

Harnessing Digital The Digital Ireland Framework 2022 Progress Report



Overview

Harnessing Digital - The Digital Ireland Framework, was published on 1 February 2022, and reflects Ireland's ambition to remain a digital leader at the heart of European and global digital developments.

The Strategy sets out a **roadmap to drive and enable the digital transition** across the economy and society, to maximise the efficiency of public services, the productivity and innovation of enterprise, and our overall competitiveness and sustainability.

It places a strong emphasis on **balance**, **inclusiveness**, **security and safety**, and **re-enforces work towards** achieving Ireland's **climate targets**. Targets are included across four dimensions, in line with the EU's Digital Decade - Digitalisation of **Enterprise**; **Skills**; Digital **Infrastructure**; and Digital **Public Services**.

Cognisant of Ireland's important role in implementing digital regulations, *Harnessing Digital* reenforces our **commitment to a modern, cohesive, well-resourced network of regulators** to effectively oversee and enforce digital regulations.

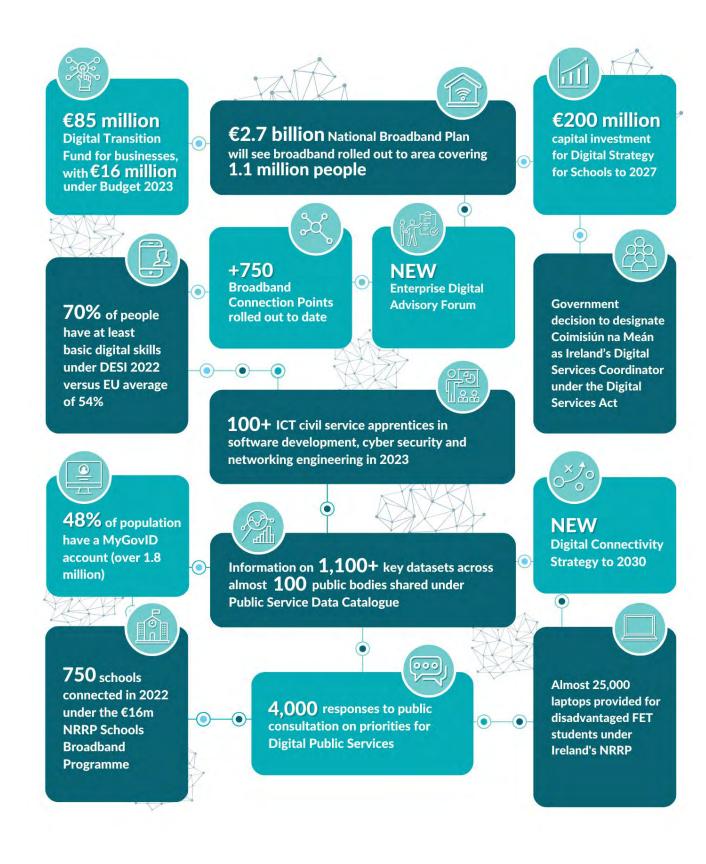
Implementation has been driven via cross-government coordination structures, reporting to the Cabinet Committee on Economic Recovery and Investment. This includes regular engagement between the Senior Officials Group on Digital Issues and **the Digital Regulators Group**¹.

Progress has been made across all of the Strategy's dimensions, as detailed below.

While the EU's **2022 Digital Economy and Society Index** saw Ireland retain its **strong overall position of 5**th out of the EU27 on digital progress, we remain focused on driving further progress across all aspects of our digital agenda.

This is increasingly important given the significant challenges, and economic headwinds facing businesses and households, as a result of high inflation, high interest rates, and energy challenges. The Government is particularly conscious of the challenges facing the technology sector and is committed to doing all we can to support those affected by related job losses, and to maintain our focus on competitiveness, and ensuring that Ireland is the best place in Europe to invest and grow for the future, in this digital age.

¹ The Digital Regulators Group includes the Commission for Communications Regulation (ComReg), the Data Protection Commission (DPC), the Competition and Consumer Protection Commission (CCPC), and the Broadcasting Authority of Ireland (BAI)



2022 Digital Economy and Society Index (DESI) Ireland's Progress

- Ireland retained its strong overall position of 5th out of the EU27 on digital progress in the 2022 DESI, with a score of 62.7, higher than the EU average of 52.3.
- Ireland's average yearly relative growth (2017-2022) is one of the highest in the EU, at 8.5%.

