# All eyes on AI

Artificial Intelligence as a challenge and an opportunity for workers and their representatives

Debates on Artificial Intelligence (AI) and Machine Learning (ML) are currently everywhere. The European Commission had appointed a high-level expert group on AI, which has significantly contributed to the discussions around ethical guidelines for trustworthy AI, that should be sufficiently secure, reliable and robust to manage errors or inconsistencies throughout the life cycle of the system.[1] The draft AI Act[2] is a first-of-its-kind legislation, which will have a significant impact on the deployment of the technology across all sectors.

The draft Machinery Products Regulation is a first attempt to formulate concrete sectoral protection goals and requirements.[3] The European Economic and Social Council has voiced specific concerns regarding the protection of workers and their data.[4]

IndustriAll Europe has been part of this debate from early on. A Policy Brief from 2019 proposed a number of core principles that should be respected when deploying AI at the workplace.[5] We support the humans-in-command approach to AI, as formulated by the ETUC already in 2017[6], and as agreed on in the European Social Partners' Framework Agreement on Digitalisation in 2020[7]. These principles were also reflected in our feedback to the public consultation on the draft AI Act.[8] IndustriAll Europe works to put workers' rights at the forefront and to help formulate adequate protection goals for workers and their representatives.

AI has enormous potential to transform production itself, innovation, and the way we organise production. Some studies suggest that the digital transformation, including AI, will lead to a net growth in the number

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[1] https://digital-strategy.ec.europa.eu/en/policies/expert-group-ai
[2] https://eur-lex.europa.eu/resource.html?uri=cellar:e0649735-a372-11eb-9585-01aa75ed71a1.0001.02/DOC_1&format=PDF
[3] https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021PC0202&from=EN
[4] https://webapi2016.eesc.europa.eu/v1/documents/EESC-2021-02482-00-00-AC-TRA-EN.docx/content
[5] https://news.industriall-europe.eu/content/documents/upload/2019/2/636849754506900075_Policy%20Brief%20-%20Artificial%20Intelligence.pdf
[6] https://www.etuc.org/en/document/etuc-resolution-tackling-new-digital-challenges-world-labour-particular-crowdwork
[7] https://www.etuc.org/en/document/eu-social-partners-agreement-digitalisation
[8] https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12527-Artificial-intelligence-ethical-and-legal-requirements/F2665249_en

of jobs over the next decade[9] – the challenge is to make sure that those who today perform jobs that will be taken over by AI will receive the necessary qualifications to perform the new and transformed jobs of tomorrow created by the digital transformation. Only if the existing workforce is part of the digital transition will this transition indeed be a Just Transition.

We feel that it is high time to address AI and its repercussions for workers and their representatives in more detail. AI is a disruptive technology, which has a significant impact on workers, on employment, on management, on companies, on our system of industrial relations, and beyond. With the AI Act being an internal market regulation, important blank spaces are left unregulated, especially with regard to the employment relationship. This needs to be addressed, both by additional legislation on the EU or on the Member States level, and by social partners. Workers and their representatives are at the forefront of the development and the deployment of new technology, and it is our responsibility to help shape it responsibly and ethically, as well as to regulate it democratically, be it by means of collective agreements or by legislation. A principle in the legislation on AI and in collective agreements must be that all decisions taken by the AI must be traceable and reversible, and appropriate mechanisms to ask for a decision to be reversed must be in place.

AI will become a reality for everyone, and everywhere. More and more applications and solutions are developed on a daily basis, for the industry and for the end-consumer alike. We are, however, not fully equipped to work with AI and with the consequences it may bring in its wake. AI is not simply a new kind of technology. It has the potential to change the way we work, the way we interact, the way we process knowledge altogether, and across all industrial sectors. Social partners should therefore work together to describe the world of work of tomorrow, to discuss the job profiles that will be relevant in the future, and what a Just Transition into an AI-enabled industry will look like. A timely anticipation of the skills needs of tomorrow, and a forward-looking up- and reskilling of the existing workforce, are fundamental to the success of an AI that works for all.

