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# BARMETAL



THE BARMETAL TOOLKIT

# How to construct a scheme of employee participation in **D-A-D** processes at company level

## BARMETAL

Digitalisation, Automatisation  
and Decarbonisation (D-A-D):  
Opportunity for strengthening collective  
bargaining in the metal sector

<https://celsi.sk/en/barmetal/>



# Contents

|  |           |
|--|-----------|
| <b>Social dialogue in response to D-A-D</b>                      | <b>4</b>  |
| <b>Addressing company-level challenges</b>                       | <b>5</b>  |
| Identifying and addressing company challenges                    | 6         |
| <b>Questions for employers and trade unions</b>                  | <b>7</b>  |
| Questions for the employer                                       | 8         |
| Questions for trade unions                                       | 9         |
| Common questions (each party can/should ask themselves)          | 10        |
| <b>Common terms in company-level dialogue</b>                    | <b>11</b> |
| <b>‘Cheat sheet’: what challenges await the metal industries</b> | <b>12</b> |

## About the project

The BARMETAL project analysed the response of social dialogue and collective bargaining to digitalisation, automatisisation and decarbonisation (DAD) in 11 EU Member States (Czechia, Denmark, France, Germany, Hungary, Italy, the Netherlands, Poland, Romania, Slovakia and Sweden) and one candidate country (Serbia).

### Project information:

<https://cel.si.sk/en/barmetal/> →

### Country-specific policy briefs (in English) and videos in the local language:

<https://cel.si.sk/en/barmetal/> →

### Country-specific factsheets (in English and the local language) with key findings and recommendations:

<https://cel.si.sk/en/barmetal/> →

# BARMETAL

This toolkit provides **practical advice and guidance** for trade unions and employers in how to approach challenges related to **digitalisation, automatisisation and decarbonisation (hereafter D-A-D)** in company-level social dialogue and collective bargaining. The toolkit is an outcome of expert analysis from the BARMETAL project.

# Social dialogue in response to D-A-D

The BARMETAL project analysed **how social dialogue and collective bargaining responds to the challenges of D-A-D**. Due to a diversity of bargaining patterns across the EU, mechanisms for collective bargaining and the implementation of workers' representatives' right to information and consultation in response to the D-A-D challenges vary.

The quality of collective bargaining at both sector and company levels in Central and Eastern Europe (CEE) differs notably from the older EU Member States. This discrepancy is particularly stark at the sector level, where collective bargaining is nearly absent in CEE's metal industry due to the dominance of competing transnational corporations.

The involvement of social partners in D-A-D issues also varies. D-A-D processes are slowly evolving across all studied countries, but with differing intensity, often due to technological disparities. A common trend is lack of social dialogue on D-A-D challenges at both sector and workplace levels, with negligible differences between the 'old' and 'new' EU. Employee representatives are generally not involved in decision-making processes regarding companies' adaptation to D-A-D challenges.

## How to improve social dialogue and collective bargaining on D-A-D related challenges?



**This toolkit offers practical steps to build up a consultation process, utilising the existing consultation-information mechanism for effective participation according to national and EU level legislation.**

The right to collective bargaining is governed by national legislation in the EU Member States and Candidate Countries. The right to information and consultation is mandated by EU Directives, which also Candidate Countries must adhere to for accession. Over 15 Directives address information and consultation rights, notably:

- Directive on improving the safety and health of workers at work (89/391/EC)
- Directive on European Works Councils (2009/38/EC)
- Directive on Employee Involvement in the European Company (2001/86/EC)
- European Information and Consultation Framework Directive (2002/14/EC)

Specific situations like collective redundancies (98/59/EC) and transfers of undertakings (2001/23/EC) are also covered by European Directives.

**Directive 2002/14/EC, requiring information and consultation in enterprises with over 50 employees, is crucial for this project.** Its impact varies by national industrial relations practices. However, **none of these directives specifically address D-A-D issues.** Employees and their representatives must ensure these processes include D-A-D issues, emphasising their significant impact on work organisation and labor relations.

