



Rialtas na hÉireann
Government of Ireland

AI – Here for Good

Progress Report on the National AI Strategy

Prepared by the Department of
Enterprise, Trade and Employment
Gov.ie

Introduction - Minister of State for Trade Promotion, Digital & Company Regulation, Dara Calleary, TD

Since the launch of the National AI Strategy in July 2021, artificial intelligence has become more present, playing a greater role in our lives and in everyday activities. The use and application of this far-reaching technology continues to help solve challenges related to climate change, healthcare, transport, agriculture, and in business. As a society, we are becoming more aware of the presence of AI all around us – be that in chatbots, on our smartphones or in our workplaces, booking holidays or helping to diagnose illnesses.

Ireland's approach to AI, as laid out in our National AI Strategy, recognises the potential for the technology to enhance our socio-economic wellbeing as well as presenting great benefits for businesses in terms of productivity and innovation. At the heart of our Strategy is an ethical and human-rights-based approach that places people at its centre and emphasises fairness, transparency and building public trust in AI.

At the same time, we recognise that the pace of advancements is rapid and over recent months AI has really entered the public consciousness and discourse. There are concerns, both real and perceived, and we must address these to ensure that we are not letting opportunities pass us by. We must ensure that we are having open and informed conversations on AI and all its potential.

Our National AI Strategy has provided the groundwork to address the concerns and the framework to respond to the challenges. It has enabled us to be attuned to the uptick in both the developments and consciousness of AI. The Strategy is centred around the themes of: Building Public Trust in AI; Leveraging AI for Economic and Societal Benefit; and Enabling AI; I am pleased with the developments and achievements outlined in this Progress Report.

In my own Department, we have made significant strides in this regard. We appointed Ireland's first AI Ambassador, who is leading a national conversation on the role of AI in all our lives and helping to demystify some of the myths and fears around AI. We also established the Enterprise Digital Advisory Forum, convened a National Youth Assembly on AI, and joined the Global Partnership on AI (GPAI). The Strategy outlines the need for a robust governance framework to safeguard against risk and to underpin public trust in AI. Crucially, work is well progressed on a horizontal EU regulatory framework which will underpin trustworthy use of AI in the EU, and Ireland is actively engaged in this.

For businesses, AI can increase competitiveness and productivity by freeing up staff for more complex roles. It can also give much greater insights into customer behaviour and trends. Under our National Digital Strategy, we have set a very ambitious target of 75% of enterprises in Ireland using AI by 2030. Government has also introduced the Digital Transition Fund which will help achieve this target. As set out in the recent White Paper on Enterprise, digital transformation is at the heart of our enterprise policy – and AI is central to this.

It is vitally important to demystify and build trust in and awareness of AI, and to prepare the ground for wider application of the technology across our society and economy. It is only through engaging with this technology, in a human-centric and ethical manner, that we can harness its full potential.

AI is changing the ways we work and will continue to change them further. If we are to see the benefits of AI, both firms and individuals must have the skills to make this happen. Digital skills are the foundation, and lifelong learning is essential for everyone as technologies continue to improve. I was pleased to see that, in line with our AI Strategy, the Expert Group on Future Skills Needs last year published its report on the skills needed for Ireland to fully benefit from the opportunities presented by AI.

Of course, as with previous technological advances, changes to the world of work are to be expected, but it is likely that much of the disruption caused by AI will result in changes to job roles, tasks, and distribution, rather than actual job losses. Indeed, a recent March 2023 OECD study on the impact of AI on the workplace found that AI users were more than four times as likely to say that AI had improved working conditions as to say that AI had worsened them. The report found that while AI has automated many repetitive and dangerous tasks, it has also created new tasks. The key recommendation of the report is that the adoption of AI results in significant skill changes – not just specialised AI skills but human skills such as creativity and communication.

The National AI Strategy is not the end, but the beginning of our work for a more digitally integrated, inclusive, and competitive society and economy. Over the remainder of 2023 and as we look to the future, we will continue to use the Strategy as the roadmap for an ethical, trustworthy and human-centric design, development, deployment and governance of AI in Ireland.



Dara Calleary, TD

Minister for Trade Promotion, Digital Transformation and Company Regulation

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Background

AI is a key component of the broader suite of digital technologies that will play a major role in shaping global competitiveness and productivity in the coming decades, granting early adopters significant social, economic and strategic advantages. The National AI Strategy, *AI – Here for Good*, was launched in July 2021 and sets out the means by which Ireland can be an international leader in the use of artificial intelligence to benefit our economy and society.

The Strategy is founded on three core principles: adopting a human-centric approach to the application of AI; staying open and adaptable to new innovations; and ensuring good governance to build trust and confidence for innovation to flourish. It sets out a whole-of-Government approach to ensuring that the necessary enablers are in place to support AI adoption in enterprise and public services. These enablers include a supportive innovation ecosystem, a secure data and connectivity infrastructure, and policies to ensure that our workforce is prepared for the impact of AI.

The National AI Strategy itself is divided into eight strands, under three broad headings:

- **Building public trust in AI:**
 - Strand One: AI and society
 - Strand Two: A Government ecosystem that promotes trustworthy AI
- **Leveraging AI for economic and social benefit**
 - Strand Three: Driving adoption of AI in Irish Enterprise
 - Strand Four: AI serving the public
- **Enablers for AI**
 - Strand Five: A strong AI information ecosystem
 - Strand Six: AI education, skills and talent
 - Strand Seven: A supportive and secure infrastructure for AI
 - Strand Eight: Implementing the strategy

This report on the implementation of the Strategy to date lists the actions taken to date under each strand.

Given the significant changes since this Strategy was launched two years ago, there are some additional actions already under way and others being planned for the coming months. The final section of this report outlines these “next steps” being taken by Ireland as we look toward the rapid pace of development in AI.



Strand 1: AI and Society

The primary objective of Strand One is to develop, build and facilitate strong public trust in AI as a force for societal good in Ireland. It goes hand in hand with Strand Two, as putting in place a strong governance ecosystem is an essential enabler for public trust in AI. However, in this Strand, the focus is on demystifying AI and building public awareness of the potential that AI offers.

Strategic Actions

- | | |
|--|-------------|
| i. Appoint an AI Ambassador to champion AI as a positive force for the economy and society [DETE] | Complete |
| ii. Open a conversation with children and young people about AI through Comhairle na nÓg, the national structure for consultation with children and young people [DETE / DCEDIY] | Complete |
| iii. Promote and expand courses which educate the general public about AI [DFHERIS] | In progress |
| iv. Expand AI for Societal Good Challenge Funds [DFHERIS, SFI / DPENDPDR / relevant Departments] | Complete |
| v. Include opportunities for AI in climate action as part of the development of future climate policies [DECC / DFHERIS, SFI / DETE / DoT] | In progress |

AI Ambassador

In May 2022, Dr Patricia Scanlon was appointed Ireland's first AI Ambassador, following an open call for expressions of interest. The role of the AI Ambassador includes leading a national conversation on the role of AI in our lives, emphasising Ireland's commitment to an ethical approach to the use of the technology and in particular its adoption by enterprise. The AI Ambassador also sits on the Enterprise Digital Advisory Forum, established under Strand

Three of the AI Strategy. In her first year in the role, Dr Scanlon has participated in a large number of engagements with media, young people, businesses and other stakeholders to demystify AI and champion its potential as a positive force. A full report on her activities over the first year will be published separately.

