

EU Strategies on OSH and digitalization and their implementation: the Healthy Workplaces Campaign 2023-25 - Safe and healthy work in the digital age

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What is it about?

European Agency for Safety and Health



- Digital technologies are rapidly changing how, where and when we work
- For workers and employers in all sectors, digital technology offers increased opportunities but also presents challenges and risks in terms of safety and health



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Psychosocial risks and digital technologies

EU-OSHA, OSH Pulse 2022

Would you say that the use of digital technologies in your workplace...? (EU27, % of workers)

Determines the speed or pace of your work

Results in you working alone

Increase surveillance of you at work

Increase your workload

Reduce your autonomy at work

European Agend



Psychosocial risks and digital technologies (workplaces)

Where technology is present, it is more

EU-OSHA, ESENER 2019

probable that psychosocial risks are mentioned Workplaces reporting psychosocial risks by presence of digital technology, EU27



Stress, depression and anxiety and use of digital technologies

When technology is used, it is more probable that



Healthy Workplaces

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Psychosocial risks and digital technologies

EU-OSHA, OSH Pulse 2022

To your knowledge, does the organisation where you work use digital devices to...? (EU27, % of workers)





Healthy Workplaces Campaign (HWC) 2023-25

Objectives

- The campaign aims to:
- Increase knowledge about the safe and productive use of digital technologies across all sectors
- Raise awareness of digitalisation and its OSH implications
- Inform about emerging risks and opportunities
- Promote risk assessment and the healthy and safe management of digital transformation of work
- Facilitate the exchange of information and good practices

The campaign relies on research carried out by EU-OSHA and disseminates its findings

Healthy Workplaces



Healthy Workplaces Campaign 2023-2025

www.healthy-workplaces.eu 0000



Safety and health at work is everyone's concern, it's good for you, it's good for business.



Healthy Workplaces Campaign (HWC) 2023-25



Digital platform work (Feb. - May 2024)



Automation of tasks (June - Sept. 2024)



Remote and hybrid work (Oct. 2024 – Jan. 2025)



Al for worker management (Feb. – May 2025)



Smart digital systems (June – Oct. 2025)





Priority areas – Digital platform work

DEFINITION



An online facility or marketplace operating on digital technologies (including the use of mobile apps) that are owned and/or operated by an undertaking, facilitating the matching between the demand for and supply of labour provided by a platform worker.

The OSH risks that platform workers face in relation to the tasks they carry out are <u>similar outside</u> the platform economy.

HOWEVER:

- Digital platform work frequently involves jobs typically in occupations and sectors that are at high risk and associated with poorer working conditions.
- AND some specific factors associated with the digitlal platform economy result in <u>additional OSH risks and</u> <u>complicate OSH prevention and management</u>





Priority areas – Digital platform work

RISKS AND CHALLENGES

- Employment status and limited application of OSH regulations
- Shifting of OSH responsibilities onto workers
- Use of algorithmic management and digital surveillance
- Professional isolation, lack of social support
- Long working hours and a poor work-life balance
- Job and income insecurity

OPPORTUNITIES

- Worker autonomy
- Flexible working hours allowing to better balance work and life
- Improved access to the labour market for disadvantaged workers





Priority areas – Automation of TASKS through AI & advanced robotics

DEFINITION

Use of smart robots or systems to execute (partially or fully) a function that was previously, or conceivably could be, carried out (partially or fully) by a human.



- Over 30% of jobs are likely to change as individual tasks are automated (OECD)
- Robots are becoming <u>mobile</u>, intelligent and <u>collaborative</u>: cobots
- Intelligent systems are also taking over a range of not just manual but also <u>cognitive tasks</u> previously done by humans
- In many <u>different sectors and settings</u>





OSH risks and opportunities of AI-based automation of tasks







Healthy Workplaces

Priority areas – Remote and hybrid work

DEFINITION

Remote work is any type of work involving the use of digital technologies (e.g. personal computers, smartphones, laptops, tablets, etc.) to work away from the employer's premises.

Telework is a common way to define home-based remote work.

The combination of telework with work at the employer's premises is also referred to as *hybrid work*.



Remote work must be included in the employer's mandatory risk assessment.