# Addressing company-level challenges

D-A-D is a relatively **new phenomenon**. Legal regulations on the right to information and consultation exist, but often lack specificity to help enforcing social dialogue and employee engagement in responding to D-A-D related challenges in a company. If the concept of just transition is applied, dedicated mechanisms of information and consultation need to be established to address the D-A-D effects on workers.

- ➔ A continuous flow of information, discussions and consultations are necessary.
- ➔ Information and consultation regarding D-A-D cannot replace broader information, consultation and negotiation processes already established according to existing legislation.
- ➔ Social dialogue related to D-A-D cannot replace information, consultation and negotiation processes related to collective redundancies, transition of the workplace to a new employer, existing processes related to worker participation in health and safety, and similar challenges.
- ➔ Information and consultation in response to D-A-D change should not be used to replace existing and functioning procedures (wage negotiations, etc.).
- ➔ Social dialogue related to D-A-D **complements** existing information and consultation processes and broadens their scope.
- ➔ D-A-D is a recent phenomenon requiring awareness to information scarcity. Numerous D-A-D related legislative processes are still in progress and the outcomes cannot be predicted.
- ➔ Even where the direction of change is predictable, the timing (pace) of the changes that will occur is challenging to estimate.
- ➔ The legislative entrenchment of D-A-D related regulation cannot fully reflect heterogeneity of cases related to D-A-D at the company level. Tailor-made social dialogue processes need to acknowledge this diversity.

! **Therefore, in each case, an attempt should be made to identify the different types of challenges that may arise in the company.**

! **Identifying impactful factors**

Employers often struggle to pinpoint key short- and medium-term factors affecting the company.

For effective decision-making, these factors need to be clearly linked to D-A-D processes.

! **Navigating legislative changes**

Legislative proposals on the greening of the economy and decarbonisation can be complex and unclear.

Understanding their specific impact on the company is challenging yet necessary.

! **Raising awareness**

It is essential that both employers and trade unions understand the D-A-D processes.

Open discussions can ensure the processes are acknowledged and integrated into strategic planning.

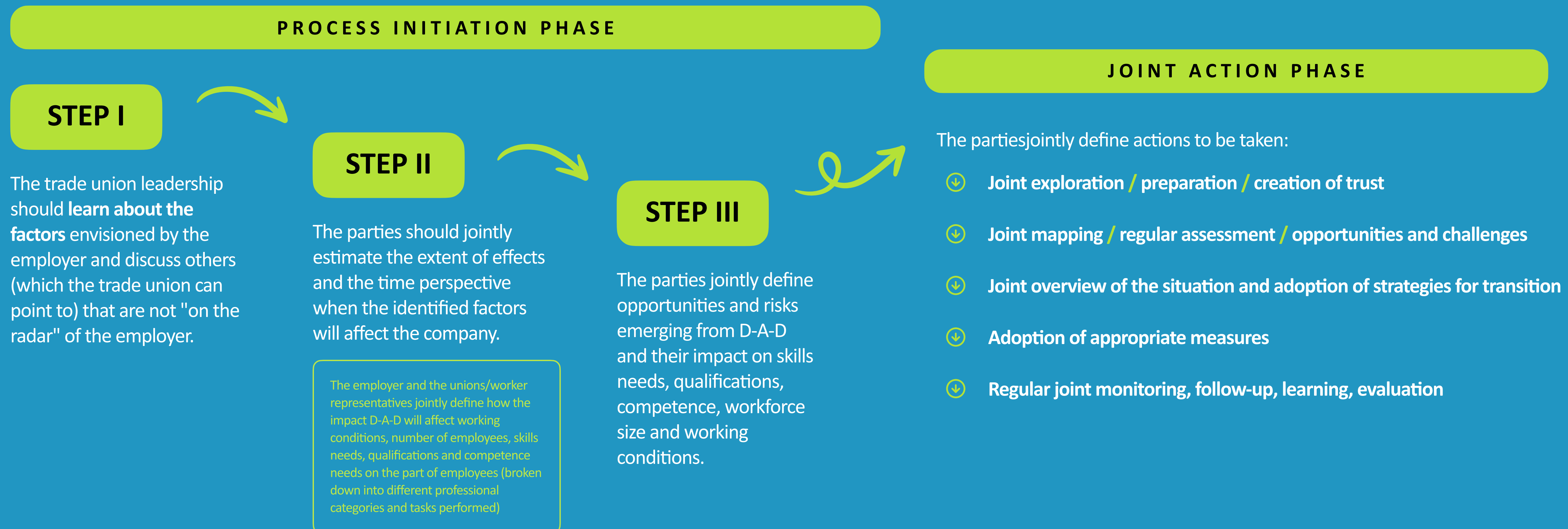
! **Balancing diverse influences**

Geopolitical issues, like energy prices, may overshadow D-A-D related factors.