AI has a huge potential for innovation and efficiency. The deployment of AI at company level will lead to significant challenges with regard to work design and organisational development. Repetitive and dangerous tasks could be substituted or allocated to the machine. With AI being particularly helpful in recognising patterns and in the handling of huge data quantities, this can contribute to an efficient organisation of work. All of this will relieve humans and enable them to work on more creative tasks. Furthermore, AI has the potential to contribute to combatting climate change, i.e. by reducing waste and energy consumption.

Still, we will most likely face a reduced amount of employment in industrial sectors, which will go along an upvaluation of the remaining jobs through further qualification and adaption to the new technologies. AI has the potential to contribute to a company's economic success, as well as to good working conditions and quality jobs. It is therefore high time for workers and their representatives to debate the topic in detail and to work on solutions to protect quality employment in Europe and secure a fair and rewarding work environment for everyone.

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[9] https://www.mckinsey.com/featured-insights/future-of-work/ai-automation-and-the-future-of-work-ten-things-to-solve-for

## The draft AI Act

In line with our feedback to the public consultation on the draft AI Act, we support a robust horizontal framework, that is set to clearly define the legal boundaries and requirements, which will have to be fulfilled by manufacturers and users. We further support, that "AI systems used in employment, workers management and access to self-employment, notably for the recruitment and selection of persons, for making decisions on promotion and termination and for task allocation, monitoring or evaluation of persons in work-related contractual relationships, should also be classified as high-risk, since those systems may appreciably impact future career prospects and livelihoods of these persons."

We would criticise, however, that the conformity assessment foreseen for this product category is, as detailed in Article 43, a procedure based on internal control referred to in Annex VI of the draft regulation. We demand that all AI systems should be classified as 'high-risk systems', when they deal with workers' data and specifically with personal data in the employment context. In line with the Opinion of the European Economic and Social Committee on the AI Regulation, we demand that a mandatory third-party assessment, similar to the one foreseen for AI systems intended to be used for the remote biometric identification of persons, should be mandatory for all high-risk AI[10], to guarantee that the system complies with all applicable laws and standards. In order to guarantee a maximum level of safety for workers, it should further be clarified that Member States can adopt more specific laws for the employment relationship and that collective agreements dealing with the issue are to be welcomed.

It is with regret, however, that we realise that the draft Regulation does not entail a comprehensive section on employment that would be able to cope with this important field. Relevant aspects, such as collective bargaining and the important role it plays in addressing technological change, a safe and trustworthy work environment and quality employment, are completely missing. We therefore reiterate our demand to work on a stand-alone Directive on AI at the workplace, which should be drafted after consulting cross-industry social partners as well as sectoral social partners. A first set of principles that should be included in such a Directive has been suggested in the feedback to the public consultation on the draft AI Act.

IndustriAll Europe believes that, when it comes to regulating AI at the workplace, the relevant international treaties and conventions, such as the International Covenant on Civil and Political Rights; the ILO Declaration on Fundamental Principles and Rights at Work; the ILO Tripartite Declaration of Principles concerning Multinational Enterprises and Social Policy; the European Convention on Human Rights; the European Social Charter; the Charter of Fundamental Rights of the European Union and the European Pillar of Social Rights need to be taken into account. Furthermore, Member States' rights to formulate more concrete protection goals should remain uncontested.

## How to approach AI at the workplace?

There is no set definition of what AI actually is. Different definitions may make sense, according to the specific context in which the AI shall be developed or used. When discussing AI at the workplace, as a

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[10] https://www.eesc.europa.eu/en/our-work/opinions-information-reports/opinions/regulation-artificial-intelligence

general rule, the definition should not be limited to Machine Learning processes, but rather cover algorithmic decision making as well, which currently accounts for the vast majority of applications that are used in the context of the employment relationship.

A first step that should be taken at the negotiation table is to come to a joint definition of what AI in the context of the company actually is – and what not. Support from an external expert might be helpful to discover in which operational fields AI applications can actually contribute to the company's success, as well as unregulated fields or use cases. In this setting, it should further be discussed how AI can contribute to reaching organisational goals. It is important to define management responsibilities and agree on a specific set of touchstones to make sure that the goals that are discussed are actually met.

