



Artificial Intelligence: How should we respond?

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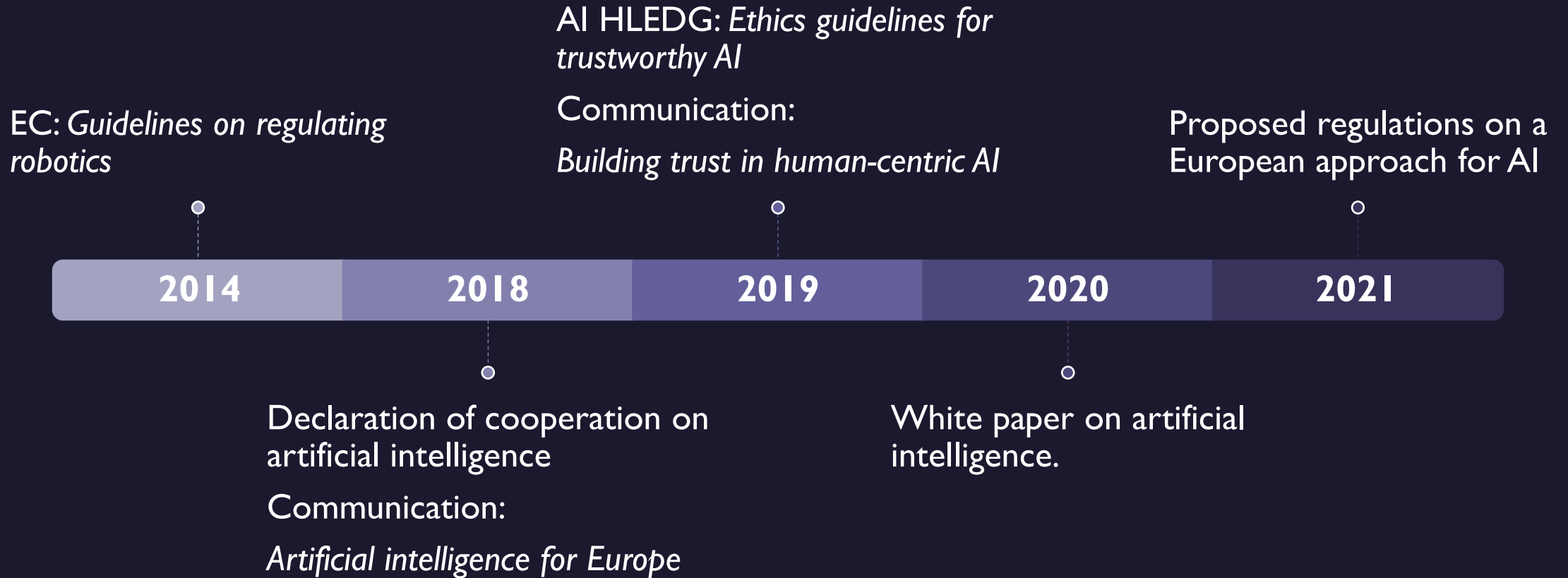
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Artificial Intelligence: Game-changer in EU market

Evolution of EU policy on AI and advanced robotic systems



Source: Rosen et al. (2022) Advanced robotics, artificial intelligence and the automation of tasks: definitions, uses, policies and strategies and Occupational Health and Safety, EU-OSHA Report
<https://digital-strategy.ec.europa.eu/en/policies/european-approach-artificial-intelligence>

“Boosting excellence in AI”: economic & business opportunity for the European Union

*“Maximising resources and coordinating investments is a critical component of AI excellence. Through the Digital Europe and Horizon Europe programmes, the Commission plans to invest **€1 billion per year in AI**. It will mobilise additional investments from the private sector and the Member States in order to reach an annual investment volume **€20 billion over the course of the digital decade**. The Recovery and Resilience Facility makes **€134 billion available for digital**.”*

*“This will be a game-changer, allowing Europe to **amplify its ambitions and become a global leader in developing cutting-edge, trustworthy AI**.”*