Understanding other factors, such as consumer demands for green solutions, can offer valuable insights.

# Identifying and addressing company challenges

Recommendations to identify and address the D-A-D related challenges at the company level:



# Questions for employers and trade unions

Taking into account the identified problem of lack of effective dialogue in response to D-A-D challenges, **the following set of questions help creating an appropriate space for developing social dialogue.**

Comprehensive action, often involving national and local public authorities, is most effective if taken at the sector level. Developing sector-level social dialogue often requires fundamental paradigmatic legislative changes. These can be achieved through a series of policy actions.

Awareness-raising best starts at the workplace level. To help to diagnose the situation at the company level, a set of questions is a useful first step. Diagnosis can trigger action through social dialogue mechanisms in company level social dialogue and collective bargaining.

A set of identified questions guide the employers and trade unions through **an initial analysis of the situation**. Based on an initial diagnosis, action should be developed in alignment the instruments of EU law on the promotion of collective bargaining and information and consultation of workers.

These embrace both the continuous formula (works councils) and the so-called restructuring Directives (98/59/EC on collective redundancies, 2001/23/EC on transfers of an undertaking, 2008/94/EC on insolvency of employer). In the case of transnational corporations, the institution of the European Works Council and the information and consultation therein should be utilised for addressing cross-border effects of D-A-D.

The following set of questions helps assessing the possibilities for dialogue around D-A-D issues at the company level. The questions allow participants to reflect and analyse the situation. They allow identifying in which areas there is a need to raise awareness and knowledge and by which actors (e.g., knowledge of workers, professionals, line managers, top management).

## Setting up a list of questions

- The list of questions is **not exhaustive**.
- Questions will allow **to start the process of diagnosing** what action can and should be taken.
- **A negative answer or no answer will always indicate the need to take urgent awareness-raising actions.**
- Questions will allow participants to identify in which areas there is a need to raise awareness and knowledge: knowledge of grassroots workers, professionals, managers, top management.



## Questions for trade unions

Page 8 →



## Questions for the employer

Page 9 →



## Common questions

Page 10 →

Have unions been consulted in relation to any production line robotisation process?

Does the trade union actively use social media to interact with its members and the general public?

Does the trade union promote the principles of a circular economy among its members?

Does the trade union promote pro-environmental behaviour among its members?

Does the company hold regular meetings to discuss the impact of D-A-D programmes on the company with trade unions (regular meetings refer to meetings at least once every threemonths)?



## Questions for trade unions

A negative answer or no answer will always indicate the need to take urgent awareness-raising actions.

Are there regular evaluations of new digital solutions being implemented with the employer?

Is the topic of the equivalent of zero emission commuting (e.g. by bicycle) raised during negotiations with the employer?

Do trade unions have access to employees online?

Is digital skills training for older workers organised at the company?

Are there regular consultations with your employer regarding new digital and technological processes?

Are trade unions involved in defining and implementing a training policy in the company?

Is the union aware of EU and national policies related to the greening of the economy that will affect the sector you represent?



Does the company envisage carrying out an analysis of CO<sub>2</sub> emissions related to employees' travels?

Does the company hold regular meetings to discuss with employee representatives (trade unions) the impact of D-A-D on the company (regular meetings refer to meetings at least once every three months)?

Are workers encouraged to use zero/low emission forms of transport to work (bicycle/public transport)?

Is the company introducing robotisation of the production line and envisaging the use of cobots (human-machine collaboration)?

Are employees (trade unions) informed about the application and principles of their performance appraisal algorithms?

Is information available on the origin of electricity/fuel indicating how much of it comes from renewable sources?



## Questions for the employer

A negative answer or no answer will always indicate the need to take urgent awareness-raising actions.