75% of EU workplaces carry out risk assessment on regular basis but only 31% of those allowing telework cover also homes (ESENER-2019)

There are tools for the prevention of risks related to telework/hybrid work for workers and employers.





Priority areas – Remote and hybrid work

OPPORTUNITIES

- Increased autonomy and flexibility
- Better work-life balance
- Improved motivation and productivity
- Reduced commuting time
- Safety from high-risk environments

RISKS AND CHALLENGES

- Isolation and lone working
- Work intensification, information overload
- Long/irregular working hours, constant availability
- Working while feeling unwell
- Conflicts between private and working life
- Poor ergonomics of equipment and workstation
- Communication between hybrid team members and management, partly at the employer's premises and partly remote, with frequent changes
- Transferring the risks of telework/virtual work into the employer's premises





https://healthy-workplaces.eu

Priority areas – Worker management through AI

Digital technologies

Personal computers

Laptops & Mobile devices

GPS

Cameras

Wearable devices

Other sensory devices

In all jobs using ICT

Both in and outside the workplace

Large amount of real-time data collected

Time spent per task Content of calls or emails Keyboard clicks

Screenshots

Websites visited

Social media

Movements

Locations

Worker ratings

Vital signs

Indicators of stress and fatigue

Micro-facial expressions

Tone of voice

Workplace

Etc.

Analytics and Decisionmaking using Artificial Intelligence (AI) / algorithms

Providing information as well as adding value through diagnostic, predictive or prescriptive insight

To make automated or semi-automated decisions or to support human decision-making Use of Al-based Worker Management (AIWM) to improve:

Productivity and efficiency

Management of work organisation and distribution

Worker performance

HR management, incl. performance appraisals and career development

Worker reward or penalties

Talent management

Worker engagement

Health and safety monitoring, prevention and training

Worker well-being

Priority areas – Worker management through Al

RISKS AND CHALLENGES

- Reduced worker autonomy and job control
- Increased performance pressure
- Increased work intensity
- Reduced relationships with peers/managers
- Lack of transparency
- Information imbalance
- Privacy issues

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OPPORTUNITIES

- Improved scheduling and task allocation
- Optimised work organisation
- Information to identify OSH issues



"It is essential to build trust in these systems by informing, consulting and allowing workers to participate in their design and implementation."



Priority areas – Smart digital systems for OSH

DEFINITION

Digital systems that collect and analyse data, often real-time, in order to identify, alert and/or assess OSH risks, thereby preventing or minimising harm and promoting OSH

- Smart glasses, or drones in the construction and the mining industries, to effectively reach and monitor dangerous areas of work site avoiding to put humans in danger
- Wearable devices that can identify levels of gases, noise and high-risk temperatures,
- Smart sensors e.g. in factory where carcinogenic substances are used that emit a signal when a specific limit value is exceeded
- Smart wearables to monitor workers' vital signs, e.g. smart glasses or sensors that monitor sleepiness
- E-textile technologies, smart helmet or smart glasses able to interact with workers e.g. used in construction sites, firemen
- Smartphone apps to allow easy reporting and/or task assistance in the event of accidents at work, or used to provide recommendations to workers





Priority areas – Smart digital systems

OPPORTUNITIES

- Monitor (real-time) risks, support risk assessment, help prevent and minimise harm to workers
- Digital counselling for workers
- Informed decision-making
- Input to design OSH trainings
- Support targeted OSH inspections

RISKS AND CHALLENGES

- Data inaccuracies or misinterpretation
- Overreliance on technology
- Risk of "delegating" the workplace risk assessment to technology
- Use of data for different purpose/surveillance
- Overwhelming (OSH) managers with data

Examples:

- Pandemics 2020-2021: monitors worker's proximity
- Warehouses The workers and fork-lifts can be monitored to detect their positions and movements: a risk of collision can be predicted by algorithms



Abbott Storage Systems: https://www.abbott-group.com.au/



Key messages for risk prevention

- Human-centred approach
 - Workers and managers should remain in command
 - Technology and AI to support but not replace human control and decisions
 - Preserve workers' job control and autonomy
- Transparency about the way digital tools and digital processes operate
- Equal access to information of all stakeholders
- Worker consultation/participation in the development, implementation and use of digital technologies and systems
- Holistic approach to evaluating digital technologies and systems
 - Raise OSH awareness of all actors: policy-makers, developers, workplace level
 - Specific attention to impacts on workers' mental health
 - Prevention through design
- Proper consideration of digital technologies in the workplace Risk Assessment
 - The workplace Risk Assessment should not be "delegated" to technology





EU Regulatory framework – digitalisation and OSH

The EU OSH Framework Directive 89/391/EEC implicitly applies to risks posed by digital technologies at work ("*The employer shall* have a duty to ensure the safety and health of workers in every aspect related to the work.")