Progress against Targets, as measured under DESI 2022

	TARGETS		PROGRESS	
	EU Digital Decade 2030	Harnessing Digital 2030	Ireland 2022 DESI	EU Average 2022 DESI
DIGITA	AL TRANSFO	RMATION O	F BUSINESS	
Cloud Computing	75%	75%	47%	34%
Big Data	75%	75%	23%	14%
Al	75%	75%	8%	8%
SME Digital Intensity (Basic)	90%	90%	64%	55%
	DIGITAL INI	RASTRUCT	URE	
Gigabit Network	100%	100% By 2028	89%	70%
5G coverage	100%	100%	72%	66%
	S	KILLS		
Basic Digital Skills	80%	80%	70%	54%
DIGI	TALISATION	OF PUBLIC	SERVICES	
Govt Services Online / e-Govt users	100% (key public services)	90% (applicable services consumed online)	92% e-Govt Users*	65%
	*This indicator meas	sures the percentage o he Internet to interact	f all internet users (ag	ed 16-74) who used

Progress on Delivery

Progress to date under each of the four Dimensions of *Harnessing Digital* over the course of 2022 is summarised below.

Dimension 1 - Digital Transformation of Business

Workstream: Comprehensively support enterprises across all aspects of their digital transformation

- An Enterprise Digital Advisory Forum has been established, with indigenous and multinational companies, and experts in digital technologies; discussions have focussed on digital skills; maximising the impact of the Digital Transition Fund; and AI.
- Under the 2022 DESI, Ireland performed ahead of EU averages on Big Data (23% versus 14%), Cloud Computing (47% versus 34%) and on par with the EU average for AI (8%) in terms of the adoption of digital technologies by enterprise, with 64% of Irish SMEs having a basic level of digital intensity (versus our target of 90% by 2030).
- The €85 million Digital Transition Fund to support companies in their digital journey opened for applications in June. Planning is underway to further develop the Fund and a new Digital Portal for 2023, which will allow businesses to self-assess their digital readiness and provide tailored advice.
- A new digital training scheme for SMEs, 'You're the Business' is helping businesses to grow, through digital skills development in partnership with Google.
- The Government published a **revised Statement on the Role of Data Centres in Ireland's Enterprise Strategy** in July, following consultation with a wide range of stakeholders. It adopts a set of principles to harness the economic and societal benefits that data centres bring, facilitating sustainable data centre development that adheres to our energy and enterprise policy objectives.
- Ireland's first Al Ambassador, Dr Patricia Scanlon, is leading a national conversation on the role of Al in our lives, emphasising Ireland's commitment to an ethical approach.
- A National Youth Assembly on AI was held in October, as an opportunity to engage with young people on AI, including to promote careers in technology.
- The Expert Group on Future Skills Needs published their Al Skills Report in June, which looks at skills needed for the deployment, management and regulation of Al.
- A Digital Ireland Conference on 23 November outlined Ireland's unique offering as a digital front-runner in Europe and as a global digital hub. Further follow-on events organised by the IIEA and IDA Ireland will take place over the coming months.

Workstream: Pursue a coherent, integrated, proactive approach to the digital transition, through a robust ecosystem and strong enablers

 Ireland is an active participant in negotiations related to digital regulation at EU level, including participating in the European Commission's High-Level Group on AI and Digitalisation of Business to coordinate EU digital activities. All four of Ireland's designated **European Digital Innovation Hubs** (EDIH) passed the threshold and are eligible to become part of the EDIH network. Two Hubs (FxC and CeADAR) will be funded jointly through DIGITAL EUROPE and the RRF. The remaining two hubs (ENTIRE and DATA2SUSTAIN) have been awarded a 'Seal of Excellence', which permits them to become full EDIH network members subject to national funding.

Dimension 2 - Digital Infrastructure

Workstream: Drive increased gigabit and 5G connectivity, including international connectivity

- A new **Digital Connectivity Strategy** sets out our ambition for digital connectivity to 2030, and the strategic enablers and initiatives to achieve it.
- Construction is complete or underway across all counties under the €2.7 billion National Broadband Plan; over 97,000 premises can now order or pre-order a high-speed fibre broadband connection across 25 counties.
- Over 750 Broadband Connection Points have been installed with high-speed broadband including 279 public sites and 479 school connections. 300 hubs, under the National Hub Network, connectedhubs.ie, are expected to be operational by end-2022.
- Under the €16 million NRRP Schools Broadband Programme 1,600 schools will be connected to high-speed broadband; of these, 750 schools are expected to be live by end-2022, with a further 250 schools to be connected in early 2023.
- NRRP funding also provides for ICT grant funding for schools for learners at risk of educational disadvantage with €50 million issued in November; and laptops provided to over 24,600 disadvantaged students in Further and Higher Education.
- The Mobile Phone and Broadband Taskforce is working to identify and overcome barriers to the deployment of telecommunications services in the State, to support the rollout of gigabit and 5G connectivity, and wider international connectivity.
- A new Maritime Area Planning legislative regime will establish a new planning and consenting regime for the subsea telecoms cable sector.