Does the company have a policy that promotes a circular economy (e.g. there are solutions that go beyond what is required by current legislation in terms of sorting and processing waste, employees are encouraged to recycle in their private lives, etc.)?

Does the company use digital tools to communicate with employees and trade unions (e.g. internal intranet, instant messaging through which employees are informed and can present their questions, etc.)?

Are trade unions informed about the impact of climate policy on the future situation of the company?

Has the company provided employee training related to technological change and digitalisation to at least 25% of the workforce in the last year?

If the production line is robotised, do you envisage upskilling workers or moving them to jobs where robotisation has not yet taken place?

Does the company have training plans targeting the majority of the workforce?

Does the company use green solutions related to the workplace (e.g. lighting, waste sorting)?

Are organisational solutions implemented in the company to promote sustainable and green transport?

**Are you aware of the EU policies that affect your sector and that are being implemented as part of the Green Deal?**



## **General questions**

**(each party can/should ask themselves)**

**Are you aware of the results of the European social dialogue related to the metal sector?**

**To what extent do you follow the development of D-A-D in your direct competitors / in your companies in the supply chain / in the sub-sector / in the metal industry ecosystem as a whole?**

**Are you aware of the environmental standards requirements for sub-suppliers in the supply chain introduced by the main customer's country, as stipulated by the latest EU legislation (Corporate Sustainability Due Diligence Directive)?**

# Common terms in company-level dialogue

If employers and trade unions wish to enter a D-A-D related social dialogue, it is important to mutually agree on **the basic concepts in labour relations**. The following short definitions can be used.



## Work organization

Work organisation is the distribution and coordination of work tasks and authority in an organisation.

Work organisation is the way in which tasks are distributed among individuals in an organisation and the way in which they are then coordinated to achieve the final product or service.

The work organisation or structure tells you who does what, whether in teams or not, and who is responsible for what.



## Work content and skills

Work content refers to the impact of digital technologies/tools on the content of work, the skills needed to do the work, and interact (digitally) with others (colleagues, management, clients, intermediaries).

It considers aspects such as autonomy, coherence, variation, workload, information, role clarity.



## Working conditions

Working conditions refer to the working environment (e.g. health, safety, physical and mental demands, well-being, climate, comfort, sanitary facilities, work equipment) and aspects of a worker's terms and conditions of employment.

The latter covers issues such as: working time (arrangements), rest periods, place(s) of work, work-life balance, leave arrangements, training and learning opportunities, evaluation mechanisms.



## Work relations

Workplace relations or interpersonal relations have an impact on the performance and well-being of employees.

They include the social interaction between employees and between employees and the organisation (formal and informal relations with the direct line manager, management, HR function).

It also includes relations with customers and other third parties. It is important to consider the quality of relationships (cooperation, integration, contact moments and opportunities, communication, working atmosphere), management style, incidence of violence or harassment, conflict management, support procedures and mechanisms.

# 'Cheat sheet': what challenges await the metal industries

## For the automotive industry

- ➔ According to the International Federation of Robotics (IFR), the automotive industry is driving automation with the largest number of robots working in factories around the world, with a new record of around one million in operation <sup>[1]</sup>.
- ➔ As the industry transitions from internal combustion engines to electric power, robots are playing a critical role. Robotic automation is helping carmakers to manage the major changes to long-established manufacturing methods and technologies. The IFR goes on to highlight the recent density of robots in the automotive industry - the Republic of Korea has 2,867 industrial robots per 10,000 workers in 2021, while Germany has 1,500 units, followed by the United States with 1,457 units.
- ➔ Automation plays a variety of roles in automotive manufacturing, including tasks such as screwdriving, windscreen installation and wheel fitting.
- ➔ Many robots on production lines are referred to as 'cobots' because they work alongside workers to perform tasks that are physically demanding or more challenging.
- ➔ As well as simply expanding automation efforts across the automotive industry, 'smart manufacturing' uses technology in addition to automation. Also known as Industry 4.0, RT Insights notes that data-driven decision-making and predictive maintenance are just

the beginning of the benefits associated with smart manufacturing, with benefits extending to areas such as energy efficiency and supply chain optimisation <sup>[2]</sup>.