- All hazards and risks, workers, workplaces, employers
- Employers required to assess and eliminate risks
- Mandatory risk assessment

'Daughters' directives with regards to specific risks at work with relevance for digital technologies usage:

- Directive 1989/654/EEC on minimum safety and health requirements for the workplace
- Directive 2009/104/EC concerning the minimum safety and health requirements for the use of work equipment
- Directive 1989/656/EEC on the minimum health and safety requirements for the use by workers of personal protective equipment at the workplace
- Directive 1990/270/EEC on minimum safety and health requirements for work with display screen equipment
- Directive 2002/44/EC on the protection of the health and safety of workers from the risks arising from the exposure to mechanical vibration





The AI Act (March 2024) covers aspects such as:

- Safe deployment of Al-systems, prohibiting some of them, while casting others as "high-risk" requiring more safeguards for the design, development, and use of these systems.
- The proposed list of "high-risk" systems includes AI systems used for recruitment or selection of workers, and AI systems used for making decisions on promotion and termination of work-related contractual relationships, for task allocation and for monitoring and evaluating performance and behaviour of workers.
- Proposes compliance with mandatory requirements for high-risk AI systems, e.g. establishing and maintaining risk management systems throughout the life cycle of AI systems, training these systems with human oversight.





EU Regulatory framework – digitalisation and OSH

Potential impacts of the AI Act on employers' obligations:

- Transparency and disclosure: workers with right to be informed when they interact with AI systems, especially in the areas of recruitment, performance evaluation, workplace monitoring.
- Non-discrimination: assessment for biases and discrimination of AI systems used in recruitment and HR processes, classified as high-risk.
- Data privacy: workers will benefit from enhanced data privacy protection.
- Decision-making: workers will have certain rights regarding AI-supported decisions, especially for high-risk applications.
- Workplace surveillance: prohibition to use AI systems for indiscriminate of unjustified surveillance or monitoring of workers





Regulatory framework – digitalisation and OSH

- Directive on Improving working conditions of persons working through digital labour platforms (2021/0414 (COD) approved 2024) introduces a number of significant changes for platform workers:
 - Provisions to correct bogus self-employment (presumption of dependent employment, burden of the proof on platforms)
 - Workers cannot be fired based on a decision taken by an algorithm (human oversight)
 - Workers' data to be better protected (no collecting certain types of personal data)
- General Data Protection Regulation (GDPR) that has extensive provisions preventing organisation from abusing private data, including, according to Art. 22: "preventing <u>decision based solely on,</u> <u>automated processing</u>, including <u>profiling</u>, which produces <u>legal effects</u> concerning him or her or <u>similarly significantly affects</u> him or her".
- EU Strategic Framework on Health and Safety at Work 2021-2027: "Anticipating and managing change in the context of green, digital and demographic transitions"
 - identifies key priorities and set out a strategic framework to encourage EU countries and stakeholders to work together on common priorities
 - recognises the role of EU-OSHA Healthy Workplaces Campaign 2023-2025 and research activities on digitalisation for the implementation of the strategy in the area of awareness raising and capacity building





Join us beyond the bits and bytes!

Find out more on the campaign website: <u>www.healthy-workplaces.eu</u>

Subscribe to our campaign newsletter: <u>https://healthy-workplaces.osha.europa.eu/en/media-centre/newsletter</u>

Solution Keep up to date with activities and events through social media:

EXAMPLE 1 #EUhealthyworkplaces

Find out about events in your country from your national focal point: <u>https://healthy-workplaces.osha.europa.eu/en/campaign-</u> <u>partners/national-focal-points</u>





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