National Youth Assembly on AI

In October 2022, the Department of Enterprise, Trade and Employment, in cooperation with the Department of Children, Equality, Disability, Integration and Youth, convened a National Youth Assembly on AI to gather the views of young people in relation to AI and its role in their lives. Recommendations from this assembly will be considered in light of the evolving policy direction of AI and its impact across a number of areas of Government.

Helping the public to learn about AI

The SFI ADAPT Research Centre for AI-Driven Digital Content Technology runs a public engagement programme under the title, #DiscussAI. #DiscussAI is a programme of public events around AI and how the technology impacts all our lives and society. It was launched in September 2021 and has since empowered more than 40,000 members of the public to learn about AI, to develop relevant skills, and to have their say on the benefits, opportunities, challenges and potential drawbacks of emerging AI research and innovation.

Work is now under way to determine the shape of the #DiscussAI programme in the coming years.

University College Cork hosts “Elements of AI” a free massive open online course (MOOC) developed by the University of Helsinki. The course covers many key concepts from the field of artificial intelligence, and is open to everyone, regardless of background. All that is necessary is a way of accessing the internet. Those who complete the Elements of AI through the dedicated Irish portal will be provided with a certificate of completion from UCC.

AI for Good Challenge Funds

The SFI AI for Societal Good Challenge was completed in Q3 2021 and SFI’s €65 million National Challenge Fund includes a focus on Digital Transformation. Under this theme, two of the three challenges (the Future Digital Challenge and OurTech Challenge) seek research applications that employ AI to support delivery of societal and economic impact. The third challenge, the Digital for Resilience Challenge, provides scope for the use of AI for societal good, as it focuses on the use of digital technology to predict and respond to future crisis events.

The National Challenge Fund also includes challenges aligned to the Green Transition.

Leveraging the Transformative Power of AI to Tackle Societal Challenges

Many of the SFI Research Centres (ADAPT, Insight, Lero, CONNECT) are also working on projects involving AI in climate action. For example, Insight and Vistamilk are working together to use AI to improve sustainability in dairy farming.

There are also SFI Strategic Partnerships in this area, including:

- **CONSUS:** Addresses “Crop Optimisation through Sensing, Understanding and Visualisation” through the integration of historical data, meteorology, crop and soil properties, together with the application of novel data analytics and machine-learning techniques.
- **Terrain-AI:** Jointly funded by SFI and Microsoft, this project aims to help understand the impact of human activity on land use and, ultimately, as a driver of climate change for more sustainable land use. This project will provide more accurate estimates of carbon fluxes across scales and a deeper understanding of the effects of human activities to enable decision-makers to develop more effective climate mitigation strategies.
- **NexSys – Next Generation Energy Systems:** An all-island collaboration involving 46 leading academics in partnership with industry to tackle the challenges of energy decarbonisation, developing evidence-based pathways toward a net zero energy system. NexSys has received €16m in funding through SFI, with nine industry co-funding partners and one philanthropic donor.

Strand 2: A Governance Ecosystem that Promotes Trustworthy AI

Ireland is committed to an AI approach that is responsible, ethical and trustworthy. The key objective under Strand Two is to ensure an agile and appropriate governance and regulatory environment for AI, with a focus on the three key areas of legal framework; ethics; and standards and certification. This has been a top priority for Government, as it will provide the foundations for public trust in AI and for the safe adoption of AI by businesses and the public service. Much progress has been made on the development of a strong governance ecosystem for AI since the launch of the strategy.

Strategic actions

i. Continue to play an active part in discussions at EU level to define a horizontal regulatory framework for AI [DETE]	In progress
ii. Consider an appropriate mechanism for ensuring a coordinated approach by Irish regulators to Digital, including AI, as part of the forthcoming National Digital Strategy [DOT / DETE / DECC / DJustice / DTCAGSM / DCEDIY]	In progress
iii. Examine and promote ways to help businesses self-assess the trustworthiness of their AI systems, including through development of case studies and toolkits for SMEs [DETE-EI, IDA / DFEHRIS]	In progress
iv. Publish a Standards and Assurance Roadmap for AI [DETE-NSAI]	Complete
v. Investigate the potential and requirements of regulatory sandboxes for AI [DETE-NSAI / DETEEI / IDA / DFEHERIS-SFI]	In progress
vi. Join the Global Partnership on AI [DETE / DFA]	Complete
vii. Continue to advocate within multilateral fora for an ethical and human rights-based approach to AI [DFA / other Departments as appropriate]	In progress
viii. Consider the implications of AI as part of a planned review of equality legislation [DCEDIY]	In progress

Regulatory Framework for AI

The EU AI Act

Since the publication of the Strategy, Ireland has continued to play an active part in negotiations at EU level on the AI Act, which will create a horizontal regulatory framework for AI developed and used in the European Union. An important feature of the AI Act proposal is that it does not regulate the technology, but rather the use of the technology. This means that new and evolving AI technologies will fall within its scope, particularly where the health, safety and/or fundamental rights of the individual may be negatively impacted. The regulation is expected to be ratified in late 2023. Existing national and European law continues to apply to the use of AI and will do so even after the AI Act is implemented.

Coordinated Approach by Irish Regulators

The Senior Officials Group on Digital Issues, chaired by the Department of the Taoiseach, and the Digital Regulators Group, has been meeting regularly since mid-2021 to promote coherence of digital and regulatory structures; to collaborate and share learnings; and to support wider regulatory cooperation. This coherent approach is particularly relevant to the regulatory oversight of AI, given its cross-cutting nature.

Standards and Assurance Roadmap for AI

The NSAI published the Standards and Assurance Roadmap for AI, developed by the Top Team in July 2023. The Top Team, which includes representatives from businesses and academia, has considered these issues carefully and will publish its report in 2023.

The NSAI also has an active role in the Standardisation Roadmap for AI being progressed at a European level, which will ensure a coherent approach to the implementation of AI systems across the EU, under the aegis of the EU Proposal for an AI Act.

Contributing to the Development of International Principles and Norms for Trustworthy AI

Ireland joined the OECD's Global Partnership on AI (GPAI) in 2021 and has been an active participant in its work. The GPAI is an international initiative to promote responsible AI use that respects human rights and democratic values, bringing together experts from science, industry, civil society, international organisations and government.

As a member of the Freedom Online Coalition (FOC), Ireland has contributed to the FOC's annual programme of action, including the promotion of a human-rights-based approach to AI and promotion of the UN Guiding Principles on Business and Human Rights in the global technology sector in the context of the development and use of AI systems.

In November of 2021, Ireland supported the negotiations and adoption by the 193 Member States at UNESCO's General Conference of the Recommendation on the Ethics of Artificial Intelligence, the first global standards-setting instrument on the subject.