*“Access to high quality data is an essential factor in building high performance, robust AI systems. **Initiatives** such as the **EU Cybersecurity Strategy, the Digital Services Act and the Digital Markets Act, and the Data Governance Act** provide the right infrastructure for building such systems.”*

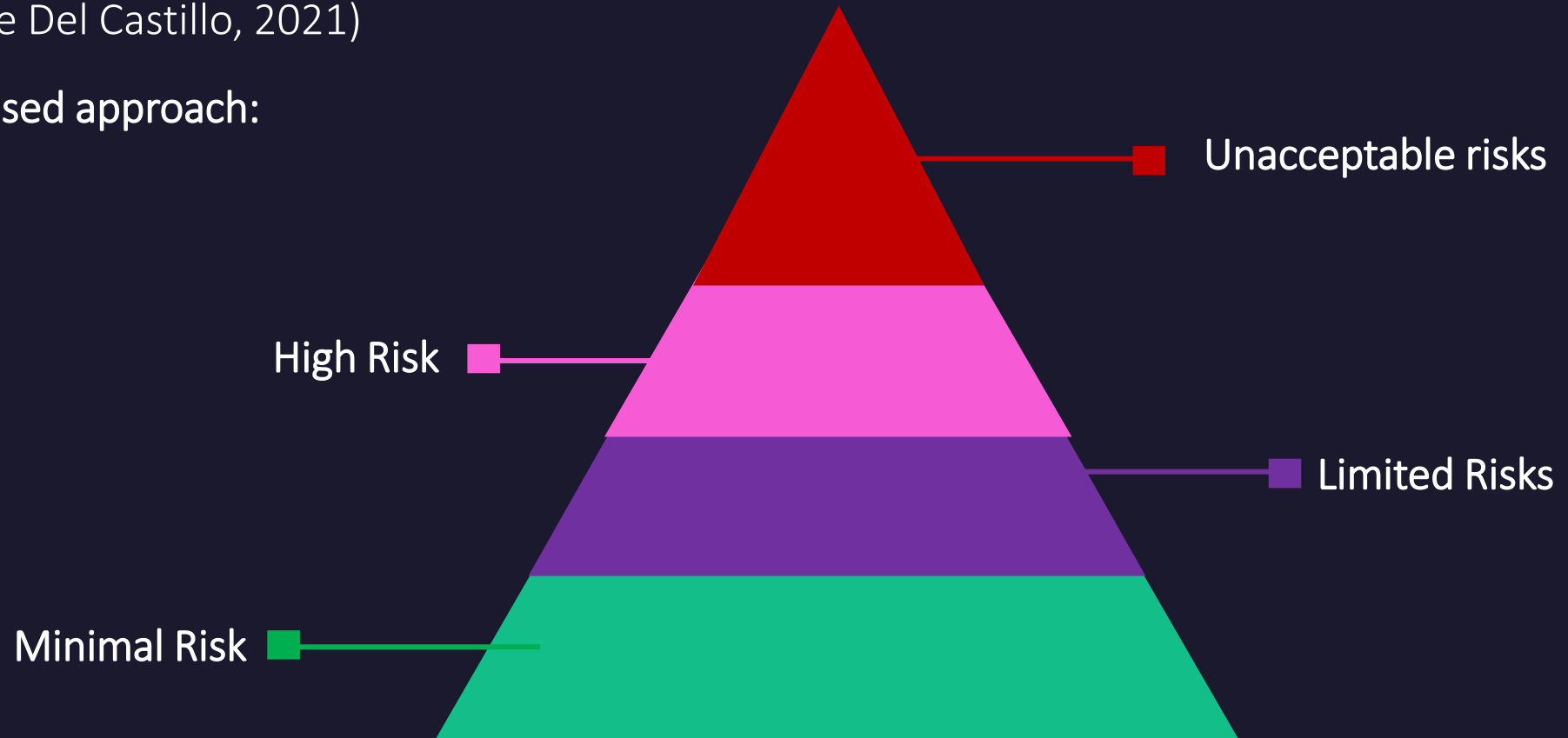
*“Building trustworthy AI will create a **safe and innovation-friendly environment for users, developers and deployers**.”*

Proposed Regulation on Artificial Intelligence

The European Commission stressed that the rules for AI should be human centric and guarantee that this technology is used in a way which is safe and respectful of fundamental rights (COM(2021) 206 final, 1).

