

The opportunity for improved AI use within the Irish public service

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Ireland's Centre for Applied Artificial Intelligence

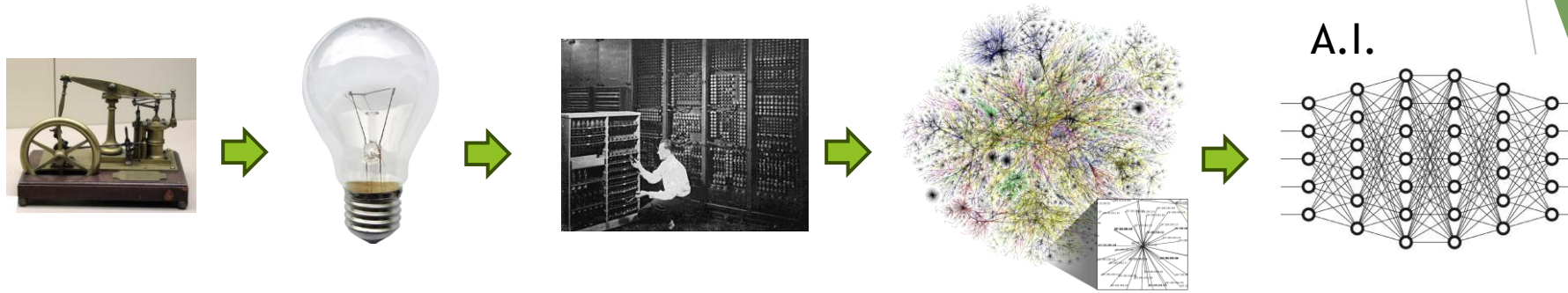
CeADAR supports companies and organisations across Ireland to explore, experiment, and build innovative AI solutions into processes and products, transforming your productivity, competitiveness, digitalisation and sustainability.



Why this event now?

- ▶ 100's of conversations, some very common themes
- ▶ Ireland has been active in digitalisation over the past decade, but AI posing new opportunities and challenges
- ▶ Lots of initiatives and support – can we join things together?
- ▶ Great interest from PSOs but there are many challenges
- ▶ How to proceed?

AI - new(ish) tools with potential for disruption



- + **Universal** - can be used in all domains
- + **Multimodal** - any type of data and structure
- + **Self-improving potential:** AI systems can adapt and enhance themselves over time.
- **Raises unique questions** of trust, bias, accountability
- **Governance challenges**—how to regulate globally pervasive, rapidly advancing systems.
- **Geopolitical competition** over AI leadership.

Data Management, Governance and Knowledge Representation

01

- Managing high volumes of diverse data
- Curation of high quality, robust datasets

Machine Learning and Deep Learning

02

- Next level applications including unstructured and multi modal data.

AI Infrastructure

- Hardware and software for next generation applications

07

Foundation models and Generative AI

- Next generation models, reducing option costs, pretraining, novel more efficient architectures, multimodal data applications.

03

Efficient/Sustainable AI

- Efficient solutions, smaller more focussed, Edge and IoT solutions

06

Trustworthy AI (TAI)

05

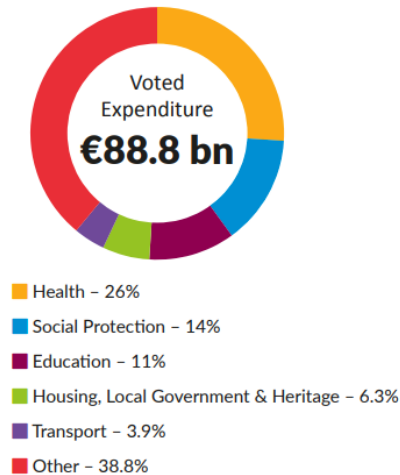
- Ethical AI, Explainable AI, Human AI Collaboration and Safety, Robustness and Privacy.

Agentic AI

- High task and data complexity, with highly adaptable models, combining foundation models and ML.