Since AI at the workplace is usually not a stand-alone technology, but an integrated part of a work system, it is important to note that the repercussions of AI also always depend on the concrete configuration of the work system in which they are integrated. It is important to note that, when shaping the AI system in the employment context, we also always have to proactively shape work organisation and the deployment of staff. That is to say: the social dimension must always be designed along the technical dimension of an AI system to make sure that the system is not designed to the detriment of quality employment. In other words: the human work organisation needs to keep pace with the technical work organisation. This means that the technical and social design will need to continuously evolve to make sure that emerging challenges are adequately and timely addressed. To make sure that the social dimension is fully respected, workers' representatives should be fully - and in a timely manner - involved in the introduction and shaping of new systems to be introduced to the workplace.

Before agreeing on a specific AI system to be introduced in the company, it is therefore important to reflect on the nature of the system in question, as the intended purpose also defines which questions need to be asked in order to come to a meaningful agreement.

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**Parameters to agree on before introducing AI in the work environment**

- What is the definition of AI in the context of our company?
- What is the added value of the specific AI system for the workers?
- What is the concrete purpose of the application?
- What could a comprehensive and complete technology assessment look like, with a focus on the repercussions, to be able to rule out any negative consequences for the workers?

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When discussing the concrete purpose of the application, it may make sense to also agree on purposes that are *not* in the scope of the application, or that are not desirable. It is therefore helpful to discuss in detail not only the opportunities and capabilities of the system, but also its limits.

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**In order to take informed decisions, or to properly assess technology before it is introduced in a company, it is of the utmost importance to have**

- Early stage involvement of trade unions and workers' representatives, in accordance with their rights to be informed and consulted on the introduction of new technologies at the workplace.

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Trade unions and worker representatives must have a timely access to meaningful and comprehensive information, and enough time and resources to process it with the support of external experts of their choice.

- Full transparency regarding the aim, scope and functioning of the application, including a roadmap showing how to integrate the AI application in the business process
- Full transparency regarding the nature of the data being collected, including the parameters relevant for data recording and evaluation, as well as data storage and data protection, including rights of access
- Full transparency regarding the foreseeable repercussions for the workers
- A clear distribution of responsibilities and allocation of tasks in algorithmic decision making, allowing for the resolution of possible failures and their foreseeable consequences
- A clear roadmap showing how to enable the workers to collaborate with the application

A further challenge is that AI systems may be learning systems. Once deployed, Machine Learning applications may constantly evolve and may change their purpose of application, the way they operate, and the way they process data. Social partners need to take this new reality into account when consulting about the introduction of these systems. Routine checks - if the existing agreements are still up-to-speed - are required to make sure that workers and their data are adequately protected. Particular attention should be paid to possible harm which a learning system may develop over time for equal opportunities, and a specific focus should be on the bias that may evolve throughout the learning phase. This requires workers' representatives to stay up to date with regard to the latest developments in technological, but also legislative questions. Workers and their representatives must have legally guaranteed access to adequate training provided by experts, as is the case in the field of occupational safety and health. A specific role for workers' representatives should be foreseen in the governance of AI at the workplace, recognised by both legislation and collective agreements.

AI systems at the workplace have a huge potential for innovation and efficiency. Machine-produced wealth will rise significantly, but may also put quality employment at risk. AI systems will be fed by huge amounts of data, often workers' data and know-how. This capture of workers' know-how is problematic, since it can be a source of massive de-skilling of workers, at least in some sectors and occupations.[11] It is important to value the workers' contribution to knowledge and know-how when training the algorithms. Social partners need to deal with this challenge and discuss how the higher productivity can contribute positively to society and to quality employment. Be it higher wages or intelligent skills planning, investments in a sustainable industry fit-for-future or shorter working hours, all these fields could benefit from a fair redistribution of the wealth generated by digitalisation and human-machine interaction. Profits generated from the further use, including licensing the use of - or the onward sale of workers' data, should be redistributed as well.

