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PURPOSE AND SCOPE

- Guidance for employers and employers' organisations, trade unions, works councils and workers' representatives in the metal industries.
- Objective: translate evidence on Artificial Intelligence-driven skill impacts into practical guidance for social dialogue and collective bargaining at workplace, firm, sectoral, regional, national and European levels.
- Method: knowledge-to-dialogue approach with iterative validation by national and European social partners.
- Core premise: skills transitions require coordination, investment, and shared commitments that are credible and enforceable, enabling workers to trust training, job redesign and transition conditions.

WHY SKILLS IS THE CENTRAL GOVERNANCE ARENA

- The main issue is task reconfiguration, competence-profile redesign and shifting training demands across occupations and value chains.
- Artificial Intelligence (AI) tends to increase demand for hybrid profiles combining technical, digital, organisational and social competences.
- Without upskilling and reskilling strategies, AI risks widening inequalities, intensifying labour shortages and undermining socially sustainable technological change.

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EXPECTED EMPLOYMENT IMPACT AND SKILLS PRESSURE



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- AI deployment in the metal industries is expected to have a limited direct employment impact to date, given investment costs and practical limits in automating complex tasks.
- Nonetheless, work organisation is increasingly shaped by data-driven systems and new digital infrastructures.
- Social dialogue and collective bargaining discussions can prioritise training feasibility, task redesign and transition conditions, in line with workshop-identified priorities.

FROM AUTOMATION NARRATIVES TO TASK AUGMENTATION

- Available evidence indicates that AI has predominantly complemented and augmented tasks rather than replacing entire jobs.
- Risk exposure varies across regions, firms and worker groups.
- Given rapid progress in AI capabilities, skill impacts require careful monitoring over time as technologies evolve.

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ETHICAL INTEGRATION OF AI



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- Ethical integration requires safeguards on privacy, fairness, transparency and accountability to promote trustworthy use of AI at work.
- Large Language Models (systems trained on large datasets to generate text and other content) may require access to worker data, can "hallucinate" and therefore require careful monitoring of reliability, efficacy and safety.
- Training should promote AI literacy, including knowledge of AI applications, ethical considerations and the ability to critically evaluate AI systems, including their limitations and responsible use.



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TRADE UNION PERSPECTIVES: JOB QUALITY AND HEALTH

- Potential gains include reduced stress, fatigue and safety risks through improved work organisation.
- Concerns include trustworthy use, changing skill requirements and physical and mental health risks, including autonomy loss and excessive monitoring.

SHARED RESPONSIBILITY FOR SKILLS DEVELOPMENT

- Skills development in the context of AI is a shared responsibility between employers and workers.
- Skills strategies are a prerequisite for competitiveness, safety and socially sustainable deployment.
- Skills investment requires changes in education and training systems, and the burden should not fall solely on employers.

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COLLECTIVE BARGAINING DEVELOPMENTS

- Most collective agreements still reference AI in general terms; a smaller set includes detailed provisions such as right to disconnect, digital rights, information sharing and business control.
- Trade union priorities include data protection, working time regulation, monitoring limits and the right to challenge automated decisions.

QUANTITATIVE SKILLS SIGNALS

- Approximately 28% of workers report using AI or working alongside colleagues who do.
- 61% expect they will need new skills within five years.
- Only 15% report recent AI-related training, and over half report low competence levels. Source: Cedefop 2024 Survey Data.

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RISK TO SOCIAL DIALOGUE AND CONSULTATION

- AI can deepen information asymmetries and cloud accountability chains between developers, vendors and deploying organisations.
- Systems may change through updates that are not treated as “new technology”, risking consultation and information deficits for workers and their representatives.



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ENFORCEABLE RIGHT TO TRAINING

- Workers affected by AI-driven transformation should have an enforceable right to retraining and upskilling, with maintenance of income during training periods, as defined through collective agreements or equivalent instruments.
- This includes credible redeployment paths and structured job redesign.

OPERATIONAL TRAINING MODELS

- Practical training models, including an “80/20” approach in which a smaller group become internal trainers, can support diffusion of hybrid competences.
- Training outcomes should be recognised and resourced.

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SYNTHESIS

- AI will reshape skills primarily through task reconfiguration; social dialogue and collective bargaining are the instruments to make upskilling and reskilling credible, enforceable and jointly beneficial in the metal industries.



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