This horizontal regulation does not regulate AI as a technology but rather on AI systems being **placed on the market or put into service** (Ponce Del Castillo, 2021)

Thus, the AI Act adopts a **risk-based approach**:



Proposed Regulation on Artificial Intelligence – High Risks A.I.

High Risks A.I. systems are allowed on the market according to an ex-ante assessment and if some specific requirements are respected (Title III, Chapter 2):

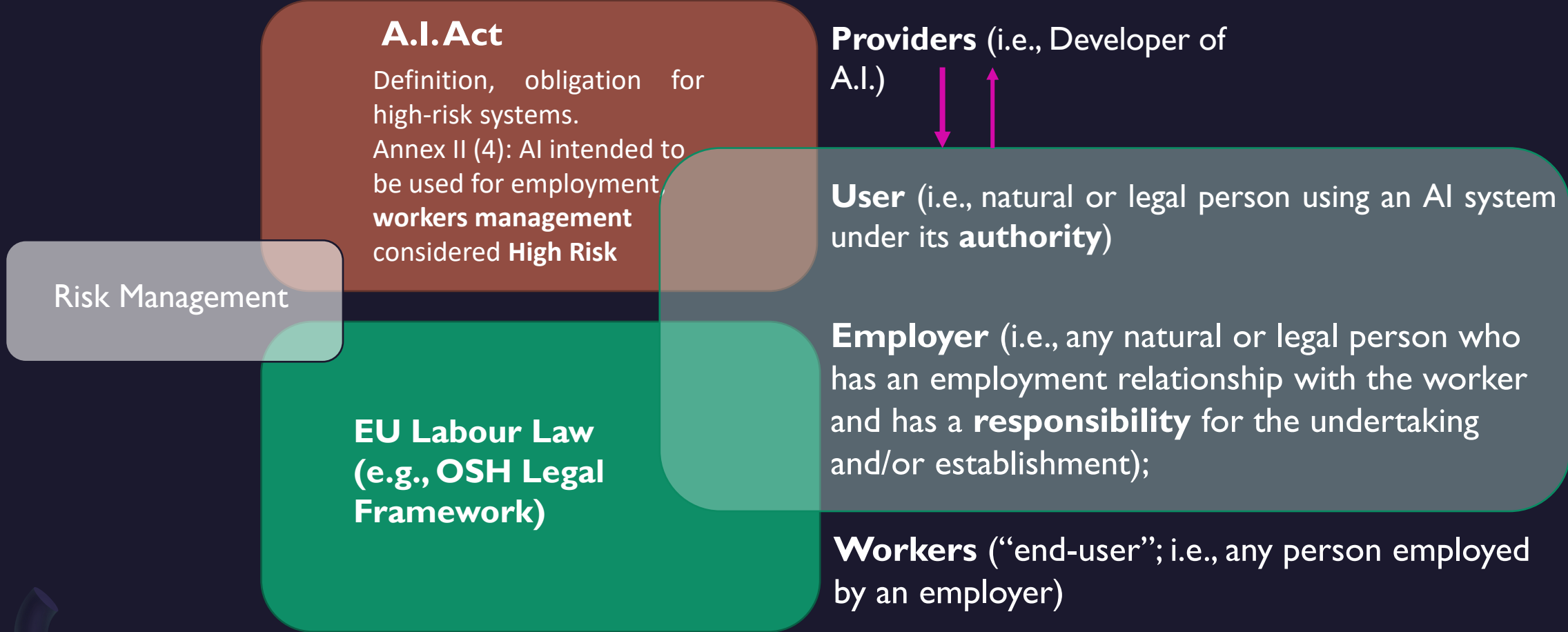
- Adequate risk assessment and mitigation systems;
- High quality of the datasets feeding the system to minimize risks and discriminatory outcomes;
- Logging of activity to ensure traceability of results;
- Detailed documentations providing all information necessary on the system and its purpose for authorities to assess its compliance;
- Clear and adequate information to the **user**;
- Appropriate **human oversight** measures to minimize risks:
- High level of robustness, security and accuracy.

