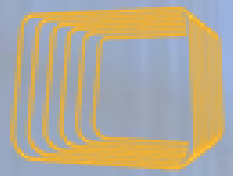
NERI Online Seminar – 5 November 2025

‘The Impact of Artificial Intelligence on Employment Relations – A European Study’



TransFormWork 2

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Project Coordinator

The project is implemented with the financial support of the European Commission – DG Employment, Social Affairs and Inclusion

EUROPEAN SOCIAL PARTNERS FRAMEWORK AGREEMENT

ON DIGITALISATION

June 2020

TransFormWork 1

European Social Partners Framework Agreement on Digitalisation

Four Pillars:

1. DIGITAL SKILLS AND SECURING EMPLOYMENT
2. MODALITIES OF CONNECTING AND DISCONNECTING
3. ARTIFICIAL INTELLIGENCE AND GUARANTEEING *THE HUMAN-IN-CONTROL* PRINCIPLE
4. RESPECT OF HUMAN DIGNITY AND SURVEILLANCE

TransFormWork 2

…. is focused on two of the Pillars of the Framework Agreement:

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- **Pillar 3: Artificial Intelligence and Guaranteeing the *Human-in-Control* Principle**
- **Pillar 4: Respect of Human Dignity and Surveillance**

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Bulgaria; Cyprus; Ireland; Malta; Poland; and Romania

TransFormWork 2

- ***Objective is to identify the impact of Artificial Intelligence (AI) and the use of algorithmic management in the employment relationship in five business sectors in the partner countries***
- ***To identify appropriate innovative strategies, mechanisms and practices for the successful application of AI and ensuring the* Human-in-Control *principal***

Focus is on:

Education; Financial services; Health services;

Industrial production; News media

What is AI? - Definitions

AI Act Regulation **came into force in August 2024, so there is now an EU-level legal definition of AI: Article 3 (1):**

AI system' means a machine-based system that is designed to operate with varying levels of autonomy and that may exhibit adaptiveness after deployment, and that, for explicit or implicit objectives, infers, from the input it receives, how to generate outputs such as predictions, content, recommendations, or decisions that can influence physical or virtual environments.

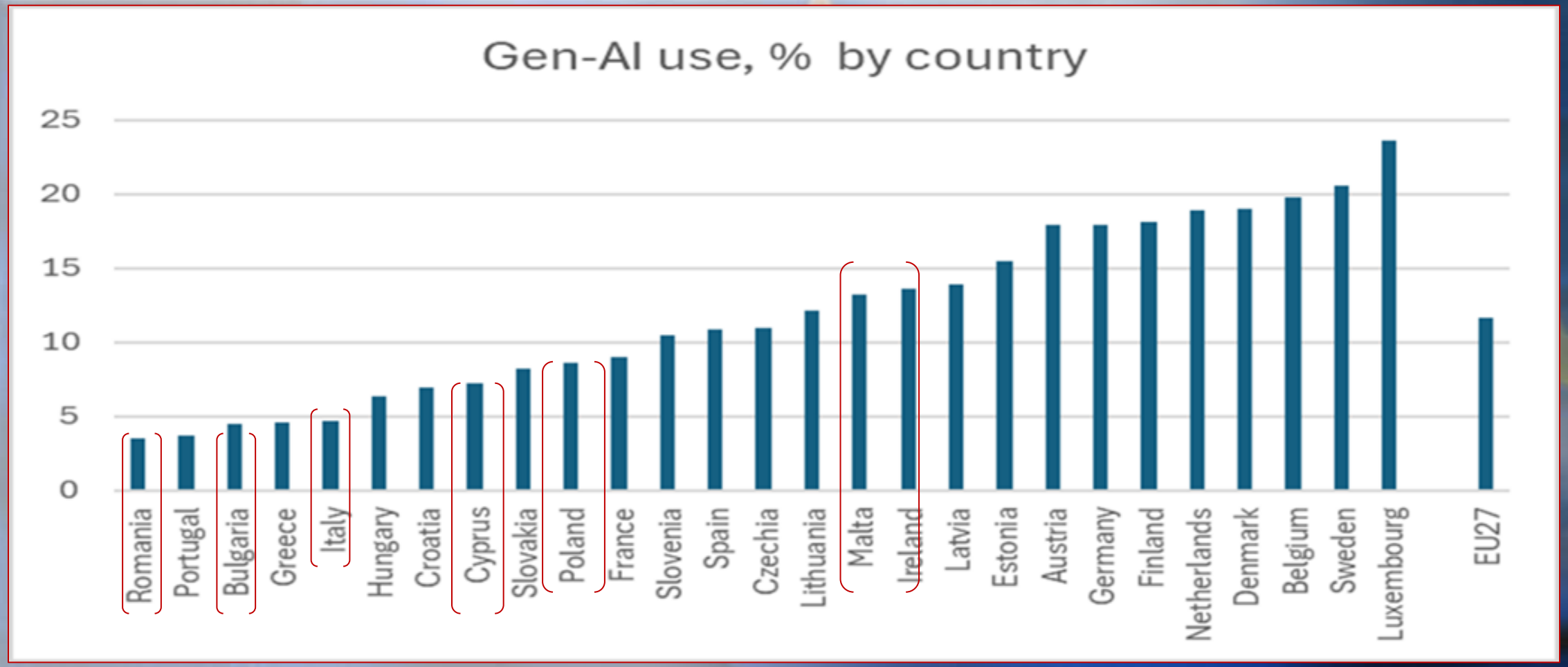
However: TFW 2 Definition

Artificial intelligence (AI) refers to computer systems capable of performing complex tasks that historically only a human could do, such as reasoning, making decisions, or solving problems