- ➔ The future of smart manufacturing is driven by AI and machine learning (ML). Reducing emissions in the automotive sector means decarbonising the entire value chain - starting with the global vehicle fleet. Car manufacturers will need to reduce CO2 emissions 90 per cent before 2050. But to meet these aggressive targets, the entire value chain must be decarbonised.

## 8 major decarbonisation effects on the automotive industry:

- ➔ **Electric vehicles (EVs).** One of the most significant steps towards decarbonisation in the automotive sector is the widespread adoption of electric vehicles.
- ➔ **Lightweight materials.** Automotive manufacturers are exploring lightweight materials - such as aluminium, carbon fibre, and advanced composites - to reduce the weight of vehicles. Lighter vehicles require less energy to power them, leading to improved fuel efficiency and reduced emissions.
- ➔ **Research and development.** To drive progress towards zero-emission transport alternatives, carmakers are investing more and more resources in research into experimental technologies such as hydrogen fuel cells.

- ➔ **Cooperation and partnerships.** Governments, research institutions, and automakers are joining forces to drive decarbonisation efforts. These partnerships aim to share knowledge, develop common standards and work towards the common goal of a greener future.
- ➔ **Renewables in manufacturing.** Carmakers are increasingly using renewable energy sources to power their manufacturing facilities. By investing in solar, wind, and other forms of renewable energy to replace traditional fossil fuel-based energy sources, the carbon emissions associated with production are significantly reduced.
- ➔ **Sustainable supply chains.** By focusing on creating sustainable supply chains and working closely with their suppliers, carmakers have more control over the responsible sourcing of raw materials and reduce waste.
- ➔ **Recycling and circular economy.** Manufacturers are emphasising how recycling and reusing materials minimises waste and extends the life cycle of automotive components. This approach reduces the need for virgin raw materials and can even save costs in the long term. At the Poole site, MFG is implementing sand reclamation, where degraded sand grains are processed on site for reuse, reducing the amount sent to landfill.
- ➔ **Manufacturing process improvements.** From upgrading equipment to optimising production processes and implementing energy-saving measures, automotive companies are implementing efficiency-boosting process improvements throughout their manufacturing facilities. This reduces energy consumption and associated emissions right from the factory floor.

## For the steel industry

- ➔ **Overcapacity and price volatility.** Global steel production capacity far exceeds demand, leading to intense competition and price volatility. In 2022, global steel production reached 1.95 billion tonnes while demand was 1.89 billion tonnes, creating a surplus that puts downward pressure on prices <sup>[3]</sup>.
- ➔ **Environmental regulations.** Steel production is a significant contributor to greenhouse gas emissions, accounting for around 7% of global emissions. Stringent environmental regulations and carbon pricing mechanisms increase production costs and challenge the sustainability of the industry.
- ➔ **Trade barriers.** Protectionist trade policies, such as tariffs and quotas, disrupt global trade flows and cause market distortions, inhibiting the industry's growth potential. In 2022 US imposed Section 232 tariffs of 25% on steel imports, affecting global trade patterns.
- ➔ **Delaying digital transformation.** The steel industry has been slow to adopt digital technologies compared to other sectors, limiting its ability to optimise operations, improve efficiency and reduce costs. The 2022 study found that only 23% of steel companies have a comprehensive digital transformation strategy <sup>[4]</sup>.
- ➔ **Innovation challenges.** The industry is struggling to develop innovative products and processes that meet changing customer needs and address sustainability issues. The 2023 report showed that R&D spending in the steel industry as a percentage of revenue is significantly lower than in other manufacturing sectors <sup>[5]</sup>.

[1] <https://ifr.org/ifr-press-releases/news/one-million-robots-work-in-car-industry-worldwide-new-record>

[2] <https://www.rtinsights.com/industry-4-0-progress-slow-but-progress-nonetheless/>

[3] <https://worldsteel.org/data/world-steel-in-figures-2022/>

[4] <https://www.linkedin.com/pulse/challenges-faced-steel-industry-mes-strategic-tool-prangya-mishra-f0m8c/>

[5] <https://www2.deloitte.com/us/en/insights/industry/manufacturing/manufacturing-industry-outlook.html>



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