04





Civil Service	47,551	
Defence	8,386	
Education	119,862	
Health	135,245	
Justice	14,215	
Local Authorities	31,085	
Non-Commercial Stage Agencies	16,107	

Case Study - Estonia

- ▶ Already advanced in government services digitalisation
- ▶ A single system “**Bürokratt**” – essentially an AI-powered virtual assistant intended to give every citizen a single conversational gateway to government
- ▶ A common approach to data and interagency sharing
- ▶ Deployed across multiple agencies and departments with the aim of getting being able to handle all public service transactions.
- ▶ Used to handle bilingual governance



Some AI Use Cases- Estonia



- Emergency call transcribing
- Call assessment and prioritisation



- Investor query handling
- E residency enquiries
- Marketing activities



All Departments

- Estonian Language services & translation



Court Service

- Hearing transcriptions



- Social media ads compliance
- Handling appeals automatically



- Flood and snow cover measuring
- Forestry management
- Land use and planning

Heritage Protection Board

- Object age and condition monitoring
- Collection descriptions and cataloguing
- Mass digitisation and labelling of photo archives

Health Service

- Clinical decision support
- Patient triage
- **Medicines Agency** - drug approval management

Estonia Key Strategies & Initiatives

▶ The "Once Only" Principle:

- ▶ Government agencies reuse data for different services, eliminating the need for citizens to repeatedly provide the same information.

▶ Proactive "Invisible" Services:

- ▶ Starting around 2015, using data to anticipate citizen needs and offer services before they are requested, such as automatic parental benefit notifications.

▶ Digital Literacy and Skills:

- ▶ Estonia invested in mass digital literacy training and continues to expand learning opportunities and reskilling initiatives to ensure the entire population can participate in the digital society.