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[11] A more detailed analysis of the problem and recommendations for social dialogue can be found in our policy brief "Sharing the value added from industrial Big Data fairly". https://news.industriall-europe.eu/content/documents/upload/2017/11/636459131743298395_2017_3_PB_DataEconomy_EN-updated111017.pdf

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## Towards an AI that is lawful, non-discriminatory and just

Social partners, and society in general, need to have a discussion about the nature of the AI that they want. For the European trade unions in the manufacturing industries, it is clear that AI and ML applications should not merely substitute human labour, and increase work intensity. They should augment human labour, contribute to a maximum level of occupational safety and health, and protect humans from fatigue, undue physical and cognitive workload, a loss of autonomy at work, as well as any loss of the sense of purpose at work. Safety and health, data privacy, strictly regulated and transparent performance recording, as well as a transparent bias management, that allows for an AI free from discrimination should be at the core of these systems. Furthermore, a sensible division of labour, which takes into account the specific strengths and potentials of the human and of the machine is of utter importance.

The human worker, adequately trained, should always maintain control over the machine, and always have the final say in decisions proposed by an algorithm. The decisions of the algorithm must therefore be communicated to the worker in an understandable and accessible way. Furthermore, AI should always be sustainable, from a technological perspective, a social perspective, and an environmental perspective. IndustriAll Europe is specifically worried about a looming gigification of the economy and underlines that purposeful employment should be at the heart of the Industry 4.0.

Training, critical thinking and adaptability will become more and more important in human-machine interaction and contribute to meaningful and fulfilling jobs. This means, however, that humans not only need to be in control, but also need to have adequate room for manoeuvre and flexibility in terms of their work cycle, (social) interaction and feedback loops.

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### Which AI do we want at the workplace?

- Avoid imposing unreasonable targets
- Adaptivity, and error tolerance must be clearly defined
- Relieve human labour
- Augment human labour, rather than substitute it
- Make room for more creative tasks in a safe work environment
- Personal needs, such as rest breaks, should never be remote-controlled. As a principle, basic human needs, also with regard to a motivating work environment, should be taken into account already in the developing phase of a system
- Human-machine-interaction (HMI) and Human-computer-interaction (HCI) must be designed according to human needs, including communication, cooperation and agency, as well as ergonomic requirements, such as usability or user experience. The machine must always present all relevant information - including its principal functioning, data focus and output - to the human in a manner that they can fully understand
- The scope for action must be clearly defined and transparent, both for the human and the machine
- The machine must not constrict the human's agency or take over the tasks allocated to the human

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- The human must stay in command, they must be aware of their agency and always and fully in control of a situation
- It must be clearly defined which information must be provided to the human operator and which competences they have in the human-machine interaction to make sure that their agency is fully respected
- The decisions taken by the algorithm must be transparent and contestable, specifically through meaningful and permanent worker consultation
- Continuous learning and gaining experience should be encouraged

AI should be lawful, fair, transparent, safe, and secure. The data that it is fed should be of high quality, meaning relevant, representative, free of errors, transparent, consistent and complete. It should comply with all applicable laws and regulation, as well as fundamental rights and non-discrimination rules. Responsibilities and liability should be clearly defined and transparent, and trust in the system should be developed. **GDPR** can be a powerful tool in the hands of workers and their representatives to make sure that workers' data is fully protected. Even aggregated data could potentially lead to the identification of individual persons, which would change the legal basis altogether. The legal requirement that personal data must only be used for a clearly defined purpose must therefore be maintained by all means.

Algorithms are data hungry. The data required for automated decision-making, (predictive) maintenance and predictive analysis are often collected from workers, and often nonselective. Personal data is often collected along industrial data, often without the people subject to this indiscriminatory practice being entirely aware of this. **The collection and storage of data** should therefore always be **subject to a concrete and transparent purpose**; data should never be collected or stored simply because it is feasible, or to prepare for future, not yet described purposes.

## GDPR as a tool for workers' representatives

- **Art. 22** – Our right not to be subject to a decision based solely on automated processing of data, including profiling; our right to obtain human intervention
- **Art. 35** – Our right to have a data protection impact assessment prior to the introduction of new technology; workers' representatives should be involved in the process
- **Art. 40** – Our right to have prepared a code of conduct intended to contribute to the proper application of GDPR, including the collection of personal data
- **Art. 80** – Trade unions' right to take action on breaches of the law on personal data
- **Art. 88** – Our right to have collective agreements to protect the rights and freedoms in respect to the processing of employees' personal data in the employment context

Social dialogue is obviously the best tool to deal with all employment-related aspects of technology, including inequality, skills, the nature of work, work organisation and the prevention of discrimination. Constant re- and upskilling is a prerequisite of a successful introduction of AI at the workplace. Workers must be enabled to operate the system, to collaborate with it where this is required, and to accept new tasks when their initial tasks have been taken over by the AI. It will help reap the benefits of AI, while at

the same time protect workers and quality employment. Meaningful social dialogue will lead to enhanced trust in the technology, greater efficiency and a maximum level of occupational safety and health.