High-risk AI systems (Annex III, 4): Employment, workers management and access to self-employed


(a) AI systems intended to be used for recruitment or selection of natural persons, notably for advertising vacancies, screening or filtering applications, evaluating candidates in the course of interviews or tests;

(b) AI intended to be used for making decisions on promotion and termination of work-related contractual relationships, for task allocation and for monitoring and evaluating performance and behavior of persons in such relationships.

AI Act & Work relationship: Overlap(s)



“Employer using A.I. in management of workers”



A.I. at Work: Foreseeable regulatory clashes

A.I. at Work: foreseeable gaps

The development of AI systems used in employment and the consequences for providers & workers:

1. Discrepancies between the providers' "intended purpose" of the AI system and its "reasonable foreseeable misuse"; should have a broader scope of "high risks" even if not initially intended to be used in the work context.
2. "Reasonably foreseeable misuse" and ensuring compliance with fundamental rights; respect of the freedom of social partners & workers' representatives in the implementation and deployment of the software.
3. Design and choice of the data set: not neutral variables; need to have full transparency on how data collected and processed but also (in the design and development phase) guarantee that data used are suitable for workforce.
4. Managing the risks of high-risk AI systems and post-market surveillance; need to leave some space for the workers' representative to bargain and adjust to the reality of workplace.
5. Over-reliance on providers' self-assessment: protection of health and safety and non-discrimination rights without safeguards; need reporting mechanisms to third-party for the workers and/or their representatives.

Source: Cefaliello & Kullmann (2022) Offering false security: How the draft artificial intelligence act undermines fundamental workers rights, European Labour Law Journal (542-562).

A.I. at Work: challenges for EU Labour Law

Influence of the AI Act at work: ensuring agency to workers and their representatives

1. The influence of the AI Act on EU non-discrimination law
2. In need of high-data quality and the use of special categories of personal data
3. Interconnection between AI Act and OSH legal framework
 - Risk assessment of OSH hazards
 - Types of collective and individual preventive measures available to eliminate or reduce the risks
 - The possibility to have meaningful consultation & information of workers and their representatives when a new technology is or planned to be introduced at the workplace.
 - Reporting mechanisms

Source: Cefaliello & Kullmann (2022) Offering false security: How the draft artificial intelligence act undermines fundamental workers rights, European Labour Law Journal (542-562).



A.I. at Work:
It is still time!

*Trade Unions' action
needed*

A.I. at Work: what it should be

Key Concepts that should be developed further (EU OSHA, 2022):

- **“Adaptive, socially and emotionally intelligent robotics”**: Adaptive automation uses software to monitor people working with robots to adapt the speed of the process and to prevent overloading
- **“Ethical framework for digitalization”**
- **“Prevention through design”**: integrated a use/worker-centred design approach, the **involvement of workers** in the implementation of any digitalisation strategies to identify the tasks best suited to automate and to structure work processes from the point of view of workers being assisted by digital technologies (rather than the other way around)



A.I. at Work: what it should be

Key Concepts that should be developed further (Prassl et al., 2022):

“Human before, in, after and above the loop”

With associated rights for workers

Before the loop – right to information and consultation on the configuration of algorithmic management systems (Aloisi & De Stefano, 2022).

After the loop – e.g., establish individual rights regarding decisions taken or supported by algorithmic management systems; the rights for an individual affected by such decision to: request and receive written explanation of the facts, circumstances and reasons leading to the decision, request and receive a human review of the decision, and the decision being rectified.