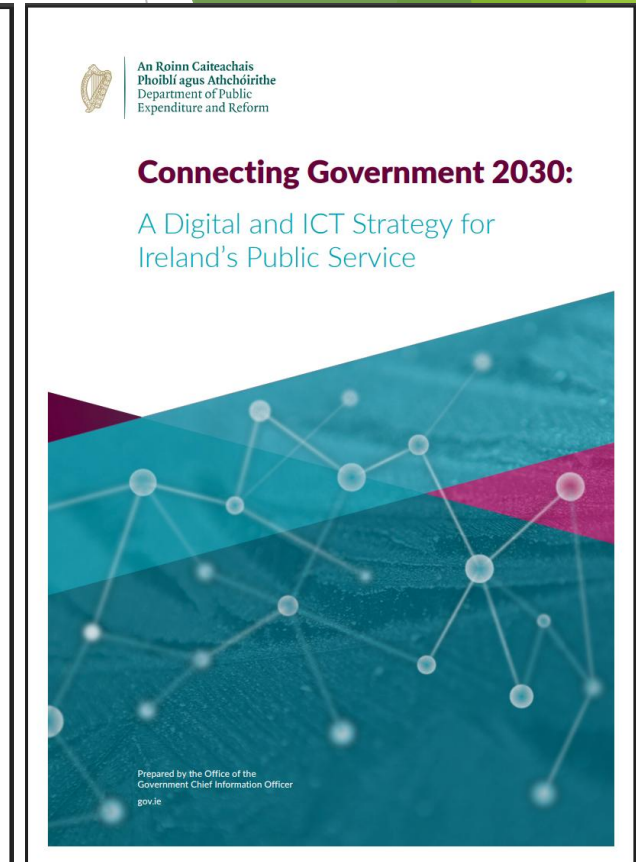
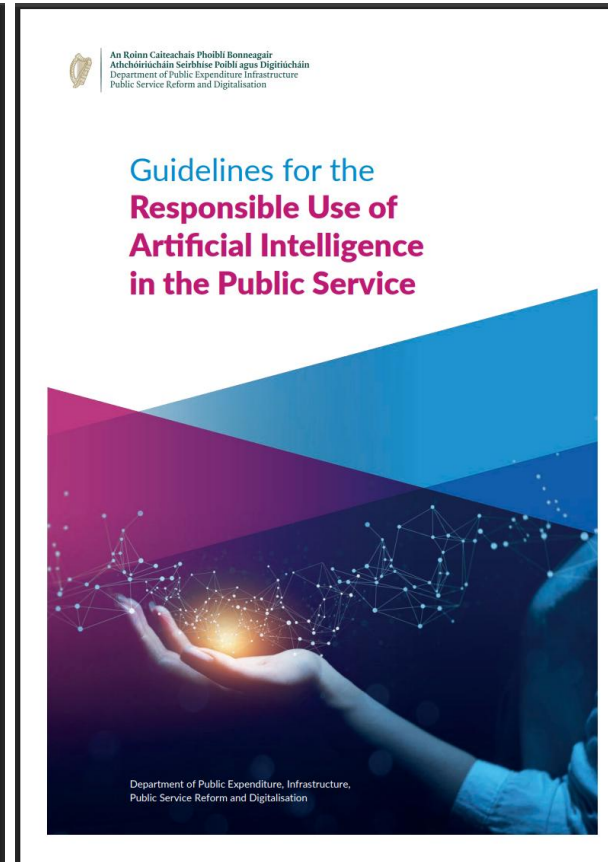
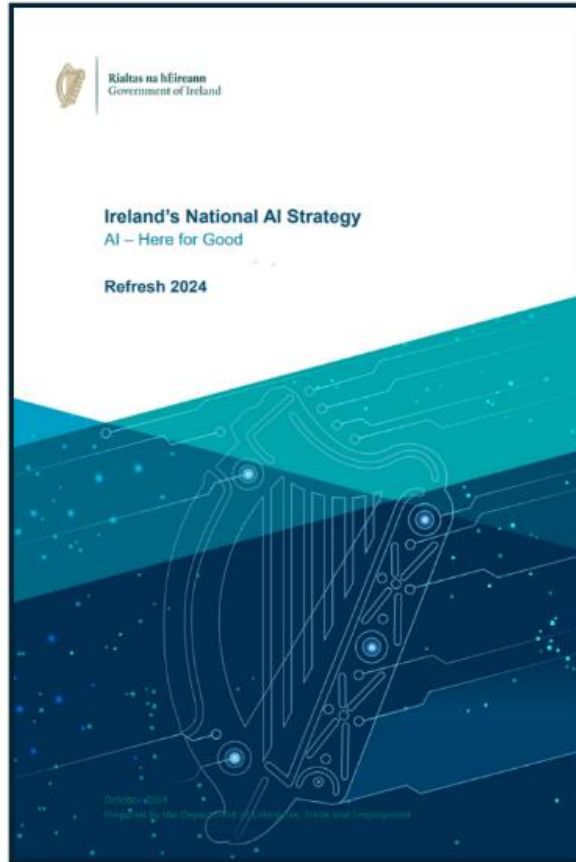
▶ Cybersecurity:

- ▶ With increased digital maturity, Estonia places significant emphasis on cybersecurity to protect its interconnected digital infrastructure and educate users on cyber hygiene.

▶ Legal Framework:

- ▶ A robust legal framework was established to support digital services and the secure exchange of data.

How is Ireland doing?



Strong foundations

Good activity already happening in Ireland



The National Transport Authority (NTA) has used an **AI Large Language Model (LLM)** to assist in the management of questions from Government representatives. While the AI helps generate answers, humans still ensure that the responses are accurate, ethical, and follow privacy rules. **resulted in a 54% reduction in time spent responding to questions.**



An Roinn Talmhaíochta,
Bia agus Mara
Department of Agriculture,
Food and the Marine

DAFM processes 30,000 to 40,000 grant applications annually. SmartText uses real-time **artificial intelligence (AI)** and **ML** capabilities to extract metadata and other contextual information from unstructured grant application documents. **DAFM have drastically reduced the number of breaches, as well as reduced application processing times from weeks to days.**



OPW Oifig na
nOibreacha Poiblí
Office of Public Works

The Office of Public Works (OPW), Policlear pilot, analyses data and information and generates quick, **concise summaries for policymakers in a matter of minutes** and was enhanced to allow interaction with archived Oireachtas debates.