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### Collective agreements are best placed to deal with AI at the workplace

Collective agreements are best placed to deal with AI at the workplace, be it at sectoral or at company level. They are a means not only to agree on the technology that is introduced at the workplace, and on the skills that are required to operate them, but also to discuss general aspects of the digital transition of a company, including how to make this transition a Just Transition for everybody involved. They can also help specify the role of workers' representatives in the process of introducing new technology.

Workers should be **informed and consulted** regarding all **automated tools** used by management to **supervise** work, **manage** the workforce in Human Resource processes or **profile** workers. Workers' representatives should have the means to hire the competencies of software engineers or data scientists to support them in these discussions, as workers cannot be expected to read the complex codes that are the basis of an algorithm.

Management should report to, consult and reach agreement with trade unions and worker representatives on:

- The nature of the **data** being collected on workers, the frequency of its collection, the duration and location of its storage, and how workers can request access to their personal data.
- The explicit **algorithms** or the **machine-learning system** used to process this data
- The **metrics** used to evaluate work and the **performance values** required from workers
- The **teaching data**, its **biases** and the means implemented to overcome them
- The **reliability** and accuracy of statistics of any implemented machine-learning system
- The **acceptable** means to **supervise** work and to detect, store and process circumstances of non-compliance with work prescriptions
- The procedures for workers or their representatives to detect **errors** or **unfair treatment** in this automated processing, report them and gain **redress**
- The **monitoring of the outputs** of the automated tools to routinely check for biases

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### Re- and upskilling: the investments of today into the workforce of tomorrow

Having the right set of skills at hand will be the decisive criterion for a Just Transition into the digital age. Digital technologies become more adaptive – and they require different sets of skills than in previous industrial revolutions. AI literacy will become more and more important, not only at the workplace, but also in everyday life. Continuous and lifelong learning will be key to help the workers and their representatives to stay up-to-speed with the technological developments. As agreed in the European Social Partners' Framework Agreement on Digitalisation, social partners should jointly work on specific skills plans to accommodate ongoing and future changes. They should work together to identify skills needs and training requirements to make sure that companies can actually deploy the technology that they are acquiring, and with the workforce that is already on board.

Collective agreements are best placed to identify and deal with existing skills needs and to channel investments into the qualification of the existing workforce. They should also assess which skills and

competencies will be required in the near future, and how to make sure that these skills and competencies are imparted. A forward-looking human resource planning and qualification strategies are a fundamental prerequisite for the success of the digital transition. The individual right to training guaranteed by collective agreement, as already formulated in the First EMF Common Demand, is central to any re- and upskilling effort. It is therefore of utmost importance that managements are always – and to the maximum extent - transparent about their plans with regard to new technology. Only if the existing workforce has the chance to timely acquire the skills that are needed to operate newly introduced technology is a seamless transition guaranteed.

Social partners should work together to acquire skills intelligence, as it is an indispensable requirement for a successful transition to know exactly which skills sets the existing workforce has at their command. A joint understanding of the skills needs, building on a thorough qualification demand analysis, helps to identify re- and upskilling requirements and to develop dedicated training programmes that ensure long-term, internal and external employability. The skills being taught must therefore be vendor-neutral, and based on general scientific and technical principles and open standards, which are permanent and transposable in all working environments. Training in digital skills should focus on the learning outcomes and lead to a full qualification recognised through the certification of acquired skills, using a transparent and clear recognition system which allows comparability.

It is obvious that the necessary job-related training should take place during working hours, and that this should be fully paid for by the companies. Vocational training required for job adaptation should always be cost-free for the employee. In turn, trade unions and workers' representatives play an important role in informing workers about training opportunities, to contribute to the reskilling exercise, and to raise awareness of the impact of technological change on their future jobs. All workers should have equal access to skills at all levels, regardless of their age, gender, employment status or nationality.