Helping businesses to assess the trustworthiness of AI Systems

CeADAR has been designated to act as Ireland's National AI Hub and will serve as a point of contact for SMEs seeking support as they work with AI. Certification, which will be developed under the NSAI's Standards and Assurance roadmap for AI will play an important role here. CeADAR will work closely with Government and with the Enterprise Agencies to derisk the use of AI by businesses, by helping them to assess the trustworthiness of AI Solutions.

Regulatory Sandboxes for AI

The NSAI is monitoring the progress of the EU regulatory sandbox pilot and will consider the implications so as to contribute to the investigation of potential regulatory sandboxes for AI in Ireland. Enterprise Ireland is also exploring the potential of a sandbox in the area of fintech in particular, where the use of AI is increasingly prevalent. Further information on SFI's work in this area is listed under Strand Seven.

Strand 3: Driving Adoption of AI in Irish Enterprise

The primary objective of Strand Three is to increase productivity by driving a step-change in the adoption of AI by Irish enterprise. AI offers huge opportunities to businesses of all sizes and across all sectors. Much of the focus over the first two years of the strategy has been on putting the necessary building blocks in place for low-risk adoption of trustworthy AI by businesses.

This includes the development of a strong Governance ecosystem, the establishment of an Advisory Forum, and the designation of CEADAR as an AI Hub, which will provide a one-stop-shop for businesses who are embarking on the AI journey. Grant funding is now also in place, and we are now well positioned to drive accelerated adoption of AI in the coming years, working closely with our Enterprise Agencies, and drawing on the advice and guidance of the Enterprise Digital Advisory Forum.

Strategic actions

- | | |
|---|-------------|
| i. Establish an Enterprise Digital Advisory Forum to advise and work with Government to drive industry adoption of AI and other digital technologies including by:
a. Assessing the current spectrum of AI resources available to industry from Government to inform actions to maximise the potential of the existing infrastructure
b. Developing an AI programme for enterprise of targeted funding and advisory measures for AI adoption
c. Raising awareness among businesses of all sizes of the resources available to help with AI adoption
d. Developing a national AI cluster or platform to drive collaboration between MNCs and SMEs [All actions above for DETE, EI, IDA, LEOs, SFI] | Complete |
| ii. Consider the best model for a data and AI infrastructure platform to accelerate the onboarding and adoption of AI in industry [DETE/IDA/EI/DPENDPDR-OGCIO] | In progress |
| iii. Establish an AI Innovation Hub, as part of Ireland’s planned programme of European Digital Innovation Hubs, to act as a National First Stop for AI, providing expertise and guidance to enterprises on their AI adoption journey [DETE, EI, Digital Europe] | Complete |

Enterprise Digital Advisory Forum

The Enterprise Digital Advisory Forum (EDAF) was established in May 2022 to support Government in driving the uptake of digital technologies, including AI, by enterprises across Ireland. The Forum brings together representatives of indigenous enterprises, multi-national enterprises, and experts in digital technologies and their adoption by business, as well as representatives of Government Departments and agencies.

Meetings of the Forum to date have focused on the building blocks for the AI and digital transition by businesses, including skills and Government supports. The Forum has included AI adoption by enterprise as one of its dedicated workstreams for its 2023 Work Programme.

A Data and infrastructure platform for AI

The Data Governance Board was established by Minister for Public Expenditure and Reform, Michael McGrath, in December 2021 and plays a pivotal role in the delivery of data governance across the Public Service. The Data Architecture and Technical Committee has been established under the Board and its work includes examining the topic of virtual data rooms. This includes benchmarking the approach of other countries, exploring the potential for collaboration with the Central Statistics Office (CSO), and discussing potential datasets for pilot data rooms with the Department of Agriculture, Food and the Marine.

In 2023/2024 the Data Governance Board will develop an implementation plan for assignation of base registries and an implementation plan for the creation of virtual data rooms. Enterprise Ireland has also committed to progressing this agenda in 2023.

CeADAR – Ireland’s National AI Hub

CeADAR, the EI/IDA Technology Centre for Applied Data Analytics and Machine Intelligence, has been designated Ireland's National AI Hub as part of the European Digital Innovation Hub network with a funding allocation of €1.9 million per annum. This designation will allow CeADAR to act as a one-stop-shop for businesses embarking on their AI journey.

CeADAR will focus on meeting industry needs in the areas of data analytics and AI. It will demystify these concepts for a non-technical audience and explain how AI can be applied in practice. CeADAR is already experienced in assisting companies across a wide range of industry sectors in adding value through use of AI and has an existing established programme of formal training in AI.

CeADAR provides training directed at both technical staff for upskilling across all aspects of AI and a broader based executive training programme which is geared to the senior decision makers. Its EDIH status will allow CeADAR to offer broader low and no-cost services to SMEs throughout the country and will strengthen the centres links to networks in Europe. CeADAR will employ strong collaboration between National and European DIHs and users, while making the information easily accessible by the infrastructure and users.

The Disruptive Technologies Innovation Fund

AI-related businesses are also among those engaging with state agencies and supports. The Disruptive Technologies Innovation Fund (DTIF) is a €500 million challenge-based fund established under Project Ireland 2040 and is run with administrative support from Enterprise Ireland. The types of projects that typically receive funding are partnerships that will develop, deploy and commercialise disruptive technologies to transform business. A total of 39 projects involving AI have been awarded a total of €131.7m across the first five calls of the DTIF.

DTIF Call	Projects involving AI/Machine Learning/Robotics	Total Funding
Call 1	12	€32.1m
Call 2	7	€30.7m
Call 3	12	€40.62m
Call 4	7	€24.2m
Call 5	1	€4.1m ¹

¹ It should be noted that Call 5 of the DTIF was a sector-specific call and only accepted applications focused on Advanced and Smart Manufacturing, and consequently there were fewer successful applications under this call. The previous calls under the DTIF were general in nature.

DTIF Case Studies

CASE STUDY

This DTIF collaborative project, comprising Amara therapeutics Ltd; TEKenable Ltd; and National University of Ireland Galway (NUIG) were allocated €1.5m to develop an innovative artificial intelligence-based digital platform which will provide patients suffering from overactive bladder conditions with immediate access to safe and effective personalised and targeted therapy delivered via iOS and Android smartphone applications.

CASE STUDY

Evercam Ltd; GagaMuller Technology Ltd; and Technology University Dublin (TUD), were allocated €2.1m under the DTIF to collaborate on a project using artificial intelligence and machine learning to create a Construction Visualisation Platform that enables disruptive and measurable productivity advantages on building sites through passive data capture and real-time delivery of mission-critical information in an accessible form.

Commercialisation Fund: AI Case Studies

Enterprise Ireland also works with Irish third-level innovators to validate potential opportunities, craft robust applications, put the right project plans in place, and provide relevant networking supports through industry engagement. The Commercialisation Fund supports third-level researchers through financial and soft supports. This support has the potential to result in the commercialisation of new innovations, ideally by way of new company creation in Ireland or by license of technologies to companies in Ireland.

AI_PREMie UCD

AI_PREMie has received funding from the SFI Future Innovator Prize, AI for Societal Good challenge category, for their early-stage work in combining AI with biomarker detection to definitively diagnose and manage pre-eclampsia in mothers. The team has recently completed their feasibility study with some promising opportunities to work towards development, particularly with the power of AI as a risk stratification tool.