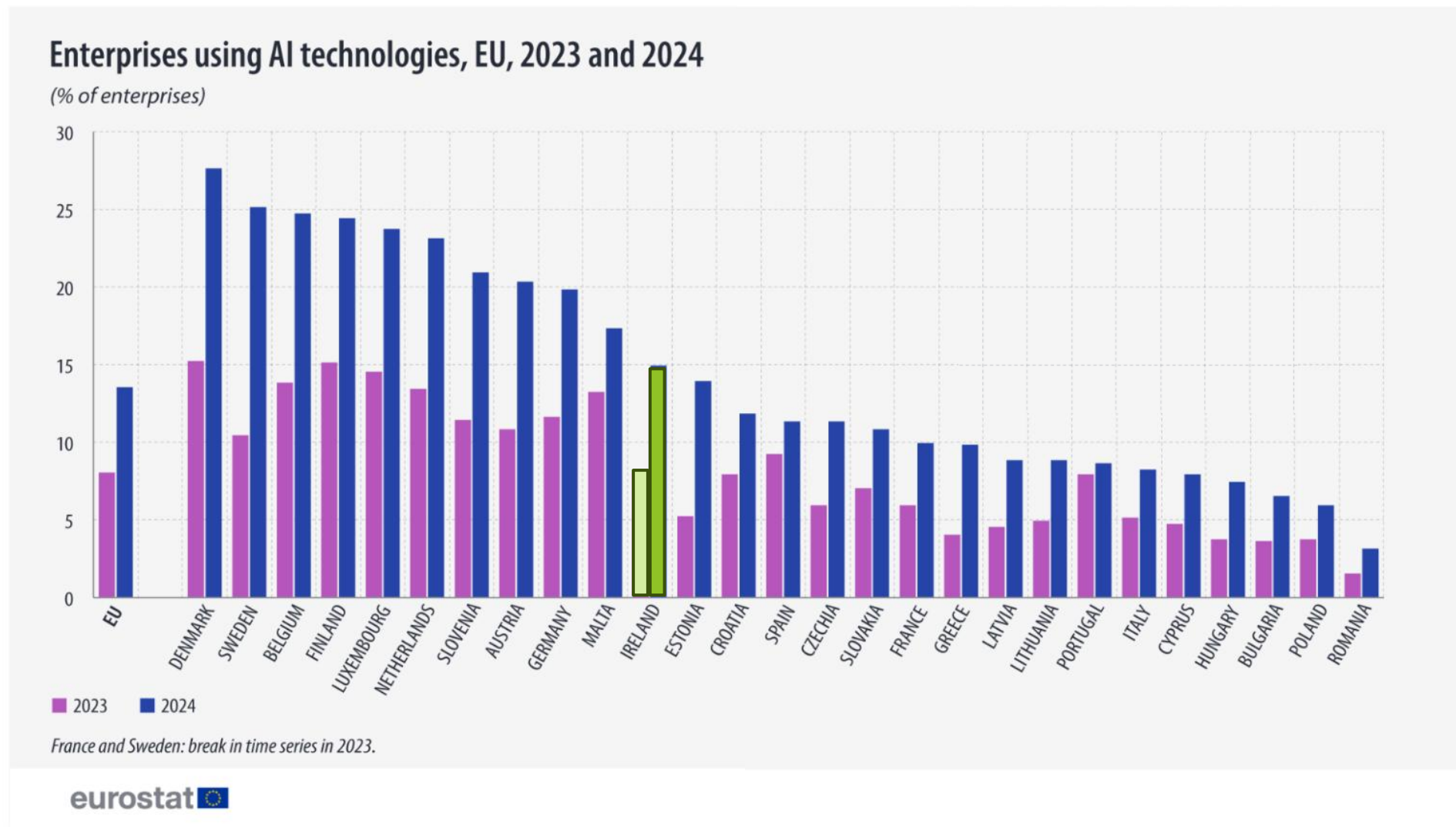
The Revenue Commissioners is using **Large Language Models (LLMs)** to route taxpayer queries more **efficiently, ensuring faster and more accurate responses.**