### Human-machine cooperation and collaboration requires new sets of skills and competences

Human-machine hybrid teams will only function if humans have complex problem-solving capacities, as well as creative, collaborative and communicative skills at their command, which will enable them to react to unexpected challenges. Critical and adaptive thinking needs to be encouraged to prevent the machine from producing erroneous results and from reproducing biases and discrimination. Empathy, judgement and cognition will be the decisive human strengths that can make human-machine-interaction a meaningful and productive collaboration.

Which skills precisely will be needed will depend on the exact role and tasks, but also on the nature of the AI deployed. It will be important to clearly define role requirements and the tasks allocated to the human and to the machine. It will be important to clearly define skills and competencies that are required for a specific job in a specific context. Cutting-edge training methodologies, i.e. by means of virtual reality or in digital learning factories, could be a relevant complement to more traditional learning methods.

As the European industries are currently facing a massive transition, it will become increasingly important to ensure that continuous skills updating also contributes to employment opportunities across enterprises

and sectors. State and public agencies should also contribute to this collective effort. Workers on job retention schemes and unemployment benefits should have access to ambitious re- and upskilling programmes that help them to develop the right skills and to advance their career. Unemployment agencies should, in coordination with schools, universities and companies, offer dedicated and fine-tuned programmes to help unemployed workers acquire the right skills and employment opportunities, including interdisciplinary programmes which combine IT and traditional skills. Furthermore, an integrated approach to skills development should be developed, from early childhood education to lifelong learning, to make sure that the students of today are ready to master the technology of tomorrow. This integrated approach should further aim at overcoming the de facto gender imbalance in education and contribute to a fairer and more inclusive labour market. Women should be encouraged and structurally empowered to acquire the skills that will be required for the AI enabled world of work.

**Principles that help shape an AI that works for all**

At the beginning of the process, there should be a fully fledged participation management with all the stakeholders concerned. The workers of the company should have the opportunity to work on a tailored mission statement governing the work or collaboration with AI at the company. Management and workers' representatives should query workers' expectations with regard to the use of AI, develop pilot projects together with the workers, and organise the exchange of experiences. Finally, once the AI system has been rolled out, the process should be evaluated and concrete conclusions of the process should be agreed on. In accordance with laws on workers' involvement at the workplace, workers and their representatives must be consulted about the introduction of new technology at the company. In order to properly assess the management's proposal and to take an informed decision, it is important to conduct a thorough technology assessment.

This technology assessment may be guided by a number of principles that will help to ensure that artificial intelligence is deployed in a fair and inclusive manner that leaves no one behind.

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**Principles for a responsible and human-centric introduction of AI at the workplace**

*Transparency and consent*

- Workers need to be aware and understand how, where and when data is being **collected**, **stored**, **used**, and how **decisions affecting them are taken**, as well as how these decisions **can be contested** by both the workers and their representatives. They should have the right to **influence** this.
- Management should report in a timely manner and state with which data an AI system should be fed, what the concrete aim of the data collection is, what the purpose of the AI system is, who may become subject to data collection, who may become subject to the AI system's output, and who has the prerogative of interpretation over the AI system's output
- This should also extend to AI 'components', that are introduced to a digital tool which is already used in a company
- The trade unions and the worker representatives need to be consulted already at the stage of acquisition of the AI system

- The trade unions and the worker representatives need to have the possibility to be assisted by an external expert already at the stage of acquisition of the AI system
- **Recommendation**: industriAll Europe recommends the development of an Impact Assessment of the AI system to be introduced at the workplace, with specific regard to the impact on workers' rights
- **Recommendation**: industriAll Europe recommends the creation of a position of data accountant in companies, whose duty is to control and report annually on the use of AI systems, in the way a financial accountant controls and reports on the financial situation
- **Recommendation**: industriAll Europe recommends that trade unions and worker representatives be provided with the means to be assisted by software engineers or data scientists to support them in these discussions

*Explainability*

- All artificial intelligence or machine learning software introduced at the workplace, taking decisions regarding humans or processing personal data, must be explainable and able to explain its decisions throughout the systems' life cycles
- All decisions taken by the AI must be traceable and understandable
- Workers must be trained to understand the AI that they are working with, or that they are subject to, what the AI's purpose is, how the AI functions, and how they can control it, as well as the AI's capabilities and limitations