MoveAhead

MoveAhead is a motion tracking and movement analytics engine built specifically for children. It combines 15 years of research in children's movement science, development and analytics with the world's largest data set of children's movement skills, making it a motion tracking/movement analytics platform that is safe, accurate and educational for children. MoveAhead's SDK and API enables brands and studios to embed movement, physical activity, and physical development into games, apps and experiences for children and families.

Proveye

Proveye focuses on empowering agri-input providers, advisors and agricultural services with a new generation of precision intelligence for crop management. Proveye is an AI-powered digital image analysis platform that offers clarity and confidence for the future of sustainable agriculture.

EDGELIOT

EDGELIOT is focused on delivering end-to-end anomaly detection solutions for high-value Telecommunication Tower infrastructure. The μ HaLo sensors (developed by the company) and AI on towers capture multiple data sets, such as tower tilt and movement. The company's algorithms and AI then process the data and detect any unusual patterns and anomalies. Alerts are then sent when unusual behaviour is detected. The system makes a significant contribution to reducing maintenance costs for telecommunication infrastructure/tower owners.

GaitKeeper

GaitKeeper is an AI-enabled digital gait analysis platform (CE certified medical device) that works using any smartphone. It uses AR and AI to enable gait assessments to be carried out anytime, anywhere and by anyone. Gaitkeeper identifies high-risk/"frail" in the over-65 population, across acute, primary and home care centres, driving cost reductions for the acute system.

Innovation Partnership Programme

The Innovation Partnership Programme (IPP) can provide funding to help with the costs of research towards the development of new and improved products, processes or services. The IPP has supported 82 companies between 2021 and 2022. Of these, 31 (38%) were involved in AI related projects. AI-related projects account for just under 32% of the total grant funding approved for IPP projects over 2021-2022.

Other Funding for Enterprise

Beyond the specific funding streams and supports set out above, the below businesses are further examples of companies supported by Enterprise Ireland who are leveraging AI technologies in their businesses.

Provizio

Provizio is using 'AI on the edge' software and hardware to fundamentally improve car and micro mobility safety. Their solution includes a five-dimensional sensory platform that perceives, predicts, and prevents car accidents in real-time and beyond the line-of-sight.

Provizio has developed a software-defined platform comprising a state-of-the-art high-resolution 4D imaging radar coupled with camera sensors to provide super-high-resolution maps of a vehicle's surroundings up to 600m range. Fusing this sensor data on-the-edge (using a powerful GPU) and applying AI/ML techniques further enhances the resolution, resulting in a scalable, integrated, and cost-effective platform. 4D radar is a key enabler, as it can operate in heavy rainfall, unlike lidar.

WHYZE Health

The WHYZE Health platform is a secure digital convergence of patients and healthcare partners from across the industry. With WHYZE Health, a patient's records travel with them across facilities and providers. As they choose to share personal health information with different stakeholders, their record becomes a more complete picture of their treatment journey.

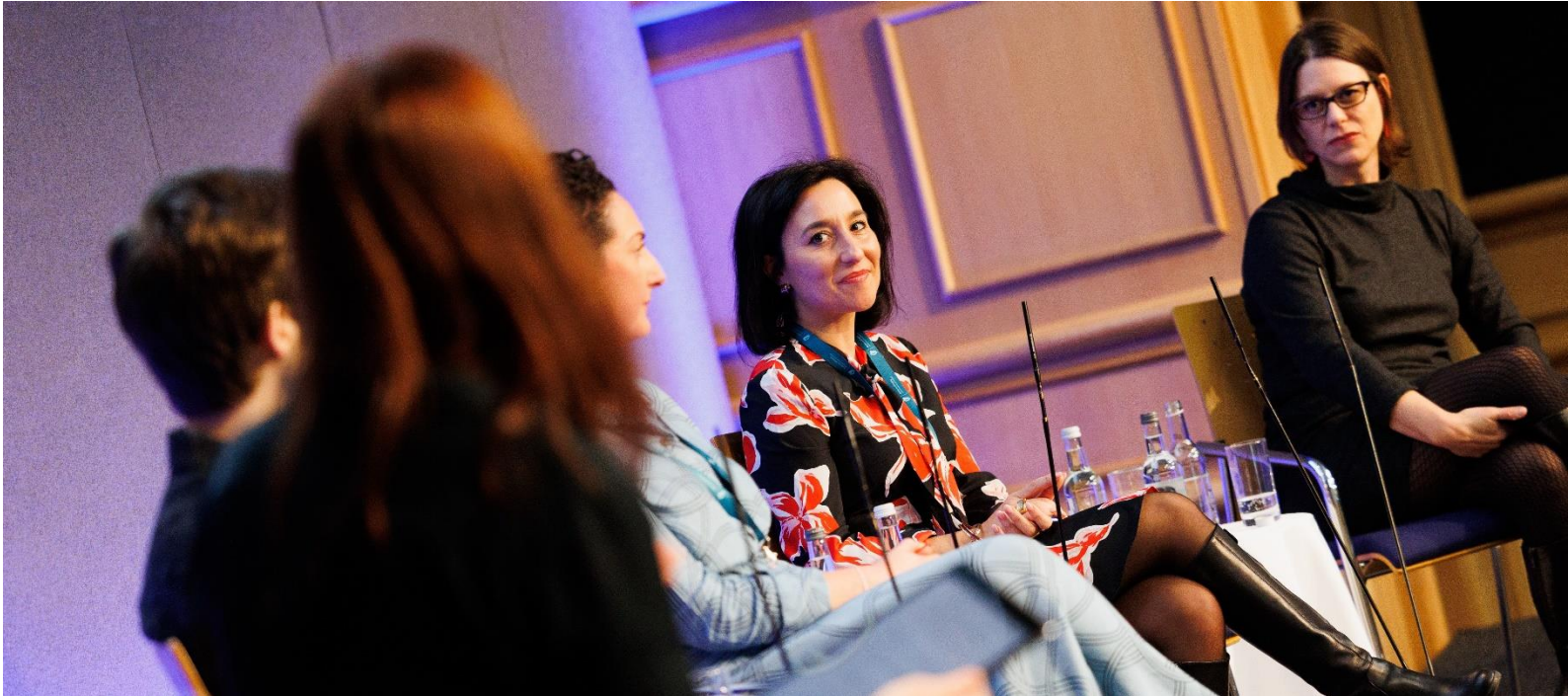
Using privacy-by-design principles embedded into our systems and business practices, the WHYZE Health platform fully integrates up-to-date information from different healthcare sources, including provider encounter information, administrative data, outcomes data, patient-reported outcomes, and wearables data. The collection of data generated by these disparate stakeholders creates an inherently value-based collaborative care and research approach that benefits everyone.

The platform also brings health opportunities directly to patients by advancing global awareness of clinical trials, enabling better outcomes, increased participation, and more efficient healthcare. If the patient consents, their quality real-world evidence is anonymised and analysed using AI to provide more effective, efficient, and cost-effective health and research decisions.