Above the loop - Employers should carry out “algorithmic management impact assessments” (ARMIA) to evaluate the impacts of algorithmic management systems on working conditions.

Source: Adams-Prassl et al. (2023) Guest Editorial: Regulating algorithmic management, European Labour Law Journal (**Special Issue Contribution**).

A.I. at Work: what it should be

Aloisi & De Stefano (2022) Your Boss is an Algorithm:

“Innovation does not take place in an institutional, political, socio-economic and cultural vacuum. It occurs in ingrained value sets and webs of norms”.

“Regulations aim to alleviate the potentially harmful effects of the use of technological devices on the quality and quantity of the work”.

Trade Union’s strategies can be put in place (Cefaliello & Aloisi, 2023).

- We can build on existing Legal Provisions: (e.g.,) obligation to consult the workers and/or their representatives when there is or planned to be introduced at the workplace. The question of the impact of A.I. on workers’ health and safety (*see additional slides of the ppt*) to gather information of the functioning of the AI (and its deployment) to assess and evaluate the OSH risks.
- Strategic litigation could be a way to force the discussion on the topic and to build pressure.
- Aim is to have the topic discussed and owned by social partners – at least, the part where it impacts the work organisation and the workers’ health and safety.

Source: Cefaliello & Aloisi (2023), Legal mobilization and data-driven technologies: overthrowing algorithmic power and liberating work. Institute of Employment Rights, Blog posts. ([Part I](#) – [Part II](#))



CONCLUSION

- The way we will decide to regulate A.I. and its impact on the world of work is a choice.
- The race for economic opportunity and innovation can not be a justification to leave workers unprotected.
- There is a need to respect the existing Social acquis and EU Labour Law framework, but also to grant specific rights.
- We need to match the technical regulation of AI with “social regulation” at the workplace (with employers’ duties & workers’ rights).
- Need to act now, before foreseeable problems materialize.

Thank You

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Impact of Digitalisation on Work & Occupational Health and Safety

“Technologies are diffusing much faster than in the past and many people are talking about the Fourth Industrial Revolution. It is expected to fundamentally change where we work, how we work, who will work and how people will perceive work.”

A number of OSH challenges & opportunities related to development of ICT-ETs have already been identified:

- **The work equipment or tools used:** (e.g) exposure to physical risks, risk intensification, human-machine interaction and cognitive demands, lack of transparency of algorithms, smart PPE
- **How work is organized and managed:** (e.g.) Flexibility, availability and blurring of work/private life boundaries, digitalized management methods (including algorithmic management), performance pressure, constant oversight, privacy invasion, ethic of AI decision making, cyber-security.
- **Employment status, hierarchies and relationships:** work casualization/online work platforms, autonomous workers, lone working loss of social skills and cyber-bullying, collaborative employment, new collective bargaining models.

Impact of A.I. on Work & Occupational Health and Safety

- Algorithmic management is already being used in many conventional employment settings such as warehouses, factories, or marketing firms to direct, to discipline, or to evaluate workers (Wood 2021, 6–7).
- A study has identified the **following occupational risk factors** originating from algorithmic work management: constant monitoring, work intensification, lack of autonomy, bias and discrimination caused by the algorithm, and complexity and lack of transparency (Todolí-Signes 2021, 436–441).
- Algorithmic management can **lead to stress, discrimination, heightened precariousness, musculoskeletal disorders, work intensification, and job losses**. AI exaggerates OSH risks in digitalised workplaces, such as psychosocial risks (including physical violence in digitalised workplaces) (Moore, 2019 & 2018).
- The **degree of control** performed by the algorithm might vary, but there is a **direct relation** between the degree of algorithmic control and the rise and/or exacerbation of occupational risks. Algorithmic management can cover: inter-worker competition and rating mechanisms, encourages a rapid pace of work without breaks, which may induce pressure and lead to accidents (Bérastégui, 2021)