An Roinn Dlí agus Cirt
Department of Justice

The Department of Justice has launched a Digital Contact Centre for Irish Immigration using Chatbots & Co-Pilot, **improving response times and customer service.**

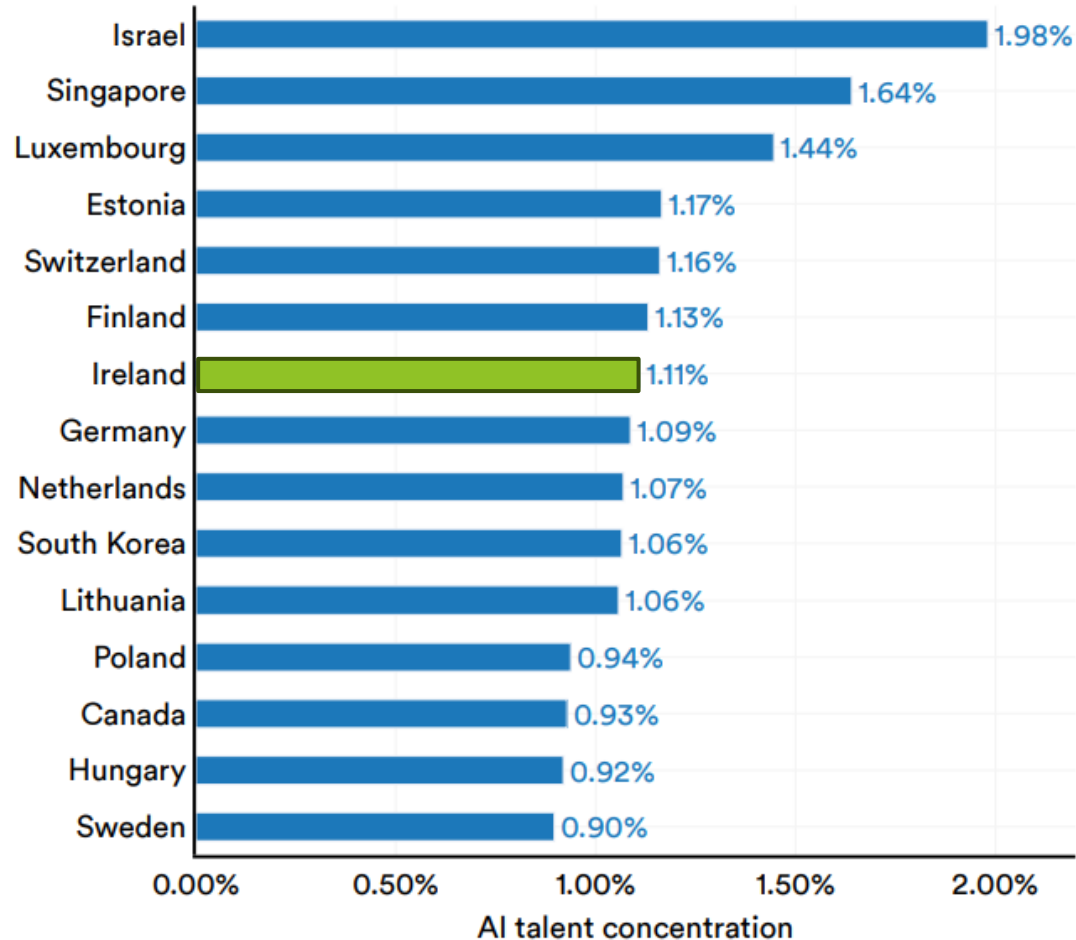
Context – Generally Low AI Adoption



Context – AI Talent (1)