BioLogit

BioLogit has developed a disruptive, AI-based medical literature monitoring platform for the pharmaceutical industry. Every pharmaceutical company with products in market is required to periodically screen scientific literature for adverse drug safety events and report to the relevant regulatory bodies. Medical literature monitoring (MLM) is a costly and time-consuming process for pharma companies who must dedicate significant manual resources to searching, reviewing, and reporting on their products. Accuracy of this activity is paramount for these companies. Biologit is solving these pain points for pharma with their AI technology and automated, audit-compliant workflow.

Biologit MLM-AI is a cloud-hosted system which addresses these inefficiencies by using the power of AI to automate the task of monitoring medical literature for adverse events and special situations.



Strand 4: AI Serving the Public

The key objective of Strand Four is to achieve better public service outcomes through a step change in AI adoption by the public sector. The public sector has already embedded AI into the provision of certain public services. However, as with Strand Three, much of the focus to date has been on putting the necessary building blocks in place, so that we are well positioned to ramp up the use of AI to improve the delivery of public services in a low risk and trustworthy way.

Strategic actions

- The GovTech Delivery Board will consider the adoption of AI by the Public Service, including:
 - i. What appropriate safeguards are needed to ensure a secure system for AI development and use in the public service In progress
 - ii. The approach to developing and promulgating principles for trustworthy AI which will apply to all AI developed for and used by the Public Service
 - iii. The development needs for AI talent in the Public Service
 - iv. Opportunities for public procurement of AI, using public purchasing power to drive innovation and growth in the development of ethical and trustworthy AI
- ii. Promote an 'open' environment for accelerating and testing AI applications in the Public Service, e.g. Hackathons and Workshops [DPENDPDR] In progress

Principles for trustworthy AI developed for and used by the Public Service

A Working Group has been convened on Trustworthy AI Principles and Guidelines, co-chaired by the Department of Public Expenditure, NDP Delivery and Reform (D/PENDPDR)/OGCIO and the Department of Enterprise, Trade and Employment. This group is leading on the development of principles for trustworthy AI to apply to all AI developed for and used by the Public Service. It will be supported in the delivery of this work by an expert researcher in AI, who D/PENDPDR have commissioned through SFI's Public Service Fellowship Scheme.

This group brings together experts in the area of artificial intelligence with representatives of Government Departments and agencies to agree on an accessible set of principles for the deployment of trustworthy and ethical AI in the public sector. Once these principles have been determined, they will be used to ensure a secure system of AI development and use within the Public Service as a whole.

Equipping the Public Service with Appropriate Skills for AI

Work is ongoing to meet the development needs for AI talent within the Public Service.

In addition to existing professional development and learning and development programmes across public service bodies, the Department of Public Expenditure, NDP Delivery and Reform (DPENDPDR) coordinates and funds a Foundation Certificate in AI for public servants. This qualification, pitched at level 8 on the National Framework of Qualifications and accredited to Technological University Dublin, seeks to equip a core of public servants with the skills and knowledge needed to engage internally and externally when considering service improvements or transformations that rely on significant AI components. This course has already run on three occasions and the Department is recruiting candidates for the fourth iteration, which is expected to begin in October 2023.

Furthermore, OneLearning, the Civil Service Learning and Development Centre, will deliver three new courses which will support public service AI adoption in 2023. Those are, "Awareness of emerging technologies," "Innovation for the Civil Service," and "Basic concepts of design/system thinking."

DPENDPDR maintains an AI and Emerging Tech Network, which includes approximately 150 people across 54 different public service organisations. This community of practice is used to promote AI courses, AI events and webinars, as well as to inform public service bodies about potential AI funding and resources. That Department also maintains an AI and Emerging Technology element to its [public web portal](#).

Cyber security and generative AI

Acknowledging the potential cybersecurity risks that the use of generative AI can pose, including the issue of whether sensitive or confidential data is being inputted into AI systems, the National Cyber Security Centre plays a key role in terms of guidance on the use of generative AI for public sector bodies.

Promoting an open environment for accelerating and testing AI applications in the Public Service

The Department of Public Expenditure, NDP Delivery and Reform, has been working closely with experts in CeADAR (as part of its public service mandate) to identify suitable projects for further development and testing. These projects are associated with public servants that have already upskilled through the qualification above and have been deemed suitable candidate projects for implementation by officials in DPENDPDR and CeADAR.

Case Studies: Examples of AI at work in the Public Service

Work is already under way in the Public Service on leveraging the potential offered by AI to address the types of work and challenges for which AI is particularly suited. The case studies below offer two examples of the kind of work that AI is already being used for in this context.

Case Study One: Bovine TB Detection

Project Lead: Department of Agriculture, Food and the Marine

The Department of Agriculture, Food and the Marine, partnered with IBM, won the AI challenge under the overall Future Tech Challenge (there were three categories in the pilot - Cloud Technology, Remote Connectivity and Artificial Intelligence) and developed a solution using machine learning to generate predictions of future Bovine TB risk at animal level. This solution was developed using significant datasets available through the Irish Animal Health Computer System, with the model built on a sample of 6.8 million test result data. The selected model correctly predicted the TB status in 385 days of 10,940 test positive cattle and 2,114,368 test negative cattle. This work demonstrated that future TB risk at animal level can be predicted using a machine learning modelling approach. This tool will enable improved case management by veterinarians through supporting the identification of cattle at higher risk of being infected for follow-up actions such as risk-based testing.

Future work includes validating the model against the most recent data and deploying the model to veterinarians managing TB cases in Ireland on a pilot basis. Bovine TB is a serious disease of cattle, a public health concern, and a threat to Ireland's ability to export meat and milk products. The national Bovine TB eradication programme has direct annual costs of around €100m, while over 4,000 farmers suffer an outbreak in their herds annually. This solution using AI and machine learning has the potential to save the lives of cattle, protect farmers' livelihoods and ensure significant savings for the Exchequer.

Case Study Two: Automated extraction of kidney failure concepts from clinical notes using Artificial Intelligence

Project Lead: Health Service Executive

The number of people with kidney failure in Ireland that require treatment with dialysis or transplantation is approximately 100 people in every million in the population, and they are more likely to have other health complications reducing their lifespan. In Ireland, on average 315,000 dialysis treatments are performed across 26 nephrology centres each year, a figure that has grown by 30% over the last ten years.

The Kidney Disease Clinical Patient Management System (KDCPMS) is an electronic health record managed by the HSE and used in every haemodialysis and transplant centre in Ireland since 2007. The KDCPMS has a mixture of structured data fields (e.g., name, date of birth, medications, past medical history) and unstructured or free-text data fields (clinical notes, outpatient letters). A recent national survey conducted by the Irish Nephrology Society Research Committee showed that although many nephrology centres used KDCPMS for day-to-day management, few used it for audit or research (15%). Most of the data is stored in unstructured free text format – meaning that users could describe the same thing using different words - which makes audit, quality improvement and research very difficult to perform. This work currently needs many hours of manual clinical chart review to perform the most basic of audits.