Workstream: Address energy & circular economy challenges from digital technologies

- Analysis will be conducted into the positive and negative impacts of digital technological changes on sustainability, via a multi-year research programme being developed with the ESRI, to commence in Q1 2023.
- ComReg are working with their EU counterparts to assess regulators' contribution to limiting the impact of the digital sector on the environment. Next steps include the development of common methods of measurement, and a public consultation is underway to identify sustainability indicators.

Workstream: Prioritise Ireland's cyber security capacity, expertise, and infrastructure

- The development of legislation to establish the National Cyber Security Centre on a statutory basis is underway. A programme of recruitment is underway and on track to reach the target of 70 staff by end-2024, with 47 expected to be in place by end-2022. Work is progressing on the development of a Technology Strategy, and a graduate training programme, which is expected to be launched in Q3 2023.
- A midterm review of the National Cyber Security Strategy 2019-2024 has been commenced. A public consultation will commence in the near future, and the review is expected to be finalised by end-Q1 2023.

Dimension 3 - Skills

Workstream: Provide a comprehensive and interconnected cluster of skills policy responses to meet the challenges, and realise the opportunity of Ireland's digital transformation, including across high-level digital skills, and digital skills for the labour market

- The target for graduates with high-level ICT skills under Technology Skills 2022 was exceeded in 2020 and 2021. An action plan, due to be finalised in Q1 2023, will aim to meet the deliverables under Dimension 3, and will focus on the development of High-Level Digital Skills, Digital Skills for the Labour Market and Digital Skills for Society.
- Progress in delivering high-level digital skills includes ongoing delivery of the Human Capital Initiative; the development of a national framework on micro credentials (the first country in Europe to do so); and UL@Work, a new range of digital-led programmes from UL, co-designed with industry, to enable digital upskilling and reskilling.
- The Ireland/OECD Skills Strategy Review will conclude in March 2023. Key areas emerging for potential action include more dynamic, granular, real-time data to respond rapidly to industry's needs; increasing short, flexible and blended skilling options for those entering or in the workforce; advancing the ease of navigability for employers / individuals through skills options; enabling individualised, continuous learning journeys through guidance and information; and more targeted, tailored workforce development.
- Ireland is represented at the EU Structured Dialogue on Digital Education and Skills to support the EU in delivering on 2030 targets, including via the Digital Decade strategy.
- Work is ongoing, informed by a recent public consultation, to progress a more unified tertiary education system to respond to the learning, skills, knowledge and talent needs of learners, society and the economy in key areas such as digital skills. This will be achieved through clear and coherent pathways and transition points across and between the system, and greater lifelong learning, up- and re-skilling opportunities.

Workstream: Deliver Digital Skills for wider Society, to enable all cohorts to engage with and benefit from digitalisation

Work ongoing to achieve the target of 80% of adults with at least basic digital skills by 2030 includes work to boost digital skills across the entire education system (schools, FET, HE, lifelong learning); Ireland's score under the 2022 DESI is 70% versus EU average of 54%.

- Implementation of the Adult Literacy for Life Strategy includes a new Programme
 Office in SOLAS and the appointment of a Director of Adult Literacy for Life Strategy
 Officer.
- The Digital Strategy for Schools to 2027 was published in April 2022, with a capital investment of €200 million over its lifetime under the National Development Plan 2018-2030.
- Reform of primary, junior and senior cycle curricula is underway to ensure young people are equipped to participate fully in modern society, including through the development of digital literacy and skills.
- A successor Literacy & Numeracy and Digital Literacy Strategy for learners in early years, primary and post-primary schools will be published in 2023, and a STEM Education Implementation Plan to 2026 will be published shortly.
- As part of its 2022 Media Literacy Programme, Media Literacy Ireland (MLI) is commencing the delivery of Be Media Smart 2023, to train public library staff to offer resources and training in media literacy to the public.
- The Broadcasting Authority of Ireland is funding the Irish Film Institute to make media literacy-related films available to schools. Upon its establishment, one of the functions of the new Coimisiún na Meán will be the promotion of media literacy.