AI talent concentration by geographic area, 2024

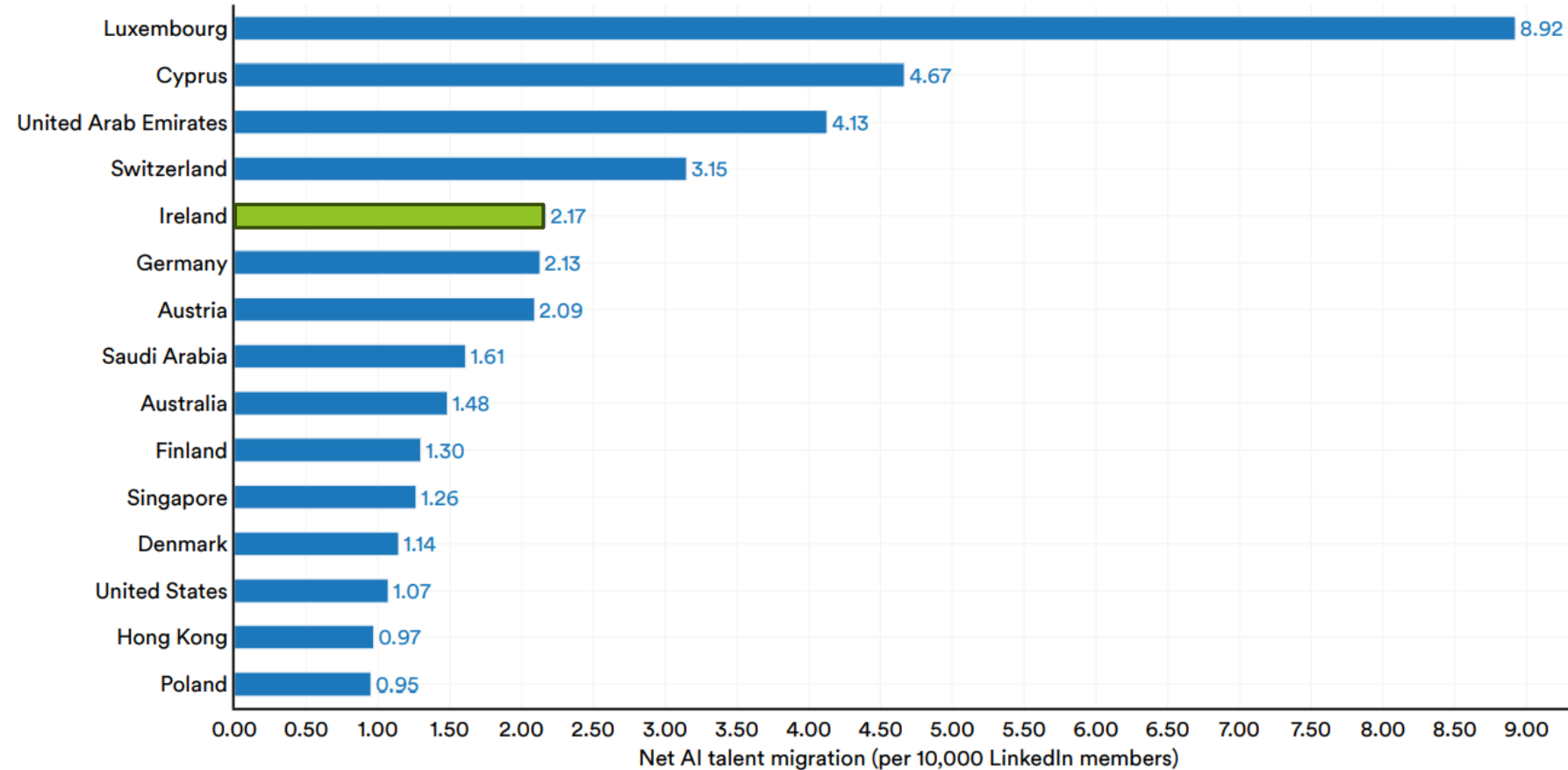
Source: LinkedIn, 2024 | Chart: 2025 AI Index report



Context – AI Talent (2)

Net AI talent migration per 10,000 LinkedIn members by geographic area, 2024

Source: LinkedIn, 2024 | Chart: 2025 AI Index report



To conclude

- ▶ Ireland is in a strong position ..
- ▶ .. but are we where we need to be?
- ▶ Is there something that we can do collectively to make the transition to AI enabled public services smoother, quicker and more effective?
- ▶ And would a more strategic framing across sectors, agencies and departments be useful?

Over to our panel!