Funded through the Public Service Innovation Fund (DPENDPDR) in 2023, the aim of this project is to utilise artificial intelligence (AI) natural language processing technology to extract structured information from unstructured or free-text data in the KDCPMS and populate structured data fields. This will make it easier and more efficient to carry out a range of clinical audits, quality improvement projects, and clinical research using the KDCPMS data. The expected outcomes of the project include:

- Deliver efficiencies by enabling the use of Kidney Disease Clinical Patient Management System (KDCPMS) for national clinical audits and quality improvement projects.
- Reduction in operational costs, time, and resources.
- Provide benefits for the end user and enable healthcare providers to better understand the needs and care of their patients, and to develop and implement more effective treatments and interventions.
- Support the development of a national renal registry for patients with kidney failure in Ireland.

Strand 5: A Strong AI Innovation Ecosystem

In order for AI to thrive in Ireland, it is essential to ensure that we have a strong, supportive ecosystem in place. The ambition outlined in the Strategy is to drive AI innovation through world class research and innovation, to ensure a strong Irish ecosystem for high-quality and responsible AI research and Innovation.

Strategic actions

i. Conduct a mapping of the AI R&I ecosystem [DFHERIS-SFI]	Outstanding
ii. Identify sectors of opportunity for establishing AI testbeds and experimentation facilities [DETE, EI, IDA & NSAI / DFHERIS, SFI, Enterprise AI Advisory Board]	In progress
iii. Promote Irish participation in international AI R&I programmes and relevant EU funding calls [DFHERIS, SFI/ DETE]	In progress
iv. Explore potential mechanisms for all-island cooperation on AI R&I in strategic sectors, for example through the Shared Island initiative [DFHERIS, SFI/ DoT]	In progress
v. Promote Ireland as a centre for talent in AI R&I as part of Global Footprint 2025 [DFHERIS/ DETE/ DFA]	In progress

Testbeds and Experimentation Facilities

The **SFI Frontiers for the Future Programme** (FFP) currently funds 16 active awards in the field of AI, representing an investment of approximately €12m. These awards are held by investigators across seven higher education institutions (HEIs) and use AI to answer questions in fields like software safety, renewable energy, healthcare and therapeutics, and transportation.

The **SFI Centre for Research Training in AI** brings together supervisors from across the full spectrum of AI techniques, from knowledge presentation and reasoning, machine learning, data mining, computer vision, natural language processing, optimisation and decision-making, robotics and autonomy. The ambition is to develop a truly national training initiative across the third-level sector.

This centre focuses strongly on the development of AI solutions in domains like smart buildings, mobility and transportation, autonomous vehicles, public service delivery,

manufacturing, enterprise, cybersecurity, climate change and environment, agriculture, marine, food production and natural resources. This initiative, led by UCC, brings together four other HEIs, as well as industry partners.

An update on the first EU regulatory sandbox pilot is expected in 2023. Enterprise Ireland has identified fintech and edtech specifically as potential testbed opportunities. With both sectors growing, new opportunities have arisen since the onset of the pandemic as disruption led to innovative solutions. Increasing uptake of digital in both sectors provides an opportunity for increased inclusiveness as services can be made available to a wider community.

IDA Ireland has developed two diagnostics aimed at helping FDI Services and Manufacturing Sectors onto and up digitalisation value chains. In terms of manufacturing, it has invested in the new national Advanced Manufacturing Centre (AMC) in Limerick, which has the objective of helping to migrate the Irish manufacturing sector towards digitally enable intelligent operations. The AMC will also focus on AI applications and may represent a strong location to integrate an AI testbed with a sectoral focus.

Promoting Irish participation in international AI R&I programmes

SFI's international teams' activities include the promotion of Irish participation in international R&I programmes and relevant EU funding calls. Some examples of successes in this area include:

- NeuroInsight, funded through the Marie Skłodowska-Curie COFUND programme;
- STAIRWAI, under the call ICT-49-2020;
- EMILDAI, through the Erasmus Mundus Joint Master programme;
- DIGI+ funded through the Marie Skłodowska-Curie fellowship programme;
- and six projects through the Horizon 2020 programmes across three centres.

SFI-funded researchers also engage in AI-related networks, collaborations and expert groups at EU level. For example, Professor Barry O'Sullivan from University College Cork has served as Vice Chair of the European Commission High-Level Expert Group on AI.

All-Island Cooperation on AI

Work is also under way on potential mechanisms for all-island cooperation on AI R&I in strategic sectors. SFI Research Centres are collaborating with HEIs in Northern Ireland. SFI is also working in close partnership with UK Research and Innovation (UKRI) and Northern Ireland-based funders (e.g. Department for the Economy; Department of Agriculture, Environment and Rural Affairs [DEFRA]) and the Regional Agency for Public Health and Social Wellbeing (PHA) on a funding call for all-island Research Co-Centres.

Promoting Ireland as a centre for talent in AI R&I

The Department of Foreign Affairs is working to promote Ireland as a centre for talent in AI R&I as part of Global Footprint 2025, with its Embassy/Consulate network promoting Ireland's offering in key markets. It continues to host, support and participate in events promoting Ireland as a centre for talent in AI R&I, often working in collaboration with Enterprise Ireland and the SFI.

Strand 6: AI Education, Skills and Talent

It is expected that one-in-three jobs in Ireland is likely to be disrupted by the adoption of digital technologies. Some of that disruption will have the effect of changing certain job roles and tasks, rather than supplanting them. While AI will lead to some displacement, it will also lead to the creation of new jobs and higher productivity and incomes. The objective of Strand Six is to ensure that Ireland has a workforce that is prepared for and adopting AI.

Strategic actions

i. Deliver a review in 2021 of the skills implications of AI over the next 5 to 10 years, and the skills-related actions needed to realise the potential of AI [DETE, EGFSN]	Complete
ii. Encourage Higher Education Institutions to take a coordinated approach to delivering AI education and training informed by the outcome of the EGFSN review [DFHERIS, HEA and HEIs]	In progress
iii. Assist employers to expand workplace-focused AI upskilling and reskilling, including through apprenticeships, SOLAS programmes, Skillnet Ireland training programmes and enterprise partnership schemes [DFHERIS, Skillnet Ireland, HEA, & SOLAS / DETE, Enterprise AI Advisory Board]	In progress
iv. Consider how AI can be incorporated into future policy for digital learning [D/Education]	In progress
v. Review the criteria for employment permits for critical AI-related skills, having regard to the research and analysis of AI skills needs that is undertaken [DETE]	In progress
vi. Establish an expert group to develop an action plan to increase the participation of women in related careers [DETE / DFHERIS / D/Education / DCEDIY]	In progress

Review of Skills Needs:

In June 2022, the Expert Group on Future Skills needs published “AI Skills: A preliminary assessment of the skills needed for the deployment, management and regulation of artificial intelligence,” a review of the skills implications of AI over the next five-to-ten years, as well as the skills-related actions needed to realise the potential of AI.

The organisations on the Group are working to ensure progress on the recommendations. In particular, the Department of Public Expenditure and Reform has commissioned a Foundation Certification in Artificial Intelligence for public servants (noted under Strand Four). In addition, SOLAS is providing an ICDL module in Artificial Intelligence and are also planning a citizen-focused AI course. A range of AI-related courses are being developed over time; many of these are increasingly being made available through the Micro-creds portal for micro-credentials. Revised standards for initial teacher education programmes, which came into effect in 2022, require digital skills to be at the core of all initial teacher education programmes. Work is also ongoing to make it possible to reflect evolving AI developments in teachers' CPD.