Dimension 4 - Digitalisation of Public Services

Workstream: Drive further digitalisation of public services (with a focus on the health system)

- Connecting Government 2030 A Digital and ICT Strategy for Ireland's Public Service
 was published in March 2022. Implementation is progressing, including the development
 of an online Key Life Events portal.
- A Public Consultation to better understand public priorities for online public services, and how to make them more efficient and accessible concluded in November.
- A Digital Inclusion Roadmap will be published early in 2023 and will set out measures
 to better support those who may not be in a position to access services online.
- A preferred bidder has been selected to build the Government Data Centre and the business case has been approved.
- The **2023 ICT Apprenticeship programme** will see over 100 apprentices appointed to 23 civil service organisations in Q1 2023.
- There are over 1.8 million verified MyGovID accounts, representing approximately 48% of the adult population (versus the target of 80% by 2030). Work is also underway at EU level on new EU eID standards and a digital wallet. Ireland is represented on OECD and UN working groups to ensure alignment with global developments.
- The development of a Health Information Bill is well advanced, and the General Scheme will be brought to Government in December. This will ensure Ireland has a fit for purpose national health information system, including by providing for a National Health Information Guardian; a standards-based approach to health information; and a

National Health Information Authority (with funding under Budget 2023 to support its design and development).

- Progress by the HSE continued in 2022 to support a digital workplace, with arrangements established for 24/7 enhanced cyber security operations monitoring, following the major ransomware attack in 2021. The HSE has appointed an interim Chief Technology and Transformation Officer and Chief Information Security Officer and begun the process of filling these posts on a permanent basis. The HSE Board has also constituted a Technology & Transformation Board Committee to oversee the ICT and cyber programme and more broadly the technology transformation agenda, and has developed a prioritised cyber work programme in response to the Independent Post Incident Review by PwC.
- The provision of Electronic Health Records (EHR) Systems for the New Children's Hospital is underway with a contract signed with an international vendor following approval by Government in July 2022. The deployment plans for the EHR system to the maternity hospitals in Limerick and the Coombe are being adjusted to 2024 to take into account the cyberattack in 2021.
- The development of a new Digital Healthcare framework 2023-2027 is underway. It will set the roadmap for digital health in Ireland for the next decade and will present options setting out a roadmap for EHR investment and deployment.

Workstream: Develop and fully implement steps to ensure public service data is used safely and effectively

- The Data Governance Board has commenced work; its role is to direct, oversee, and drive data governance across the Public Service.
- A Public Service Data Catalogue was published in March to promote openness and transparency around the Public Service-held data by providing information on over 1,100 key datasets across almost 100 public bodies. In addition, a Data Sharing Playbook, which provides a step-by-step process for data sharing, was updated in June.
- Under the new Data Governance Framework, and following public consultation, several Data Sharing Agreements under new legislation have been completed. This Framework builds upon the Data Sharing and Governance Act 2019, which will be fully enacted in December 2022. Ireland ranked first for public trust in the use of data by government in the OECD Trust Survey.

Implementation: A Co-ordinated Approach to Digital Policy & Regulation

Implementation of Harnessing Digital is overseen by the Cabinet Committee on Economic Recovery and Investment, supported by a Senior Officials Group on Digital Issues chaired by the Department of the Taoiseach. Strong political leadership, led by the Tánaiste and Minister for Enterprise, Trade and Employment has ensured a continued focus on, and strong coherence across our digital agenda, with a Digital Single Market Group, chaired by the Department of Enterprise, Trade and Employment. This coherent approach has included regular engagement with the Digital Regulators Group as committed to under the Strategy.

Digital Markets Act

European Health Data Space Regulation

Terrorist Content Online Digital Services Act

Online Safety and Media Regulation Bill Artificial Intelligence Act

Cyber Resilience Act Future of Media Commission Report

Data Act Data Governance Act Electoral Reform Act

Regulation on Preventing and Combatting Child Sexual Abuse Material

European Media Freedom Act

Communications Regulation Bill 2022

Workstream: Ireland is committed to continue to provide a modern, cohesive and well-resourced digital regulatory system

