT) – the establishment of which was recommended by the Kalifa Review. CFIT's primary objectives are to provide strategic cohesion of UK FinTech ambition through facilitating national connectivity, and to support UK FinTech cluster development. Through helping to develop the UK's "execution capability", G-SIRT would support CFIT's international agenda to increase the global scale and impact of UK FinTech.
- If fully funded, we anticipate G-SIRT would create a total of 16,500 (10,200 direct with 6,300 indirect and induced) new jobs and £931m in GVA by 2031.

Total economic impacts associated with the period 2022-2031

Economic Indicator	Direct	Indirect	Induced	Total
Jobs	10,200	3,600	2,700	16,500
GVA	£638m	£153m	£139m	£931m
Wages	£309m	£88m	£54m	£451m
Productivity	£62.5k	£42.6k	£52.5k	£56.5k
Average wage	£30.3k	£24.4k	£30.4k	£27.4k

What is required from government?

- At present, the capacity of the RegTech sector in NI and the UK more widely is constrained by a number of factors, including issues with scalability, access to talent, board education and finance. FinTrU, a leading NI-based RegTech company focusing on the financial services sector, cite scalability, alongside a lack of common standards, a lack of good quality data and a lack of digitally enabled regulatory frameworks, as key barriers to the development and adoption of RegTech solutions. For example, data is a significant challenge in KYC processes (specifically for business customers), the data required to complete these processes efficiently is fractured, expensive and of poor quality, but an opportunity exists to create a consolidated and stream-lined approach. However, this would require significant research, underpinned by substantial collaboration between academia, industry (RegTechs & financial institutions) and regulators.
- FinTrU are confident that the establishment of G-SIRT will fast-track this cross-collaboration, driving research into solutions for larger scale/complexity problems which can in turn be implemented within industry. With the right support the sector could help to create up to 10,200 direct jobs, with a further 6,300 indirect and induced, by 2031.
- The establishment of G-SIRT will require £161 million in central government spending over 6 years. This initial public investment will work to crowd-in wider co-investment from Northern Irish authorities and industry. A breakdown of the phasing of this investment is set out in the table below.

Breakdown of proposed funding by financial year

	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	Total
Private (£m)	3.30	5.53	28.59	31.69	33.68	35.86	138.65

UK							
Government (£m)	15.94	28.92	31.80	28.50	27.76	28.54	161.46