*Information and consultation*

- Transparent and robust information and consultation procedures before the introduction of AI at the workplace, and on an ongoing basis, including the design, development and deployment of the system, enhance trust in the technology and help the workers to make full use of the capabilities of the technology. Ad hoc working groups or sub-committees of the existing body of worker representation in the company (including European works councils) could be set up to build up a specific trade union analysis of the impact of the introduction of cutting-edge technology (i.e. in the fields of human-machine interaction, human-computer interaction and AI) on work and employment.
- Management, trade unions and worker representatives should engage in an open dialogue on the nature of any automated profiling being performed on workers and on the information given to each worker on their profiles.
- Workers' representatives should be capable of giving their informed consent to the introduction of AI systems at the workplace, including with regard to data processing, privacy protection and surveillance. The AI systems should respect the privacy rights of all workers involved, either in the development or in the usage of the system. Purpose limitation of data use should be guaranteed.
- Unlimited surveillance and monitoring of the work must be prohibited and limited to a strictly necessary minimum, i.e. to prevent accidents at work; the recorded footage should be allowed to be used exclusively for purposes specifically described in the applicable collective agreements
- When using data analyses in the work context, aggregated and individualised data should be differentiated. Aggregated data can be exploited to contribute to an enhanced quality of the

production process. Individualised data should be protected to the maximum extent to prevent surveillance and individual performance control. As a general rule, only data that is actually needed should be collected. "Data economy" should apply as a fixed principle.

*Right to appeal*

- Workers and their representatives should have a meaningful right to appeal decisions made by the AI, i.e. in the sense of Art. 13-15 GDPR

*Human oversight and humans in command*

- Any decision on one's professional advancement, including promotions, pay rises and extras, must not be taken by the AI alone, but be subject to meaningful human oversight
- The reasoning for such decisions must be clear, transparent and traceable, and workers and their representatives must have access to the data and the right to appeal such a decision
- The workers responsible for the human oversight should receive the necessary quality training on how to perform this task, and have the necessary authority at their command to carry out that role
- Meaningful human oversight means that the workers are entitled to disregard the output of the AI system, without risking negative consequences. The human must have the right competencies at hand to understand the operating principles of the AI and to interpret the output. Oversight must become a clearly defined task for the worker and the worker must be supported by an appropriate mechanism, i.e. in the shape of an established reporting system or a committee for process improvement
- A positive and constructive culture of criticism is decisive to enable the workers to maintain their agency, and to deal with the AI independently and critically

*Skills and qualifications*

- Worker autonomy and worker knowledge in human-machine interactions must be preserved and reskilling programmes should be designed to make sure that workers understand their own roles and tasks within their jobs
- Dedicated impact assessments to prevent de-skilling and loss of specific know-how, as well as a loss of autonomy, are needed to protect the workforce from a devaluation of its labour
- Forward planning of employment and skills, workforce planning, lifelong learning and upgrading of workers' skills are all cornerstones in terms of the anticipation of and preparation for changes within companies
- Access to continuous training must be guaranteed for all workers, irrespective of their age, profession, or status
- Training in digital and AI skills must be of a good enough quality to lead to a qualification recognised by clear and comparable certification.

*Bias*

- Management must ensure that data sets that are fed into the algorithms are complete and to a maximum extent unbiased
- As it is currently still next to impossible that datasets at input level are completely free of bias, it should be ensured that management avoids any bias or discrimination in the result of AI

decisions at output level; human oversight is therefore mandatory, and a human should be ultimately responsible for the results of AI decisions

- Data sets should be screened for biases on a regular basis; individuals and groups must be protected from discrimination by any means

*Risk assessment*

- A risk assessment with a focus on preserving human physical and psychological safety, including how to prevent an overly large share of potentially monotonous tasks, confirmation of possible biases and suggestions for how to improve safety should be conducted, making sure that workers are not subject to unfair biases and practices
- Any foreseeable impacts on human rights, volume of work, working conditions or professional development must be addressed
- A risk prevention protocol should be drawn up to address the impact of the AI systems to be deployed with regard to occupational health and safety.