

# Harnessing Digital The Digital Ireland Framework 2023 Progress Report



#### **Overview**

Harnessing Digital: The Digital Ireland Framework was published in early 2022. It reflects Ireland's ambition to continue to be a **European and global digital leader**, and our strong commitment to progressing the digital transformation of our economy and society.

The Strategy was developed in line with the EU's Digital Decade, setting out a roadmap to advance the **digitalisation of enterprise and public services**, enabled by **digital infrastructure and digital skills provision** at all levels, whilst complementing work towards reaching Ireland's climate objectives.

Recognising Ireland's important role in enforcing **digital regulation**, *Harnessing Digital* also reenforces our commitment to a modern, cohesive, well-resourced regulatory framework to effectively oversee and enforce existing and new regulations.

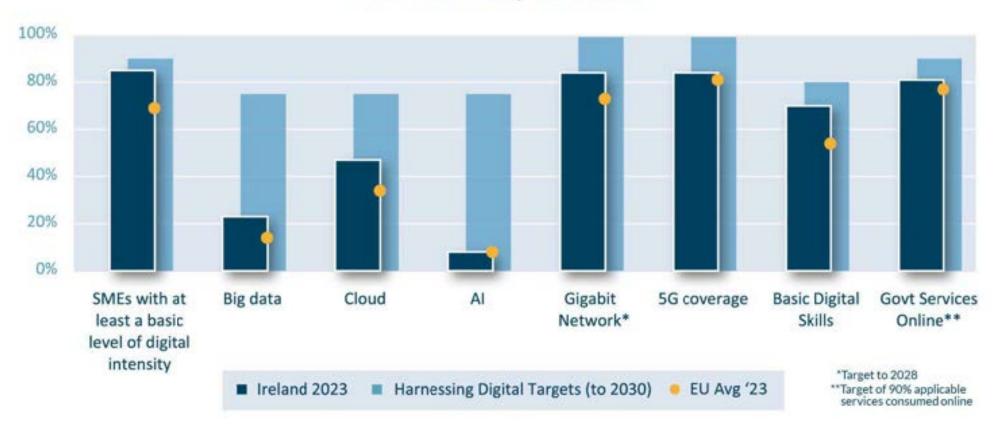
Harnessing Digital ensures a cross-Government approach to progressing our digital agenda, with strong implementation structures under the Cabinet Committee on the Economy and Investment ensuring coherent and impactful delivery. It includes regular consultation and engagement with stakeholders, including with industry through the Enterprise Digital Advisory Forum, and with regulators through the Digital Regulators Group. Strong political leadership across the broader digital agenda, including at EU and international level, plays an important role in delivery.

This cross-Government approach, with extensive engagement, is particularly important in the context of the **fast-paced evolution of AI**, which has both significant potential to enhance our socio-economic wellbeing, enable innovation, and advance productivity, while also bringing risks and challenges. The Government is committed to an **ethical and human rights-based approach** to AI that is people-centric, and emphasises fairness, transparency and building public trust, as reflected in our National AI Strategy, AI -Here for Good.

The EU's **Digital Economy and Society Index** (DESI) for 2023 showed continued progress across our digital agenda, whilst also highlighting areas where progress could be accelerated. For example, while we hold a leading position in the EU on several enterprise, skills, connectivity and public services indicators, we also have work to do to reach our targets in some areas. These include driving higher levels of enterprise adoption of AI, Cloud and Big Data, continuing to meet the demand for high quality digital skills across the economy, and progressing citizen access to Digital Health records. The Government is continuing to focus on working to deliver in these areas in particular, to ensure we reach our national, and EU-level digital targets.

This, the second progress report published for *Harnessing Digital*, highlights the significant developments under the strategy over the course of 2023.

## Ireland's Progress against Harnessing Digital Targets as measured by DESI 2023





4 new European Digital Innovation **Hubs operational: CeADAR** (Al innovation hub); **FactoryxChange**; **DATA2SUSTAIN: and ENTIRE** 

**Almost** 8.000 third level **ICT** graduates in 2022



**New Digital** Portal for business (Q1 2024)



High-speed broadband infrastructure extended to all rural primary schools



(part of DIGITAL Europe)



New one-stop-shop Single Portal for Careers and Skills Information on learning and career development options being developed



#### Be Media Smart 2023

- building a public library network to increase digital literacy



Coimisiún na Meán formally established March 2023



**2.3**m verified **MyGovID** accounts



2023 DESI: Ireland ranks 1st for **Digital Public Services for Business** at 100%



New Digital Inclusion Roadmap, Digital for Good, to improve digital inclusion through skills, access and infrastructure

2 additional Commissioners for the Data Protection Commission, and €27.9m for the DPC under Budget 2024

#### **Progress on Delivery**

Progress over the course of 2023 under each of the four dimensions of *Harnessing Digital* is summarised below.