AI in enterprises by size (%)

TransFormWork 2 Partners	Using AI (% 2024)	By Size of Enterprise %		
		Small	Medium	Large
Bulgaria	6.47	3.0	5.5	13.8
Cyprus	7.9	6.3	14.3	34.9
Italy	8.2	6.2	5.4	24.3
Ireland	14.9	12.0	25.0	51.2
Malta	17.3	17.0	33.0	50.0
Poland	5.9	4.0	10.4	4.0
Romania	3.07			
EU 27	13.48	11.21	20.97	41.17

Eurofound EWCS 2024: AI by Member State



Algorithmic Management …

FORMS OF ALGORITMIC MANAGEMENT			
TransFormWork 2 Sectors	…allocates work tasks (%)	… monitors work performance (%)	… determines when you have to work (%)
Education	11.4	10.0	5.8
Health	16.2	16.2	19.0
Industry	17.0	19.8	10.1
Finance	33.7	35.4	12.5

EWCS 2024

TFW 2: “The story so far…”

Desk research into and comparisons of Government / National Policies - Completed:

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Governments in all partner countries have published National AI Policies:

- **2020: Bulgaria, Cyprus and Poland;**
- **2021: Ireland, updated in 2024**
- **2024: Romania**

Italy adopted relevant legislation on AI in 2020

Malta set up the *Digital Innovation Authority* in 2018, published policy paper in 2024 and now has a *rolling policy* approach

“Next six months…”

- Drafting Comparative Report
  - Final Steering Committee meeting in January to finalise Comparative Report
  - Publication of Comparative Report in seven languages (of participating Member States)
- Publication of National Reports (in relevant languages)

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Final European Conference

Sofia – 26-27 March 2026

Initial Findings

- Growing Gap **between** Member States
- Danger of growing gap **within** Member States between large and small enterprises
- Administration / Personnel / HR management
- Automation / Customer services
- Younger / Older workers
- Consultation of workers / worker representative
- *Human-in-Control* principle
- ‘Don’t knows’

Recent EU Research

- *European Working Conditions Survey*, 2024 (Eurofound)
- *Skills empower workers in the AI revolution* (Cedefop)
- *Fourth European Survey of Enterprises on New and Emerging Risks – ESENER*, 2024 (EU-OSHA)
- *Work in the Digital Era: How technology is transforming work* 2025 (European Commission, JRC)

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- Fundamental Rights, AI and EU law roundtable discussions (FRA)
- AI training handbook and seminars (EWA)

“The story so far…” By Sector: Education

Cedefop Report :

…it is obvious that upskilling, reskilling and investing in AI literacy will be crucial drivers of a human-centred AI revolution that can boost European competitiveness

… AI take-up and training are higher in organisations where a trade union or other worker representation body is in place.

“The story so far…” By Sector: Education

- AI not used extensively in some Member States (MS)
- In those MS where AI is used, it is mainly in 3rd level institutions for preparing lectures and setting student arraignments
- Increased use in second level schools//colleges
- Not used extensively in primary schools, but in some MS it is beginning to be used in classes for older student
- There are concerns that ‘location’ is becoming an issue!!

“The story so far…” By Sector: Health

- The World Health Organisation (WHO) set out its strategic approach to AI in a serious of reports in 2024
- It estimates that *… by 2030 there will be a worldwide shortage of approx. 11 million healthcare professionals and AI will be important in providing technology support for speedy diagnosis and analyse of, for example, X- rays, CAT scans, MRIs and providing precision by the use of robotic surgery*

> *AI is already playing a role in diagnosis and clinical care, drug development, disease surveillance, outbreak response, and health systems management*
>
> T A Ghebreyesus, WHO Director-General (2024)

“The story so far…” By Sector: Health

European Agency for Safety and Health at Work (EU-OSHA):

- *Twenty-one per cent of workplaces in information and communication report the use of machines, systems or computers that use artificial intelligence (AI) (EU-27 average: 7%),*
- *The use of machines, systems or computers monitoring workers’ performance and/or behaviour is reported by 15% of establishments in transportation and storage (EU-27 average: 7%).*
- *Only 4% of surveyed establishments in the EU-27 reported using none of the digital technologies included in the questionnaire.*

A POSITIVE USE OF AI

Cardiovascular disease is leading cause of death worldwide (17 million deaths)

These two Spanish cardiologists. Manual Marina Braysse and José Maria Lillo Castellano invented an AI diagnostic system that can read ECGs with expert-level accuracy in milliseconds, rather than waiting hours or, sometime, days for lab results!!