Acting on the Recommendations of the Review

Provision for AI-related courses is made through Springboard+ and the Human Capital Initiative (HCI). In the Springboard+ 2022 programme offering, there are four courses available, while there are three courses available under the HCI Pillar 1. HCI Pillar 3, Innovation and Agility, also offers seven related projects. These include Rethinking Engineering in Education in Ireland (REEdI) at Institute of Technology Tralee; the ADVANCE Centre for Professional Education in University College Dublin; the Digital Academy for Sustainable Built Environment (DASBE) at Technical University of the Shannon: Midlands Midwest; UL@Work at the University of Limerick; CYBER-SKILLS at Munster Technological University; Creative Futures Academy at the National College of Art and Design; and Next Generation Graduates at Trinity College Dublin.

HCI Pillar 3 projects have now reported AI courses through their respective projects. These include the ADVANCE project at UCD, UL@Work at University of Limerick, and the Next Generation Graduates at Trinity College Dublin.

Work is under way on a successor to Technology 2022, Ireland's third ICT Skills Action Plan. This successor plan will target digital skills right across the labour market and will take into account broader digital skills labour market priorities, as well as themes emerging from the Funding the Future, OECD Skills Review, the EU Structured Dialogue on Digital Education and Skills, and ongoing close collaboration with enterprise.

That collaboration includes engagement with the National Training Fund (NTF) Advisory Group and with the Enterprise Digital Advisory Forum (EDAF), and a proposal to develop upskilling programmes for AI under the NTF is being developed as an outcome of that engagement.

The action plan will also seek to further advance the overall targets set out in the National Digital Strategy, Harnessing Digital – The Digital Ireland Framework, including the goal of increasing the number of learners graduating with higher-level digital skills to over 12,400 graduates, apprentices and trainees, with the ambition of further increases in digital skills provision in the following years. AI skills is one of several areas considered under this target.

Skillnet Ireland's Future Skills Programme (FSP) facilitates innovation and collaboration in new programme design and industry-based research on the future of work and learning. This programme assists in collaborations between enterprise, academic institutions and industry training providers to develop programmes that address the future skills needs of business and emerging skills gaps within growth sectors.

Future Policy for Digital Learning

The Department of Further and Higher Education, Research, Innovation and Science launched the Adult Literacy for Life (ALL) Strategy in September 2021. This Strategy aims to bridge the digital divide across Irish society, which includes enhancing broad digital skills. It also sets a target of decreasing the share of adults in Ireland without basic digital skills from 47% to 20% by 2030.

Younger learners are being supported by Department of Education measures, such as the Digital Strategy for Schools (April 2022), which aims to empower schools to harness the opportunities presented by digital transformation to build digital competence and to develop an effective digital education ecosystem. An implementation plan is also being developed to align with the objectives of this Strategy.

Finally, the STEM Education Policy Statement (2017-2026) highlights goals and actions required to achieve and improve the STEM education experiences and outcomes for all learners, from early years to post-primary level. A STEM Education Implementation Plan up to 2026 was published in March 2023.

While an expert group to increase the participation of women in AI-related careers has not yet been established, there are a number of cross-Departmental initiatives that seek to increase gender balance and participation by women across all STEM sectors.

Strand 7: A Supportive and Secure Infrastructure for AI

Strand Seven of the Strategy is focused on ensuring that the correct “building blocks” are in place for a healthy AI infrastructure, including access to high-quality and trustworthy data; robust data governance and privacy frameworks; secure high-speed telecommunication networks; and sufficient computing power and storage capabilities. It also emphasises the requirement for a strong national approach to cybersecurity.

Strategic actions

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|--|-------------|
| i. Building on initiatives such as the EMPOWER program, provide a framework for trustworthy data governance across the private sector and develop tools and methodologies to apply the framework. [DFHERIS, SFI / DETE, EI, IDA] | In progress |
| ii. Promulgate standards and guidelines for ethical data sharing within the Public Service [DPENDPDR / Data Governance Board] | In progress |
| iii. Increase the availability of open government data for AI training and testing, including by holding an AI Open Data Challenge [DPENDPDR / CSO] | In progress |
| iv. Identify public sector climate and environmental open datasets to encourage development of AI solutions for climate action [DPENDPDR / DECC, EPA, SEAI] | In progress |

EMPOWER Programme

The EMPOWER programme is an SFI Spokes research programme. “Spokes” are large scale academic-industry collaborations. EMPOWER brings together four SFI Research Centres: Lero (the programme lead), Insight, ADAPT and FutureNeuro. It aims to develop new systems and methods to enable and support data governance in the real-world application of data-driven solutions. Its research will focus on developing a data ecosystem that benefits all users while defining and safeguarding the rights of data sharers.

These centres will work with a number of companies in the sector, including Meta, Siemens, Huawei, Trilateral Research, Genesys, P4ML, RedZinc Services and Analog Devices. The Spoke began in August 2021, and has a four-year duration.

Through the EMPOWER Spoke, ADAPT has contributed to the Data Governance public policy development process, including the National AI Strategy; the National Digital Strategy; and Government’s preparation for the Data Science Summit 2022.

As set out under Strand One, ADAPT’s public engagement campaign, #DiscussAI, engages with citizens, policymakers and other stakeholders to inform policy formation. As a direct result of #DiscussAI, Senator Lynn Ruane, a member of the Seanad’s Civil Engagement Group, met with ADAPT to discuss how to ensure that the Age of AI is inclusive and fair; the potential of AI to deliver enhanced public administration services; and how policy makers can be kept abreast of the latest research and innovation in the field of AI.

Standards and Guidelines for Ethical Data Sharing within the Public Service

Work is ongoing on the development of standards and guidelines for ethical data sharing within the public service itself. The Data Governance Board has established a Data Safeguarding and Transparency Committee, which, among other things, will oversee the development of a data sharing ethics model for use right across the Public Service.

Significant research and benchmarking have been done, including consultation with:

- the Central Digital and Data Office (UK) in relation to their current Data Ethics Framework;
- the Agency of Digitisation (Denmark) in relation to their ethics council;
- Brendan Tierney (ethics expert, Dublin Institute of Technology) to discuss possible ethical frameworks for Ireland; and
- Gartner ethics specialist, in relation to Utrecht ethics model and use of a similar model in Ireland.

Increasing availability of open government data for AI training and testing

Work has also been carried out to increase the availability of open Government data, for use in training and testing of AI models. The National Open Data Portal currently provides open and free access to 14,385 datasets from 136 public sector organisations. 93% of the available datasets on the portal are provided in a machine-readable format, with 68% of these accessible via Application Programme Interfaces (APIs).

The Sustainable Energy Authority of Ireland (SEAI) has to date published 43 open data sets to the National Open Data Portal. Some examples of uses that these data sets have been put to by businesses include the evaluation of multiple potential sites for large-scale investment in windfarms and desktop assessments of geothermal energy resources in Ireland. SEAI is also working to identify public sector climate and environmental open datasets to encourage the development of AI solutions for climate action.