#### **Dimension 1 - Digital Transformation of Business**

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

- The EU's Digital Economy and Society Index (DESI) 2023 shows Ireland holds a leading position in the EU in terms of SMEs with at least a basic level of digital intensity (currently at 85% versus the target of 90%).
- The €85 million Digital Transition Fund continues to help companies at all stages of their digital journey, with €10 million allocated in 2022 and €16 million in 2023, and a total of 274 businesses approved for funding to date. Work is underway to broaden eligibility to enable more businesses to access digital funding schemes.
- A new **Digital Portal**, which will advise businesses on their digital journey, will be launched in Q1 2024.
- The 'Building Better Business' series visited all 9 Regional Enterprise Plan regions, hosting events including panel discussions on SME's digital journeys, and showcasing the range of state initiatives to assist businesses with their digital transition.
- In line with the Government's 2022 Statement on the Role of Data Centres, work is ongoing across Government to balance the needs of **data centres** and other large energy users with other electricity consumers across the economy.
- On AI, the **CeADAR** research centre has been established as Ireland's AI innovation hub under the European Digital Innovation Hub programme.
- A new Al Advisory Council will be established in the coming weeks. It will be chaired by the Al Ambassador, Dr Patricia Scanlon (appointed in 2022), and will include experts from academia, business, law, security, and civil society to provide independent expert advice to Government on Al policy and the responsible use of Al.
- Guidance on the trustworthy and ethical use of AI in the public service is being
  developed to ensure that the public sector can safely harness the power of AI to tackle
  big challenges, including to increase productivity and benefit from innovative
  opportunities. Interim guidance for the public service will be published shortly.
- A Progress Report on implementation of the Al Strategy, and a report on the first year
  of activity by Ireland's Al Ambassador, Dr Patricia Scanlon, were published in August
  2023.
- Over 2023, the Enterprise Digital Advisory Forum established in 2022 to ensure a stakeholder-led approach to helping enterprise focused on opportunities from GovTech, digital inclusion, skills, cyber security, leveraging our European Digital Innovation Hubs, and an in-depth session on Al. Membership of the Forum has recently been refreshed, to ensure all voices are heard and that the Forum is as representative and responsive as possible.

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

- In addition to CeADAR, three further European Digital Innovation Hubs, which serve as one-stop-shops for business, providing access to technical expertise, innovation services and skills development, are operational:
  - FactoryxChange (FxC): aims to accelerate 'Factories of the Future' embracing ecological, digital, and societal challenges.
  - DATA2SUSTAIN: aims to increase the transformation capacity of SMEs in the Northern and Western Region, focusing on the circular economy and sustainability.
  - ENTIRE: aims to help SMEs and start-ups to become more competitive using digital technologies.
- The **Central Bank of Ireland** launched a consultation on enhancing engagement on innovation, including a proposal to establish an **Innovation Sandbox Programme** to provide regulatory advice and help for innovation development as part of a deeper engagement with fintech.
- Ireland will chair the **D9+ group of digitally advanced countries** for the first half of 2024, with the main ministerial meeting to take place in April 2024; this will coincide with Ireland's **second Digital Ireland Conference**.
- Ireland is actively involved in negotiations at EU level on digital regulation, and on the
  Council of Europe's work on a legal convention on AI. Ireland also participates in the
  EU's Digital Decade 2030 structures, and the High-Level Group on AI and Digitalisation
  of Business, to coordinate EU digital activities, such as the Digital Innovation Hubs.
- The EU's General Block Exemption Regulation (GBER) came into force in July 2023. The Green Deal GBER amendment broadens the scope of the regulation to enable EU Member States to provide State Aid for digitalisation projects, the development of innovative digital technologies, and provides more options for facilitating the development of Innovation Hubs.

#### **Dimension 2 - Digital Infrastructure**

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

- According to DESI 2023, Ireland retained its leading position on mobile broadband takeup (98% versus an EU average of 87%), and improvements can be seen across our connectivity indicators, including 5G spectrum.
- Progress towards our national and EU-level connectivity targets through the
  implementation of our **Digital Connectivity Strategy** is on track. The delivery of fibre to
  the home broadband is making strong progress, with 70% of premises in commercial
  areas now upgraded, and **over 600,000 premises now have full fibre subscriptions**, as
  reported by ComReg.