“The story so far…” By Sector: Industry

- AI is building on technologies that have been used for decades!
- Automation – the use of computer-controlled systems, such as:
  - Automated production lines
  - CAD (computer aided design)
  - Robotics
  - Programmable logistics
  - Automated quality-control systems (camera-monitoring; sensors)
  - Warehousing / inventories
  - Software to run industrial processes with minimal human involvement

“The story so far…” By Sector: Industry

- Information technologies are also been used to manage various processes and machines
  - For example, in car assembly:
    - Welding
    - Paint shop
    - CAD
    - Automated quality control
    - Camera-based detecting product defects
    - Sensors to measure / follow production line in real time

“The story so far…” By Sector: Industry

Generally, AI in manufacturing is used for:

- Improving efficiently
- Improving quality
- Optimising supply chains (just-in-time)
- Product design and development
- REDUCED PRODUCTION COSTS (including employment costs!!)

“The story so far…” By Sector: Industry

However, for workers:

- Use of algorithms to control work schedules mean workers have less control and are constantly under work pressures
- HR systems for surveillance, data analysis, staff predictions, skill requirements and targeted training

“The story so far…” By Sector: Finance

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EWCS 2024

“The story so far…” By Sector: Finance

Financial service (banks, insurance and leasing) is the business sector using AI more that any other sector

AI used for operational tasks, such as:

- **Improve customer services (i.e. mobile banking and contactless payments)**
- **Assessment of credit worthiness**
- **Analysis of customers’ behaviours**
- **Cyber security, tracking and preventing financial fraud, money laundering in ‘real time’ and enhancing company security**

“The story so far…” By Sector: Finance

- Identify suspicious transactions
- Access to information for opening accounts or extending credit.
- Gather data for loan applications and assign a credit score
- General administration, data analysis and records, including HR

The value of AI in financial services is that it not only rapidly processes huge amounts of written or transaction data, but can also recognise and understand patterns between data. For now, most banks still have hybrid models, with some human involvement in decision-making.

The Institute of Bankers in Ireland

“The story so far…” By Sector: Finance

- In the Insurance Sector, an internet-connected car can now send driving data to the insurer, which can inform an underwriting decision on a drivers premia

- Foreign exchange trading is now dominated by AI algorithms, tracking price movements around the globe over 24 hours / 7 days!!

“The story so far…” By Sector: Media

- Organic growth!!
- Skilled jobs including research and creative writing
- Less skilled jobs, such as
  - Editing
  - Translations / transcribing
  - Providing headline, subtitles, article summaries
  - Archive searches (e.g. for suitable photos)
  - Targeted advertising and specific audience

“Story so far…” By Sector: Media

Social Media is a prolific user of AI to generate content and for research and

- **Generate content**
- **Automate tasks – editing, content searches,**
- **Data analysis**
- **Targeted advertising**
- **Brand messaging**

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Platform workers / EU Directive (EU 2024/2831)

FINALLY!!

Work in the Digital Era: How technology is transforming work 2025
(European Commission, JRC)

- **Joint Research Centre – what is it?**
  - **Brings together research by, for example, Eurofound, Cedefop, EU-OSHA, ILO, OECD, etc**
  - **JRC published a seven year study of all the available AI research**
  - **JRC publication … *do not necessarily reflect the position of opinion of the European Commission***

Work in the Digital Era: How technology is transforming work 2025 (European Commission, JRC)

Research focused on three main areas of digital technology and work:

- ***Automation*: The impact of automation on employment in recent decades has been modest and frequently positive**
- ***Digitalisation* of work processes: … is a complex and paradoxical picture with a dual impact on work – increased responsibility with reduced autonomy**
- ***Platformisation* of work: have stabilised as a 'marginal' segment of the EU labour market**

Recent Developments

Some recently announced redundancies jobs to be replaced by AI

- Amazon: 14,000
- Lufthansa: 4,000
- UPS 48,000
- Nestlé 16,000
- Microsoft 16,000 (4,000 in Ireland)
- Intel 24,000

Some relevant websites

https://fra.europa.eu/en/news/2025/fundamental-rights-ai-and-eu-law-roundtable-discussions

https://www.ela.europa.eu/en/search/content?search_api_fulltext=ai

https://www.eurofound.europa.eu/en/publications/all/european-working-conditions-survey-2024-first-findings

https://www.businesseurope.eu/wp-content/uploads/2025/02/2020-06-22_agreement_on_digitalisation_-_with_signatures-de0-1.pdf

https://digital-strategy.ec.europa.eu/en/policies/european-approach-artificial-intelligence

https://publications.jrc.ec.europa.eu/repository/handle/JRC141451

https://www.cedefop.europa.eu/en/publications/9201

QUOTE FROM FT, 6/7 September 2025

We don't know what is going to happen … we are at a point in history where something amazing is happening and it may be amazingly good and it may be amazingly bad. We can make guesses, but things aren't going to stay like they are

Geoffrey Hinton ('Father' of AI)

Trans Form Work II

Social partners together towards a better and effective regulation of Artificial Intelligence for a just transition to the work of the future

Go raibh maith agat

Thank you

https://www.siptu.ie/projects/trans-form-work-ii/

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