Ensuring a robust infrastructure for future AI development

Alongside other infrastructural elements like robust connectivity and cybersecurity, high-performance computing (HPC) is a key enabler for forward-looking adoption and development of AI. As is noted above, Ireland is participating in the network of European Digital Innovation Hubs (EDIH). The network of EDIHs has been designed to support businesses and organisations in their digital transformation, and to offer access to the latest advances in HPC, in addition to their work in the area of AI and other digital technologies.

Ireland is also a founding member of the European High-Performance Computing Joint Undertaking (EuroHPC). Through EuroHPC Ireland-based researchers access a federated network of Europe's most powerful supercomputers.

Beyond HPC, Government and the EU have committed to a new initiative to protect the transmission of sensitive data and prevent cyberattacks using quantum communications infrastructure (QCI). IrelandQCI aims to build a national quantum infrastructure for Ireland as part of EuroQCI, the EU-wide programme. Government has committed €5m to the initiative, matching the €5m in EU funding secured through the EU's Digital Europe Programme. Deployment of a pilot QCI network across Ireland is expected by 2024.

Secure, high-speed telecommunications networks

Digital connectivity is also a pre-requisite to ensure the State can embrace all digital opportunities including AI.

The Government's Digital Connectivity Strategy sets out a number of targets, including that:

- all Irish households and businesses will be covered by a Gigabit network no later than 2028;
- all populated areas will be covered by 5G no later than 2030; and
- digital connectivity will be delivered to all schools and broadband connection points by 2023.

Ireland's target of Gigabit coverage by 2028 is two years ahead of the EU target of Gigabit coverage by 2030. It is expected that by 2028, all homes and businesses will have a full fibre network available to them. Full fibre is the most resilient and reliable fixed network, capable of providing the standard of service required to support AI which and ensures very low latency and reliability.

As part of the Strategy to ensure ubiquitous Very High Capacity Networks (VHCN) are available, the Government has committed up to €2.6bn to ensure 100% coverage of the State. A new company, National Broadband Ireland, is currently rolling out full fibre to all rural homes and businesses through the State investment and had a target completion date of 2026. Other large commercial operators have invested heavily in their fibre networks and have significant committed investment plans to upgrade their networks by 2028.

Ireland has also an extensive International Interconnection network between America, UK and Europe with further investments planned to ensure our national networks are supported with the appropriate capacity and security available from this extensive subsea cable network.

Next Steps for AI in Ireland

Strategic Direction

Ireland sees a huge opportunity from expected developments in AI technology in the next five years. We have been preparing for the next generation of AI for a number of years and have put good safeguards in place. We believe our strong innovation ecosystem, excellent and responsive skills infrastructure and commitment to ethical and human-centric AI position us well to benefit from the AI revolution, and importantly, to make sure that our workforce is well prepared.

Two other significant strategies have been published since the launch of “AI – Here for Good”. These are our national digital strategy, “Harnessing Digital”, which was published in February 2022, and the White Paper on Enterprise 2022-2030, which was published in December 2022 and focuses on the twin climate and digital transitions. Both of these strategies have a clear recognition of the importance of AI as a sector and as a productivity tool for enterprise and wider society.

With many of the foundational building blocks now in place through the implementation of the AI strategy, Ireland is a strong and secure place for AI investment and our focus will move to driving the adoption of AI tools by the broader enterprise economy, as well as supporting the growth of AI companies.

Developing an AI Cluster

The White Paper on Enterprise recognises the importance of clustering to sustain and develop competitive advantage in areas of strategic importance and potential, in particular the green and digital transitions. This will be achieved by way of a centrally coordinated, cross-government approach to clustering.

Ireland already has a young, but developing, clustering landscape and it is proposed to build on the strengths and opportunities this presents. The Department of Enterprise, Trade and Employment published research to develop an evidence base to support the development of a national clustering policy and framework in March 2023. As part of our clustering framework, we will evaluate the potential for an AI cluster.

Supporting enterprise development and adoption of AI

The CeADAR centre has received approval from the Commission as a European Digital Innovation Hub (EDIH) and has been designated Ireland’s national AI hub. This will allow CeADAR to be a one-stop-shop for enterprise looking to adopt AI technologies and facilitating test-bedding of AI technologies for companies.

Enterprise Ireland will deliver support and guidance for appropriate AI adoption by client companies to help them capitalise on the market opportunities it offers together with its usage as a tool to drive productivity and competitiveness.

We will also continue to promote Ireland as a leading location for investment in ethical AI development.

We will continue to leverage Ireland’s influence internationally and show leadership on issues related to AI – both in regulatory negotiations and policy discussions in a range of international fora, and in our engagement with Governments and policymakers in other countries.

Advice for Government and the Public Sector

It is likely that there will be many unpredictable challenges for Government arising from the ongoing evolution of AI. Given the rapid pace of change in the sector, particularly since the public launch of generative AI models, there is a need to ensure that the rollout of AI tools is safe, secure, human-centric and ethical; and that there is suitable, independent and balanced expert advice available to Government.

Ireland’s AI Ambassador, Dr Patricia Scanlon, has played an invaluable role as a sounding board on AI for policymakers and businesses. Dr Scanlon will continue in this role for another year.

The Government will shortly establish a voluntary AI Advisory Council which will be chosen following an open “expressions of interest” call and be made up of AI experts in the areas of academia, business, legal, social science/economics, ethics and civil society. The Council will be tasked with providing independent expert guidance, insights and recommendations to Government in shaping the development, deployment and governance of AI technologies in Ireland, and ensuring that Ireland is fully positioned to harness the expected revolution in AI which we know is coming in the next five years.

Influencing regulation of AI in Ireland and internationally

The Government will continue its engagement with regulatory negotiations and proper implementation of international legislation while avoiding over-regulation to prevent stifling innovation. The Government will also leverage its engagement with other Governments bilaterally and involvement in international fora to support the ethical and human-centric development of AI. For example, as part of discussions at the EU/US Transatlantic Trade and Technology Forum (TTC), the EU and US have committed to producing a Code of Conduct for AI that businesses can sign up to on a voluntary basis. This is seen as an interim measure while legislation is being passed to regulate the use of AI in not just the EU and US, but in countries around the world. It is being led at EU level by Executive Vice President Margrethe Vestager. At the same time, Commissioner Thierry Breton has proposed an AI Pact, bringing forward some of the key requirements under the EU AI Act, which would apply within the EU only and until the AI Act comes into force.

In addition, the Government will use our programme of national events and international engagement to promote multilateralism and show Ireland’s role in leading global regulation and influence.

Continued implementation of existing actions

Other actions from the 2021 Strategy which are currently underway will continue to be implemented and further developed. This includes:

- Implementation of the recommendations of the EGFSN report from 2022 and addressing the upskilling and reskilling needs of the economy in adapting to use AI tools and to manage the transition to newer job roles;
- Finalise the standardisation roadmap for AI with our European partners, and implement this with enterprise in Ireland to support the development of the sector;
- Finalise and implement the principles and guidelines for the ethical and human-centric use of AI in the public sector, and support the development of suitable AI tools within the public sector; and
- Consider what additional Government supports may be needed for the sector, to provide suitable funding mechanisms, develop strategic collaborations, and facilitate market demonstration of concepts.