- In rural areas, construction is complete or underway across all remote areas under the €2.7 billion National Broadband Plan; more than 200,000 premises have now been passed with full fibre, and there are over 60,000 subscriptions. Of the €2.7 billion, €348 million of State funding was approved in Budget 2024 to continue expanding to over 600,000 rural premises.
- **Broadband Connection Points** are now in place at just under 300 locations across all counties. Under this programme, designated community centres, GAA and other public buildings provide free high-speed WIFI to the public, with many operating as digital hubs.
- The extension of high-speed broadband infrastructure to all **primary schools** in rural areas, including islands, is now complete under the National Broadband Plan.
- In 2023, a Digital Connectivity Office was established to oversee the delivery of Ireland's digital connectivity targets including oversight of the National Broadband Plan contract with National Broadband Ireland. The Office is also carrying out a significant review of Ireland's international interconnectivity capacity to ensure future policy and demand needs are met over the coming decades.
- Work is underway to establish an appropriate Universal Service Standard for broadband and voice services; this will ensure that all citizens are entitled to adequate broadband and voice services at an affordable price.
- The new Maritime Area Planning legislative regime established a new planning and consenting regime for the subsea telecommunications cable sector; the Maritime Area Regulatory Authority (MARA) was established in July, and the development of the Maritime Area Consenting (MAC) regime that will apply to the sector is underway.

#### Workstream: Address energy & circular economy challenges from digital technologies

- Initial research has been published as part of a multi-year research programme with the ESRI into the positive and negative impacts of digital technological changes on sustainability.
- ComReg is working with EU counterparts to assess regulators' contribution to limiting
  the impact of the digital sector on the environment and were drafters of the Body of
  European Regulators for Electronic Communications (BEREC) report on Sustainability
  Indicators for Electronic Communications Networks and Service. BEREC is currently
  examining how to empower consumers through information on the environmental
  impact of digital goods and services.

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

 The Government has approved the development of legislation to establish the National Cyber Security Centre on a statutory basis and this will be completed by October 2024 as part of the transposition of the NIS 2 Directive.

- The Mid Term Review of the National Cyber Security Strategy 2019-2024 was published in June 2023, setting out 18 new strategic actions, including the development of a Cyber Security Industry Strategy.
- €10 million has been committed to a national **Quantum Communications Infrastructure** network for Ireland as part of DIGITAL Europe's EuroQCI, an EU-wide programme. The project aims to secure critical infrastructure against the threat of cybersecurity attacks due to advances in quantum computing power. The network is expected to be completed by end-2024.

#### **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

- Ireland ranked above average across many of the skills indicators in the 2023 DESI, including  $2^{nd}$  for ICT graduates, and  $3^{rd}$  for those with at least basic, and above basic digital skills. DESI 2023 also indicates Ireland has improved in ranking for female ICT specialists from  $14^{th}$  (20.1%) to  $9^{th}$  (21.8%), in terms of EU Member States.
- In 2022, there were nearly **8,000 graduates** from ICT programmes at third level alone.
- A range of **digital upskilling and reskilling initiatives** are being made available via Skillnet Ireland, Human Capital Initiative and Springboard+.
- A one-stop-shop Single Portal for Careers and Skills Information in relation to learning and career development options is being developed.
- The OECD Review of Ireland's National Skills Strategy, published in May 2023, identified digital transformation as a critical mega-trend and its recommendations will inform future digital skills needs analysis and provision. The development of a whole-of-government approach to skills policy, including through the current restructuring of Ireland's National Skills Council, is underway.
- The report on the first project under a **DFHERIS / ESRI research programme** on the role of emerging technologies in labour market skills needs will be published in early 2024.
- Ireland continues to contribute to the EU Structured Dialogue on Digital Education and Skills.
- Work is continuing to ensure a more unified third level education system, with 5
  regional dialogue meetings held in June 2023 and ongoing engagement with relevant
  stakeholders and institutions contributing to this work.

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

- Implementation of the Adult Literacy for Life (ALL) Strategy continues, with up to €1
  million in funding available for proposals under the Innovation and Collaboration Fund,
  to include digital literacy projects. In addition, the ALL website continues to be improved
  to provide all relevant information and advice on literacy and access to services for
  users.
- Implementation of the Digital Strategy for Schools to 2027, published in April 2022, continues to be progressed.
- The STEM Education Implementation Plan to 2026, published in March 2023, will
  further improve the STEM learning experiences for all learners from early learning to
  post-primary school, including professional opportunities for teachers and guidance
  counselors to increase awareness of STEM subjects, and a continued review of the STEM
  curriculum across all levels.
- A successor to the National Strategy: Literacy & Numeracy for Learning and Life 2011-2020 for early childhood and care settings, primary and post primary schools, with digital literacy as a primary focus, is due to be published in the coming months.
- Coimisiún na Meán, which was formally established in March, published their initial work programme in June, which includes the development of media literacy initiatives to help the public to critically assess online and broadcast content.
- Media Literacy Ireland, funded by Coimisiún na Meán, launched Be Media Smart 2023, an initiative to train public library staff to build a network of community-based trainers to help individuals, communities, and institutions recognise and value reliable and accurate information.