- The Online Safety and Media Regulation Bill 2022 is progressing through the Oireachtas with a view to enactment by year-end. It provides for the establishment of Coimisiún na Meán, including an Online Safety Commissioner, and the dissolution of the BAI. It will update the regulation of television broadcasting and video on-demand services and transpose the revised Audiovisual Media Services Directive into Irish law.
- In parallel, Government is advancing the **establishment of Coimisiún na Meán** on an administrative basis, with €7.5 million allocated under Budget 2023; **recruitment for key posts is expected to be completed soon, including an Online Safety Commissioner.**
- The Report of the Future of Media Commission was published in July, following Government agreement in principle to adopt 49 of 50 recommendations and propose an alternative funding model. Work to implement the recommendations, and develop a new funding model is ongoing, with Government to be updated on progress in December.
- At an EU level, the Digital Markets Act and Digital Services Act came into force in November 2022.
- Earlier this year, the Government decided to designate Coimisiún na Meán as Ireland's Digital Services Coordinator under the Digital Services Act, and work is ongoing to give operational and legislative effect to that decision.
- In November, the **Government agreed to designate Coimisiún na Meán** as competent authority under the **Terrorist Content Online Regulation**, applicable from June 2022.

- The Data Governance Act will apply and takes direct effect in Ireland from September 2023. Preparation is underway for its transposition, including via secondary legislation, to provide for the setting up of a competent body and a Single Information Point to assist public bodies in the voluntary sharing of data they hold; and primary legislation is being prepared to facilitate the designation of a competent authority to oversee compliance of data intermediaries operating in Ireland.
- Additional new regulations currently being negotiated at EU level include the Data Act;
 Al Act, Al Liability Directive and Product Liability Directive; and a proposed Regulation on Preventing and Combatting Child Sexual Abuse Material.
- The Communications Regulation Bill 2022 was published in September following Government approval in July and is progressing through the Oireachtas. It results from the transposition of the European Electronic Communications Code into Irish legislation, which provides for a review of the legislative framework for the telecommunications sector to make it fit for the digital age.
- The Government is committed to continuing to deliver effective data protection regulation and protecting the data privacy rights of EU citizens, which is critical to the development and growth of our digital economy. The Irish Data Protection Commission (DPC) is a bloc leading partner in enforcement on behalf of EU citizens in the EU. In July, the Government agreed to commence the process to appoint two additional Commissioners to support the evolving needs of the DPC, reflecting the Government's recognition that the DPC is dealing with an increased workload with increasingly complex investigative requirements, and its intention to continue to build the capacity of the Commission. The increased budget Government has committed to the DPC, with €26.2 million for 2023, will allow further expansion of resources, beyond the 200 staff currently employed, and of capacity.

Annex - Harnessing Digital Targets and Workstreams

Positioning Ireland as a digital leader, driving and enabling digital transformation across the economy and society.

Dimension 1:

Digital
Transformation
of Business



Dimension 2:

Digital Infrastructure



Dimension 3:

Skills



Dimension 4:

Digitalisation of Public Services





Targets

75% enterprise take-up in Cloud, Big Data, AI by 2030

90% of SMEs at basic digital intensity by 2030

At least 800 businesses supported by 2026 under the €85 million Digital Transition Fund

At least 35% of State funding for start-up & early stage businesses invested in innovative digital businesses from 2022

All households and businesses covered by Gigabit network by 2028

All populated areas covered by 5G by 2030

Digital connectivity to all Connected Hubs and Schools by 2023

All operators of essential services, Government Departments and key agencies verified to have implemented robust cyber security mitigation measures by 2024

Increase the share of adults with at least basic digital skills to 80% by 2030

Increase graduates with higher-level digital skills to over 12,400 by end-2022, with ambition to further increase digital skills provision in following years 90% of applicable services consumed online by 2030

80% of eligible citizens using MyGovID by 2030

20% of employees in the public sector remote working (post-pandemic)

Workstreams

Comprehensively support enterprise across all aspects of their digital transformation.

Pursue a coherent, integrated, proactive approach to the digital transition, through a robust ecosystem and strong enablers.

Drive increased gigabit and 5G connectivity, including international connectivity

Address energy & circular economy challenges from digital technologies.

Prioritise Ireland's cyber security capacity, expertise, and infrastructure.

Provide interconnected cluster of skills policy responses to meet the digital transformation

Deliver Digital Skills for Society, to enable all cohorts to engage with digitalisation.

Drive further digitalisation of public services, with a focus on the health system.

Fully implement steps to ensure public service data is used safely and effectively.

Underpinned by a coherent governance structure, and a modern, cohesive, well-resourced regulatory framework.