#### **Dimension 4 - Digitalisation of Public Services**

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

- Under the 2023 DESI, Ireland ranks first for Digital Public Services for Business at 100%, with good progress in other areas of Digital Public Services, albeit DESI results also highlighted some areas where progress could be accelerated including in relation to Digital Health records where Ireland preforms poorly against EU measures.
- **Digital for Good: Ireland's Digital Inclusion Roadmap**, published in August 2023, sets out the range of initiatives which are contributing to the improvement of digital inclusion through better skills, access and infrastructure, reducing digital divides at national, local, and community level.
- A public consultation on Digital Public Services was completed and the report will be
  published shortly; this was supplemented by further targeted research and stakeholder
  consultation. The feedback has been used to set priorities for a new Life Events
  programme.

- The development of the related Life Events portal is advancing, with driving licences and birth certificates to be the first services available. The development of an EU-compatible digital wallet is also progressing, with birth certificates, driving licences and a MyHealthID to be amongst the first services available through the digital wallet.
- A **new version of the Government website gov.ie** will be launched shortly, to include access to public services via the Life Events portal, and the MerrionSt.ie news service.
- Ireland has seen a high take-up of **MyGovID**, with over **2.3 million** verified accounts by the end of October 2023.
- Construction is progressing on a **State Data Centre**, to provide a fit for purpose modern, secure, and green facility; with completion of the building structure due in Q1 2024.
- **101 ICT apprentices** were recruited to the Civil Service to meet the demand for in-house ICT skills and to broaden the talent pipeline.
- A new Digital Health and Social Care Roadmap 2023-2030 is nearing completion, and a
  corresponding implementation plan is being developed by the HSE. It will establish a
  roadmap for digital health in Ireland to the end of this decade, present options for
  electronic health record investment in Ireland and articulate the objective that all Irish
  citizens should have access to their digital health records by 2030.
- The provision of Electronic Health Records (EHR) Systems for the new Children's Hospital is underway in the most extensive EHR deployment in Ireland and builds on the success of programmes at the largest maternity hospitals and St James Hospital. Deployment to the maternity hospitals in Limerick and the Coombe is being adjusted to 2024 to take into account the 2021 cyber-attack and put in place measures to increase cyber resilience prior to further expansion. Ireland has also started phasing in the national individual health identifier across GP practice systems and hospital patient administration systems. Ireland is one of the EU Member States participating in the programme to deliver summary care records and electronic prescription for cross-border use cases and has participated in all of the test cycles.
- The development of a Health Information Bill is well advanced; it will ensure a fit for
  purpose national health information system to enhance patient care and treatment and
  facilitate better planning and delivery of health services, as well as better research and
  innovation. It will also provide for a National Health Information Guardian and enable
  the establishment of a National Health Information Authority.

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

The Data Sharing and Governance Act 2019 has been fully implemented. It introduces a
layer of governance and transparency to sharing personal information across Public
Service Bodies. The Data Sharing Agreement Register, including the Data Sharing
Agreements and the Data Processing Impact Assessment required under the Act, has
been published.

• The **Public Service Data Catalogue** was launched in 2021 to facilitate transparency around public service data, by providing information on over 1,100 datasets across almost 100 public bodies. In July 2023, the Catalogue was nominated by the Government as the Single Information Point under the EU's Data Governance Act, to provide information on public sector 'protected datasets' and how to access and re-use them, and work is ongoing to increase awareness and promote its use.

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

Ireland's **strong political leadership** and **whole-of-Government** approach to our digital agenda, including at EU and international level, ensures coherent and impactful delivery. The **Cabinet Committee on the Economy and Investment** drives the implementation of *Harnessing Digital*, supported by a Senior Officials Group on Digital Issues, chaired by the Department of the Taoiseach, and other Sub-Groups. Ongoing engagement with stakeholders plays a central part, including **regular industry engagement** via the Enterprise Digital Advisory Forum, as well as with regulators through the Digital Regulators Group.

Ireland takes its important role in **enforcing digital regulation** seriously, and through *Harnessing Digital* the Government is re-enforcing Ireland's commitment to a modern, cohesive, well-resourced regulatory framework so as to effectively oversee and enforce regulations. This includes our commitment to ensuring the provision of necessary resources and legislation, as for example, with the Digital Services Act. In the current context of an increasingly complex digital regulatory landscape, with significant new EU regulations emerging, along with the rapid pace of technological development, particularly in the area of AI, Ireland's strong commitment to effective enforcement is particularly pertinent.

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

- The Online Safety and Media Regulation Act 2022 was commenced in March 2023, providing for the establishment of Coimisiún na Meán, and the transposition of the revised Audiovisual Media Services Directive into Irish law.
- Coimisiún na Meán was formally established in March, and central roles are now in
  place including the Executive Chairperson, Broadcasting Commissioner, Online Safety
  Commissioner, Media Development Commissioner and the Digital Services
  Commissioner with wider recruitment ongoing. In June, An Coimisiún published its
  work programme to February 2024, which includes setting out how it will adopt the
  first online safety codes.
- The EU's Digital Services Act (DSA) came into force in November 2022, and the European Commission has designated 19 Very Large Online Platforms (VLOPs) and Very Large Online Search Engines (VLOSEs) to date, 13 of which are established in Ireland. Requirements for VLOPs and VLOSEs under the DSA have applied since August 2023; and the DSA will apply to all other relevant businesses from 17 February 2024. Under the DSA's enforcement model, EU Member States must designate Digital Services Coordinators.

- The Digital Services Bill, a critical priority for the coming period, is being advanced to designate Coimisiún na Meán as Ireland's Digital Services Coordinator (DSC) under the Digital Services Act (DSA) and the CCPC as a competent authority for specific articles under the DSA. The Government is committed to the enactment of the Bill before 17 February 2024. Work is also ongoing to ensure our DSC is operating effectively as quickly as possible, and the Government has allocated €6 million in Budget 2024 for the DSC, an additional €3 million to last year.
- In 2023, Coimisiún na Meán and An Garda Síochána were designated as Competent Authorities under the Terrorist Content Online Regulation, with responsibility for oversight of service providers and the issuance of Removal Orders of terrorist content respectively.
- The Government approved an Implementation Strategy and Action Plan for the Future of Media Commission recommendations in January, and implementation is ongoing, including the development of a new National Counter Disinformation Strategy.
- The EU's **Digital Markets Act (DMA)** came into force in November 2022 and the European Commission designated 6 gatekeepers under the DMA in September 2023, who have 6 months to comply with related requirements.
- The EU's Data Governance Act (DGA) has applied since September 2023. The CCPC is currently being established as Ireland's competent authority for registration and compliance of 'data intermediation services providers' and 'data altruism organisations', and the CSO is being established as competent body for assisting Irish public sector bodies which opt to share 'protected data'. Ireland's 'single information point' for protected data under the DGA is hosted on the Public Service Data Catalogue and went live in September.
- The EU's **Data Act** was agreed in June and is expected to be published in the Official Journal shortly before entering into force 20 days later; it will apply 20 months after this (expected Q3 2025).
- The Communications Regulation and Digital Hub Development Agency (Amendment)
   Act 2023, and the European Union (Electronic Communications Code) Regulations
   were both commenced in June, transposing the European Electronic Communications
   Code, and providing for additional and enhanced consumer protection in the
   telecommunications sector.
- Additional new regulations currently being negotiated at EU level include the AI Act and European Media Freedom Act (with political agreement on both reached in December), the Cyber Resilience Act (political agreement reached in November), the Gigabit Infrastructure Act, a proposed Regulation on Preventing and Combatting Child Sexual Abuse Material and a proposed regulation laying down additional procedural rules relating to the enforcement of GDPR.
- The Government is committed to providing effective data protection regulation for EU citizens. The Data Protection Commission plays a central role in GDPR enforcement across Europe. Two additional Commissioners will be appointed to the Data Protection Commission shortly in recognition of its role in GDPR enforcement and increased workload. The DPC received €27.9 million under Budget 2024, an almost eightfold increase on the 2015 allocation.

#### **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:



Dimension 4:

Digitalisation of Public Services





#### **Targets**

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

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 by Gigabit network by

covered by 5G by 2030

Digital connectivity to all Connected Hubs and Schools by 2023

All operators of essential

ncrease 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. strong enablers.

Drive increased gigabit and SG connectivity, including international

Address energy & circular economy challenges from digital

cyber security

Provide inter-connected cluster of to meet the digit.

Deliver Digital Skills for

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.

